2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT CLASS 2 LANDFILL CROSS GENERATING STATION

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January 31, 2024

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1. Annual Groundwater Monitoring Report Summary

The South Carolina Public Service Authority (Santee Cooper) has prepared this 2023 Annual Groundwater Monitoring Corrective Action Report for the Class 2 Landfill at the Cross Generating Station (CGS). This 2023 Annual Report was prepared to comply with the United States Environmental Protection Agency (EPA) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities, 40 Code of Federal Regulations (CFR) Part 257, Subpart D dated April 17, 2015 (Rule), specifically subsection § 257.90(e)(1) through (6).

The Class 2 Landfill ceased operations by December 31, 2015, and closure by capping was completed by August 9, 2016, per a plan approved by the South Carolina Department of Health and Environmental Control (SCDHEC). The Class 2 Landfill was certified closed by SCDHEC on February 28, 2017, and is maintained and monitored in post-closure care pursuant to SCDHEC regulatory requirements. In addition to the federal CCR rule groundwater monitoring program discussed throughout, an SCDHEC approved groundwater monitoring program is also being concurrently implemented to comply with the SCDHEC Post Closure Permit #08337-1601.

In accordance with § 257.90(e)(6), an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit is provided below:

At the start of the current annual reporting period (January 1, 2023), the CGS Class 2 Landfill continued to operate under a corrective action monitoring program in accordance with § 257.98. Statistically significant levels (SSLs) of cobalt in monitoring well POZ-4 were identified for the January and June 2023 sampling events.

Previously, statistically significant increases (SSIs) of boron, calcium, chloride, sulfate, and TDS were identified in POZ-4, POZ-6 and POZ-7 during the detection monitoring events in 2017. This triggered an assessment monitoring program which was initiated on January 15, 2018. The statistical analysis of the downgradient wells for the Class 2 Landfill identified a statistically significant level (SSL) of the Appendix IV constituent cobalt in well POZ-4. As a result, an assessment of corrective measures was initiated on January 14, 2019, for this unit. The assessment of corrective measures report was completed on June 12, 2019, and a public meeting was held on December 3, 2019, to discuss five remedial alternatives per § 257.96(e). A remedy was selected pursuant to § 257.97 and the remedy selection report was completed on July 27, 2020. The selected remedy was capping with water management enhancements followed by monitored natural attenuations (MNA). The water management enhancements were implemented in 2020.

At the end of the current annual reporting period (December 31, 2023), the CGS Class 2 Landfill remained in the corrective action groundwater monitoring program. Monitoring of the selected remedy will continue in 2024.

To report on the activities conducted during the prior calendar year and document progress complying with the CCR Rule, the specific requirements listed in § 257.90(e)(1) through (5) are provided in the next section in bold/italic type followed by a short narrative stating how that specific requirement was met.

2. 40 CFR § 257.90 Applicability

2.1 40 CFR § 257.90(a) and (c)

All CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under § 257.90 through § 257.98.

Once a groundwater monitoring system and groundwater monitoring program has been established at the CCR unit as required by this subpart, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action through the active life and post-closure care period of the CCR unit.

The capped and closed CGS Class 2 Landfill continues to be subject to the groundwater monitoring and corrective action requirements set forth by the EPA in 40 CFR § 257.90 through § 257.98. This document satisfies the requirement under § 257.90(e) which requires the CCR landfill Owner/Operator to prepare an Annual Report.

2.2 40 CFR § 257.90(e) - SUMMARY

Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. […] For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1).

This Annual Report documents the activities completed in 2023 for the closed CGS Class 2 Landfill as required by the subject regulations. Groundwater sampling and analysis was conducted per the requirements of § 257.93, and the status of the groundwater monitoring program, as set forth in § 257.98, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

In 2023, the corrective action groundwater monitoring program continued in accordance with § 257.98. An SSL of cobalt in POZ-4 is the only exceedance of an Appendix IV groundwater protection standard (GWPS) downgradient of the Class 2 Landfill. It is worth noting that while the cobalt concentrations vary between sampling events, recent concentrations are lower than the historical range of concentrations in POZ-4 and for POZ-6. This observation indicates that the selected groundwater remedy is performing as anticipated.

During the 2019 Assessment of Corrective Measures and Nature & Extent evaluations, analytical results from the groundwater monitoring well installed in the uppermost aquifer at the downgradient property boundary (monitoring well CCMLF-1) showed intermittent results above the GWPS for cobalt. While off-site migration had not been confirmed, Santee Cooper notified SCDHEC and nearby residents and/or landowners that the GWPS for cobalt in a property boundary well had been exceeded per § 257.105(h)(8). To evaluate potential for off-site migration and impacts to off-site drinking water wells, samples were collected from both the single potable well that supplies drinking water for the surrounding closest

residences and from multiple residential taps and analyzed for cobalt. Santee Cooper has continued to monitor this property boundary well in both the uppermost shallow and deeper aquifers and the same nearby residential potable well for cobalt through 2023. **To date, all sample results for cobalt were significantly below the groundwater protection standard in the nearby residents' drinking water.** Communication with SCDHEC and the residents has been ongoing.

The remedy selection process, in accordance with § 257.97, began in 2020 following the public meeting held on December 3, 2019, to discuss the remedial alternatives. In accordance with § 257.97(a), a semi-annual progress report was posted to the publicly available website on January 23, 2020, detailing a summary of actions completed to date in selecting and designing the remedy as well as activities planned for the remainder of 2020. The remedy selection report was finalized on July 27, 2020, and posted to the publicly available website. The selected remedial alternative is landfill closure (cap in place) with enhanced water management improvements followed by monitored natural attenuation (MNA).

The landfill was closed by installing a low-permeability geomembrane liner and clay cap and cover along with surface water controls for runoff from the landfill cap and erosion protection. The engineered and installed geomembrane cap virtually eliminates all vertical infiltration of water into the CCR material within the landfill. Enhanced water management controls included design and installation of a system to capture drainage from the capped landfill and directing the water that had been in contact with ash to a lined leachate collection pond. The landfill closure and water management improvements were completed in August 2016 and January 2020, respectively, under the oversight of SCDHEC and a professional engineer. The remaining component of the selected remedy is MNA, which is a viable remedial strategy recognized by state and federal regulators that is applicable to inorganic compounds in groundwater. MNA occurs due to naturally occurring processes within the aquifer following source control. A site-specific groundwater flow and solute transport model of the predicted cobalt concentrations following source control further supports MNA as a remediation alternative. Therefore, MNA, in combination with source control, will continue to reduce concentrations of cobalt in groundwater downgradient of the Class 2 Landfill, thereby attaining the GWPS in the future.

Further development of the corrective action groundwater monitoring program for MNA was completed in 2022 by reevaluating the existing Groundwater Monitoring Plan (GMP). This evaluation concluded that the assessment monitoring protocol currently being implemented is sufficient to meet the needs of corrective action groundwater monitoring program, which is consistent with § 257.98(a)(1)(i) and thus will continue to be implemented during the regularly scheduled semi-annual groundwater monitoring events.

2.2.2 Key Actions Completed

The following key actions were completed in 2023:

- Prepared 2022 Annual Report including:
    - The Annual Report was placed in the facility's operating record pursuant to § 257.105(h)(1);
    - Pursuant to § 257.106(h)(1), the notification was sent to the relevant State Director within 30 days of the Annual Report being placed in the facility's operating record [§ 257.106(d)];
    - Pursuant to § 257.107(h)(1), the Annual Report was posted to the CCR Website within 30 days of the Annual Report being placed in the facility's operating record [§ 257.107(d)];

- Collected and analyzed two rounds of groundwater monitoring (January and June) in accordance with § 257.95(b) and § 257.95(d)(1) and recorded the concentrations in the facility's operating record as required by § 257.95(d)(1) (which is also consistent with § 257.98 (a)(1)). Groundwater monitoring results are summarized in Table 1 and laboratory analytical results are provided in Appendix B.
- Completed statistical evaluations associated with the October 2022, January 2023, and June 2023 sampling events to determine statistically significant exceedance of GWPS for Appendix IV constituents in accordance with § 257.93(h)(2). Statistical results are summarized in Appendix A.
- Continued collection of eight, independent samples from POZ-3, an existing well which is used for the state landfill permit, to establish a baseline prior to including in the statistical evaluations. As of December 31, 2023, seven (7) samples have been collected to date, six (6) of which occurred in 2023. POZ-3 will be added to the compliance groundwater monitoring network after collecting eight samples.
- Continued to characterize the nature and extent of Appendix IV constituents identified at statistically significant levels above the GWPS in accordance with § 257.95(g)(1).
- Continued to implement the semiannual Corrective Action Groundwater Monitoring Program consistent with § 257.98(a)(1).
    - Continued monitoring boundary wells for cobalt and continued to collect drinking water samples from a nearby residential potable water well. **Analytical results for these wells continue to show cobalt below the groundwater protection standard.**
    - Continued monitoring surface water in the Bulltown Ditch for cobalt on an annual basis. Analytical results continue to show cobalt is below the groundwater protection standard.
    - During the first semi-annual sampling event, groundwater samples were analyzed for geochemical parameters, including cations and anions, which will be used for the long-term performance monitoring of the attenuation mechanisms contributing to the cobalt concentration reductions in the groundwater.
- Improved the potentiometric surface characterization of the uppermost aquifer given changing site conditions by:
    - Collecting site-wide synoptic rounds of water levels within a 48-hour period prior to initiating semi-annual sampling of the groundwater monitoring wells. Groundwater elevation measurements continued to be collected in each well immediately prior to collecting the sample.
    - Collecting site-wide synoptic water levels quarterly to better understand temporal changes in groundwater elevation; this required two additional events collected independently of groundwater sampling;
    - Continued surveying the water surface elevations of unlined ponds, as well as ditches, at the same time as the semi-annual monitoring events and other quarterly synoptic water level events. Unlined ponds are sources of hydraulic head and groundwater recharge; therefore, it is appropriate to include pond surface water elevations in the potentiometric interpretation of the uppermost aquifer.
- Initiated an evaluation of the aquifer properties to further support and monitor the success of the selected remedy of monitored natural attenuation of cobalt. Solid samples were obtained from four (4) wells (POZ-4, POZ-6, POZ-7 and POZ-8) for a series of laboratory analyses.
- Evaluated turbidity, oxidation-reduction potential, and well screen submersion trends in sitewide wells and identified wells to be redeveloped by a certified well driller to remove buildup of sediment fines and suspected biofouling on the well screens. A submersible camera was used to investigate wells with unsubmerged screens prior to redevelopment. Camera investigation and

well redevelopment were completed in November 2023. Success of redevelopment will be monitored during 2024 sampling events.

- The CGS Sampling and Analysis Plan was updated in August 2023 to make general revisions and improvements to reflect changes in site conditions and procedures. It will continue to be revised, as necessary.

2.2.3 Problems Encountered

CCMLF-1, the CMA/NE well at the property boundary, had higher than historical field measurements for oxidation-reduction potential and dissolved oxygen and subsequently a cobalt concentration that exceeded the GWPS.

Upon receipt and review of the analytical results for the March baseline sampling event, the non-detect reporting limits for monitoring well POZ-3 (Sample ID #AF58979) were greater than the GWPS for lithium. At the time these results were evaluated, too much time had passed for a confirmatory resample to be of value.

2.2.4 Actions to Resolve Problems

CCMLF-1, the CMA/NE well at the property boundary, was resampled to confirm the cobalt concentration. The 7.28 µg/L result for cobalt on January 26, 2023, was resampled to be 2.8 µg/L on March 28, 2023. Then for the sample collected on June 21, 2023, the result for cobalt was 1.7 µg/L.

Regarding POZ-3 sample results and given the values for lithium in other baseline sampling events were below the GWPS for POZ-3, it is likely this high non-detect value for lithium does not represent an exceedance of the GWPS. Once eight baseline samples are analyzed, POZ-3 will be statistically evaluated for SSLs of all Appendix IV constituents.

2.2.5 Project Key Activities for Upcoming Year

Key activities to be completed in 2024 include the following:

- Prepare the 2024 annual report; place it in the record as required by § 257.105(h)(1), notify the Relevant State Director [§ 257.106(d)]; and post to the facility's publicly available CCR website [§ 257.107(d)].
- Conduct semi-annual groundwater monitoring consistent with § 257.98(a)(1) and § 257.95(d)(1) and in accordance with the CGS GMP.
- Piezometers CGSPZ-4 and CGSPZ-5 will be abandoned and replaced by a South Carolina certified well driller in January 2024, outside of the easement of an infrastructure construction project.
- Continue to collect independent samples on a bimonthly basis for POZ-3 to establish a statistically representative dataset. POZ-3 will be added to the compliance groundwater monitoring network after collecting eight samples. This date is estimated to be in conjunction with the January 2024 sampling event.
- Update the statistical upper tolerance limits for background wells PM-1 and CBW-1 in accordance with the Unified Guidance.
- Conduct statistical analyses of semi-annual groundwater monitoring analytical results of the CCR compliance wells to determine if SSLs of the detected Appendix IV constituents are present.

- Use the existing groundwater fate and solute transport model as needed to compare cobalt concentrations in groundwater monitoring wells POZ-4 and POZ-6 against modeled values post-closure. Re-calibrate or enhance the model as needed to support MNA studies.
- Continue the evaluation of the aquifer properties to support the selected remedy of monitored natural attenuation of cobalt.
- Conduct additional nature and extent activities:
    - Continue monitoring the property boundary wells in the uppermost and deeper aquifers on a semi-annual basis.
    - Continue annual monitoring of the nearby residential potable water well.
    - Continue surface water monitoring of the Bulltown Ditch.
- Continue improving the potentiometric surface characterization of the uppermost aquifer given changing site conditions by:
    - Continue the sitewide synoptic water level measurements four (4) times per year on a approximately quarterly basis and in conjunction with the semi-annual groundwater monitoring events.
    - Continue collecting surface water elevations from unlined ponds and ditches on the same quarterly basis as the sitewide synoptic water level measurements.

2.3 40 CFR § 257.90(e) - INFORMATION

At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

2.3.1 40 CFR § 257.90(e)(1)

A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

As required by § 257.90(e)(1), a map showing the locations of the CCR unit and associated upgradient and downgradient monitoring wells for the Class 2 Landfill is presented as Figure 1.

2.3.2 40 CFR § 257.90(e)(2)

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

No groundwater monitoring wells were installed decommissioned in 2023.

2.3.3 40 CFR § 257.90(e)(3)

In addition to all the monitoring data obtained under § 257.90 through § 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

In accordance with § 257.95(b) and § 257.95(d)(1), at least two independent samples from each background and downgradient monitoring well were collected and analyzed. A summary table including the sample names, dates of sample collection, reason for sample collection, and monitoring data obtained for the groundwater monitoring program for the Class 2 Landfill is presented in Table 1 of this report. In addition, as required by § 257.95(d)(3), Table 1 includes the GWPS established under § 257.95(d)(2).

Laboratory analytical data reports, along with field sampling forms, are provided in Appendix B to this report.

2.3.4 40 CFR § 257.90(e)(4)

A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

The groundwater monitoring program remained in corrective action monitoring for the duration of 2023. A summary of the history of the evolution of the monitoring programs is provided in this section.

As required by § 257.93(h) a statistical analysis of the Appendix III constituents was completed January 15, 2018. Baseline analytical data collected from background monitoring wells CBW-1 and PM-1 were combined to develop Upper Tolerance Limits (UTLs). The UTLs for each Appendix III constituent were compared to the analytical results for the downgradient monitoring wells POZ-4, POZ-6, and POZ-7. Constituents with analytical results exceeding the UTLs were identified as SSIs over background for the respective Appendix III constituent. Per § 257.94(h) an Assessment Monitoring program was initiated on February 14, 2018. As required by § 257.93(h)(2), the subsequent statistical evaluation of the detected Appendix IV constituents identified SSLs, specifically cobalt, above GWPS. Therefore, per §257.95(g)(3), an assessment of corrective measures and nature and extent evaluation was initiated to evaluate the horizontal and vertical nature and extent of the SSLs downgradient of the CGS Class 2 Landfill.

The statistical analysis of Appendix IV constituents was conducted within 90-days of completing each semiannual sampling and analysis event in 2023 and it was determined that a SSL of cobalt continues to be present downgradient of the Class 2 Landfill in POZ-4 only. There is no maximum contaminant level (MCL) for cobalt and elevated levels of cobalt were not identified in the background wells, therefore, the GWPS for cobalt is set at the regional screening level (RSL). The sample concentrations from the downgradient wells for each of the detected Appendix IV constituents from the monitoring events of 2023 were compared to their respective background UTLs and GWPS (Appendix A). A sample concentration greater than the GWPS is considered to represent an SSL. Based on previous compliance sampling events and statistical evaluations, interwell comparisons were utilized for all downgradient wells and constituents. During sampling events in January and June 2023, an SSL above GWPS was identified at the Class 2 Landfill in monitoring well POZ-4 for cobalt, consistent with previous results. All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results generally reflect the predicted cobalt groundwater fate and transport modeling results. Even though there is variability in the cobalt data, the statistical trends are
stable for the three downgradient wells, POZ-4, POZ-6, and POZ-7. The ongoing performance of the selected remedy in achieving GWPS will continue to be evaluated during subsequent semiannual monitoring events.

Further development of the corrective action groundwater monitoring program was completed by reevaluating the existing CGS GMP in 2022. It was determined that the current assessment monitoring plan being implemented is sufficient to meet the post-closure monitoring needs to continue to evaluate the performance of the selected remedy and thus will continue to be implemented during the regularly scheduled semi-annual groundwater monitoring events. This is consistent with § 257.98(a)(1)(i).

2.3.5 40 CFR § 257.90(e)(5)

Other information required to be included in the annual report as specified in § 257.90 through § 257.98.

This Annual Report documents activities conducted to comply with Sections § 257.90 through § 257.98 of the Rule.

Additionally, an overview of the performance of the remedy implementation to date is provided. The landfill closure and water management improvements were completed in August 2016 and January 2020, respectively, under the oversight of SCDHEC. The enhanced water management improvements refer to capturing water which had been in contact with CCR and was draining through the toe drains, an improvement consisting of installing a seepage collection system including discharge piping and lift stations. The water captured from the toe drains is fully isolated from non-contact stormwater and is redirected to the operational Class 3 Landfill Leachate Collection Pond before further treatment in the station's permitted wastewater treatment facility prior to discharge under NPDES permit #SC0037401.

Since the completion of the water management improvements, the uppermost shallow aquifer boundary well (CCMLF-1) has shown marked decreases in cobalt concentrations from 17.8 µg/L to 1.7 µg/L. The sampling results from both 2023 sampling events remained below the GWPS of 6 µg/L. The adjacent deeper aquifer boundary well (CCMLF-1D) has consistently been below the GWPS since monitoring of the property boundary began with the initial nature & extent activities in 2019. Additionally, the two other nature & extent wells that define lateral extent, CCMLF-2 and CAP-13, continue to demonstrate cobalt below the GWPS. These wells will continue to be monitored in 2024. The decline in cobalt concentrations observed in the shallow aquifer boundary well CCLMF-1 indicates that the cobalt plume is contracting, and that natural attenuation is effective in reducing cobalt concentrations in groundwater.

The only remaining monitoring well with a statistically significant level of cobalt is POZ-4. This well is located on the northeastern boundary of the CCR unit. While the concentrations have increased from 32.1 µg/L to 98.4 µg/L over the course of the 2023 sampling events, these concentrations are considerably lower than the historical range. Additionally, it is not unusual to observe a temporary spike during the summer sampling events. This well will continue to be monitored during ongoing corrective action sampling activities in 2024.

Groundwater flow rate and direction are provided as Figures 2, 3, 4 and 5 for each sampling event as specified in § 257.93(c).

As the number of groundwater monitoring wells and associated samples have increased considerably across the site since the promulgation of the CCR Rule in 2015, turnaround times for labs have increased compared to historical expectations. Average turnaround times were approximately 60 days in 2023. Additionally, expansion of the groundwater monitoring networks (i.e., wells and samples) has contributed to a significant increase in data volume and complexity.

TABLES

Table 1 - Summary of Analytical Results
Cross Generating Station Class 2 Landfill Corrective Action Monitoring 2023

					Appendix III Constituents									Appendix IV Constituents																		Field Parameters							
Well ID	Purpose	Date of Sample Event	Laboratory Sample ID Number		Boron	Calcium		Chloride	Fluoride	Sulfate	Total Dissolved Solids	pH	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226	Radium 228	Radium 226/228 Combined	Selenium		Thallium	Depth to Groundwater	Groundwater Elevation	pH	Specific Conductivity	Temperature	Oxidation Reduction Potential	Turbidity	Dissolved Oxygen
				Unit	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	SU	ug/L	ug/l	ug/L	ug/l	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	pCi/L	pCi/L	pCi/L	ug/L	ug/L	ug/L	Feet	Feet	SU	uS	C	mv	NTU	ppm
				Method	EPA 6010D	EPA 6020B	EPA 6010D	EPA 300.0	EPA 300.0	EPA 300.0	SM 2540C		EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 300.0	EPA 6020B	EPA 6010D	EPA 7470	EPA 6010D	EPA 903.1 Mod	EPA 904.0	EPA 903.1 Mod	EPA 6010D	EPA 6020B	EPA 6020B						SM2580		
				GWPS/ US EPA MCL/RSL	----	----	----	----	4.00	----	----	----	25.0	16.0	2000	4.00	5.00	100	6.00	4.00	15.0	40.0	2.00	100	----	----	16.3	50.0		2.00	----	----	----	----	----	----	----	----
Site Background Wells																																					
PM-1	Background	1/24/2023	AF54600		11.4	12.6		12.3	<0.100	8.12	111	4.84	<5.00	3.32	80.8	<0.500	<0.500	<5.00	1.36	<0.100	<2.50	<5.00	<0.200	<5.00	0.845	1.79	2.63		<2.50	<1.00	8.29	75.0	4.84	100	17.7	37.0	2.90	0.660
PM-1	Background	6/5/2023	AF66439		18.4	12.7		12.4	<0.100	9.11	130	5.08	<5.00	<5.00	76.6	<0.500	<0.500	<5.00	1.19	<0.100	<1.00	<5.00	<0.200	<5.00	3.47	0.236	3.70		<10.0	<1.00	7.85	75.4	5.08	130	24.8	47.0	0	0.910
PM-1	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
CBW-1	Background	1/24/2023	AF54572		17.5	29.3		3.00	0.150	84.2	143	4.23	<5.00	<3.00	42.5	<0.500	<0.500	<5.00	0.760	0.150	2.59	<5.00	<0.200	<5.00	0.509	1.15	1.68		<2.50	<1.00	9.29	76.5	4.23	181	18.2	347	0	0.720
CBW-1	Background	6/6/2023	AF66407		836	33.9		3.73	0.230	97.1	179	4.34	<5.00	<5.00	38.8	<0.500	<0.500	<5.00	0.814	0.230	2.55	<5.00	<0.200	<5.00	0.968	4.12	5.08		<10.0	<1.00	9.64	76.2	4.34	247	21.5	149	0	1.38
CBW-1	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
Class 2 Landfill Wells																																					
POZ-3	Baseline	1/31/2023	AF54601		35.0	193		14.3	<0.100	87.7	664	6.53	<5.00	<3.00	96.3	<0.500	<0.500	<5.00	0.865	<0.100	<2.50	<5.00	<0.200	<5.00	0.570	1.32	1.89		<2.50	<1.00	4.16	78.5	6.53	767	17.8	132	0	0.760
POZ-3	Baseline	3/20/2023	AF58979		51.5		192	13.1	0.100	88.9	696	6.30	<5.00	<3.00	105	<0.500	<0.500	<5.00	0.660	0.100	<2.50	<50.0	<0.200	<40.0	0.421	0.713	1.13	<15.0		<1.00	5.47	77.1	6.30	788	12.6	134	7.20	0.940
POZ-3	Baseline	6/13/2023	AF66440		14.2	180		15.0	<0.100	97.7	643	6.49	<5.00	<5.00	91.1	<0.500	<0.500	<5.00	2.10	<0.100	<1.00	6.07	<0.200	<5.00	0.406	1.13	1.53		<10.0	<1.00	6.22	76.4	6.49	1000	25.8	57.0	9.30	0.620
POZ-3	Baseline	7/19/2023	AF71899		19.6		159	12.2	0.140	25.2	654	6.38	<5.00	<3.00	96.5	<0.500	<0.500	<5.00	2.39	0.140	<2.50	3.17	<0.200	<5.00	0.706	0.477	1.18	<20.0		<1.00	5.21	77.4	6.38	983	26.6	38.0	5.70	0.660
POZ-3	Baseline	10/10/2023	AF80267		20.5	166		11.2	0.210	80.0	715	6.10	<5.00	<5.00	99.9	<0.500	<0.500	<5.00	2.70	0.210	<1.00	<5.00	<0.200	<5.00	0.205	-1.54	0.205		<10.0	<1.00	6.21	76.4	6.10	947	23.1	70.0	0	0.960
POZ-3	Baseline	12/5/2023	AF84385		15.8	185		11.2	0.110	81.7	699	6.29	<5.00	<5.00	99.0	<0.500	<0.500	<5.00	1.00	0.110	<1.00	<5.00	<0.200	<5.00	0.281	1.21	1.49		<10.0	<1.00	5.07	77.5	6.29	967	18.0	127	6.80	0.790
POZ-3	total samples				6	4	2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	2	4	6	6	6	6	6	6	6	6	6
POZ-4	Corrective Action	1/30/2023	AF54602		18.6	277		347	<0.100	101	1466	6.12	<5.00	<3.00	132	<0.500	<0.500	<5.00	32.1	<0.100	<2.50	11.9	<0.200	<5.00	0.818	3.98	4.80		<2.50	<1.00	3.71	79.0	6.12	1130	16.9	74.0	0.500	0.760
POZ-4	Corrective Action	6/13/2023	AF66441		27.0	358		568	<0.100	156	2084	6.20	<5.00	<5.00	99.5	0.540	<0.500	<5.00	98.4	<0.100	<1.00	22.6	<0.200	<5.00	2.17	2.78	4.95		<10.0	<1.00	6.36	76.4	6.20	2260	27.2	-8.00	58.2	0.560
	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
POZ-6	Corrective Action	1/30/2023	AF54604		39.0	459		305	<0.100	474	2010	6.26	<5.00	<3.00	78.1	<0.500	<0.500	<5.00	3.01	<0.100	<2.50	9.67	<0.200	<5.00	0.786	3.82	4.60		<2.50	<1.00	5.18	78.7	6.26	2040	18.8	-14.0	392	0.430
POZ-6	Corrective Action	6/13/2023	AF66443		39.7	496		376	<0.100	554	2262	6.35	<5.00	<5.00	88.3	<0.500	<0.500	<5.00	3.10	<0.100	<1.00	20.1	<0.200	<5.00	0.873	0.773	1.65		<10.0	<1.00	7.57	76.3	6.35	2720	22.8	-79.0	299	0.690
	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
POZ-7	Corrective Action	1/31/2023	AF54605		<10.0	7.57		18.7	<0.100	<2.00	185	4.72	<5.00	<3.00	95.1	0.735	<0.500	<5.00	1.40	<0.100	<2.50	<5.00	<0.200	<5.00	0.854	4.02	4.87		<2.50	<1.00	3.68	78.3	4.72	64.0	18.8	246	7.90	1.25
POZ-7	Duplicate	1/31/2023	AF54606		<10.0	9.84		21.4	<0.100	<2.00	86.3		<5.00	<3.00	106	0.755	<0.500	<5.00	1.22	<0.100	<2.50	<5.00	<0.200	<5.00	0.643	3.80	4.44		<2.50	<1.00								
POZ-7	Corrective Action	6/13/2023	AF66444		11.2	26.5		36.5	<0.100	<2.00	196	5.93	<5.00	<5.00	145	<0.500	<0.500	<5.00	0.610	<0.100	<1.00	11.0	<0.200	<5.00	0.445	0.655	1.10		<10.0	<1.00	6.34	75.7	5.93	187	26.5	207	3.60	1.21
POZ-7	Duplicate	6/13/2023	AF66445		10.9	25.9		36.6	<0.100	<2.00	170		<5.00	<5.00	143	<0.500	<0.500	<5.00	0.680	<0.100	<1.00	8.68	<0.200	<5.00	0.822	1.80	2.63		<10.0	<1.00								
	total samples				4	4	0	4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	0	4	4	2	2	2	2	2	2	2	2
POZ-8	CMA/NE	1/30/2023	AF54607		22.2	631		638	<0.100	27.7	2854	6.78	<5.00	<3.00	520	<0.500	<0.500	<5.00	<0.500	<0.100	<2.50	144	<0.200	<5.00	0.304	1.44	1.74		<2.50	<1.00	4.46	78.7	6.78	1940	17.5	-79.0	33.0	0.396
POZ-8	CMA/NE	6/22/2023	AF66446		19.8	427		774	<0.100	40.4	2630	6.54	<5.00	<5.00	326	<0.500	<0.500	<5.00	<0.500	<0.100	<1.00	65.9	<0.200	<5.00	0.301	2.71	3.01		<10.0	<1.00	5.97	77.2	6.54	2800	22.0	-94.0	14.1	0.660
	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
CCMLF-1	CMA/NE	1/26/2023	AF54582		24.6	29.0		12.0	<0.100	51.9	146	5.27	<5.00	<3.00	151	<0.500	<0.500	<5.00	7.28	<0.100	<2.50	<5.00	<0.200	<5.00	0.439	-1.13	0.439		<2.50	<1.00	3.32	77.5	5.27	171	15.8	228	4.80	1.01
CCMLF-1	Resample	3/29/2023	AF59978									5.78							2.80												4.21	76.7	5.78	119	16.5	98.0	0	0.620
CCMLF-1	CMA/NE	6/21/2023	AF66422		20.0	21.5		8.25	<0.100	12.8	104	5.94	<5.00	<5.00	79.3	<0.500	<0.500	<5.00	1.70	<0.100	<1.00	<5.00	<0.200	<5.00	0.983	2.50	3.48		<10.0	<1.00	4.46	76.4	5.94	151	21.0	130	7.60	0.600
	total samples				2	2	0	2	2	2	2	3	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	0	2	2	3	3	3	3	3	3	3	3
CCMLF-1D	CMA/NE	1/26/2023	AF54583		14.3	54.2		6.00	<0.100	4.72	168	7.08	<5.00	<3.00	38.5	<0.500	<0.500	<5.00	<0.500	<0.100	<2.50	<5.00	<0.200	<5.00	0.443	1.21	1.66		<2.50	<1.00	3.12	77.5	7.08	204	15.4	52.0	0	1.36
CCMLF-1D	CMA/NE	6/21/2023	AF66423		14.3	51.0		6.21	<0.100	3.45	178	7.21	<5.00	<5.00	38.1	<0.500	<0.500	<5.00	<0.500	<0.100	<1.00	<5.00	<0.200	<5.00	0.680	1.19	1.87		<10.0	<1.00	4.32	76.3	7.21	284	20.9	-134	4.80	0.550
	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
CCMLF-2	CMA/NE	2/7/2023	AF54584		16.1	5.07		3.68	<0.100	2.72	40.0	5.39	<5.00	<3.00	25.8	<0.500	<0.500	<5.00	<0.500	<0.100	<2.50	<5.00	<0.200	<5.00	0.748	0.445	1.19		<2.50	<1.00	6.73	77.4	5.39	34.0	20.7	280	0	2.13
CCMLF-2	CMA/NE	6/22/2023	AF66424		14.5	12.1		5.84	<0.100	<2.00	53.6	5.97	<5.00	<5.00	31.1	<0.500	<0.500	<5.00	0.710	<0.100	<1.00	<5.00	<0.200	<5.00	0.451	2.87	3.32		<10.0	<1.00	7.49	76.6	5.97	96.0	21.1	70.0	5.80	1.19
	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
CAP-13	CMA/NE	1/31/2023	AF54570		13.5	55.9		4.81	<0.100	108	294	5.37	<5.00	<3.00	199	<0.500	<0.500	<5.00	<0.500	<0.100	<2.50	<5.00	<0.200	<5.00	0.405	3.71	4.11		<2.50	<1.00	3.67	77.1	5.37	255	18.8	94.0	55.5	0.370
CAP-13	CMA/NE	6/15/2023	AF66405		31.7	42.9		4.63	<0.100	79.7	231	5.19	<5.00	<5.00	160	<0.500	<0.500	<5.00	<0.500	<0.100	<1.00	<5.00	<0.200	<5.00	0.287	0.954	1.24		<10.0	<1.00	6.01	74.8	5.19	296	23.1	12.0	4.00	0.860
	total samples				2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2

Notes:
1. All groundwater samples collected from the monitoring wells for Corrective Action Monitoring in 2023 for the constituents listed in Appendix III of the EPA CCR Rule (40 CFR) were analyzed by South Carolina Certified laboratories: Santee Cooper Analytical Services (Certification # 08552), GEL Laboratories, LLC (Certification # 10120), Test America Laboratories Inc. Savannah (Certification # 98001), Rogers & Callcot, Inc. (Certification # 23105001), and Pace Analytical Services LLC (Certification #99030).
2. All Background, Corrective Measures Assessment (CMA) / Nature & Extent (NE), & Corrective Action compliance wells have been sampled to mee §§ 257.95 and § 257.98(a)(1).
3. Due to challenges with laboratory delays, all groundwater samples were not analyzed by a single laboratory. This accounts for the majority of the reporting limit variability. Matrix interference also contributed to variable RLs.
4. Depth to groundwater is measured below the top of the casing (btoc) to the water surface. Elevation is shown relative to mean sea level (msl).

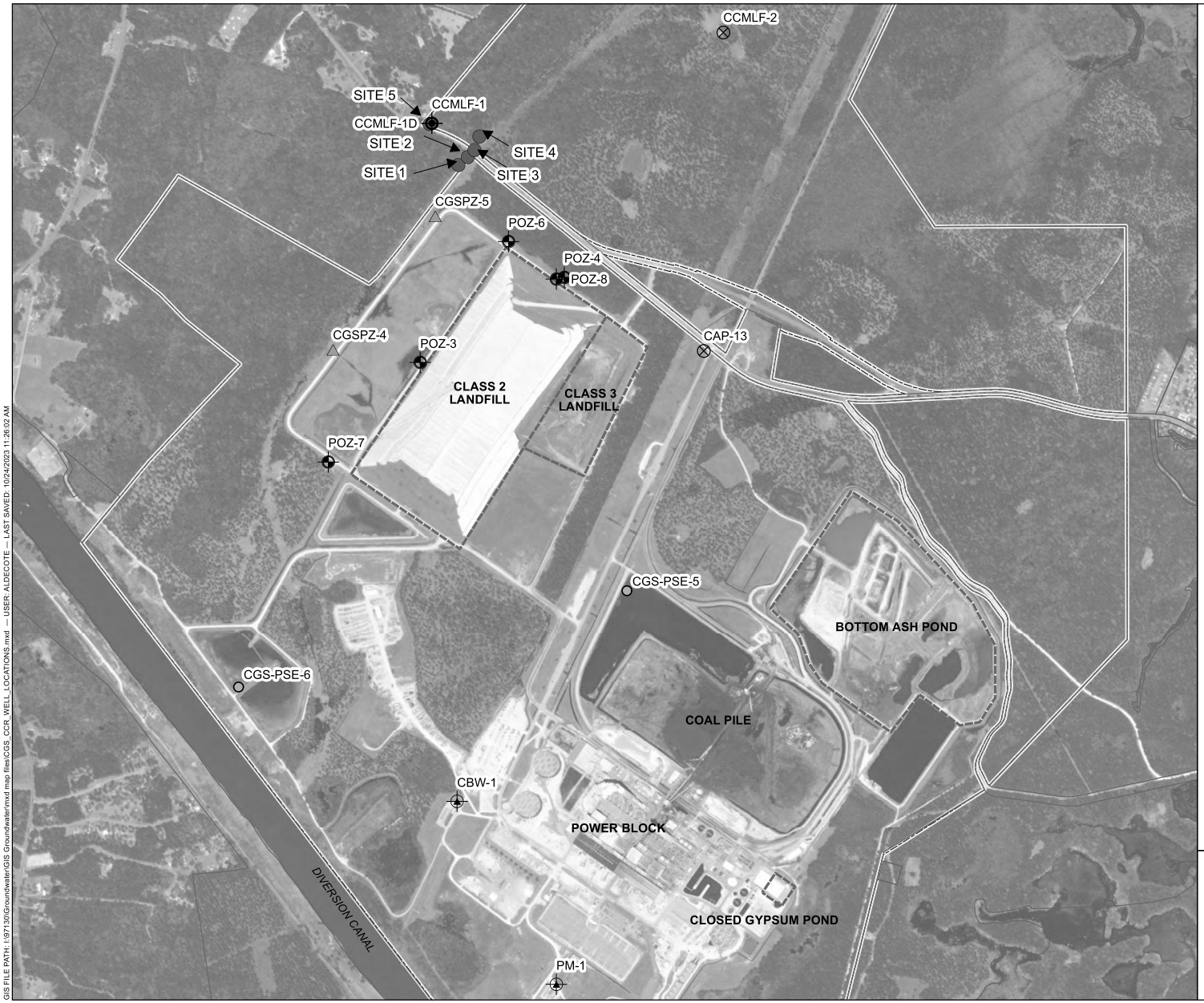
Table 2
Cross Generating Station
2023 Synoptic Water Levels for Groundwater Monitoring Wells

		1st Event - 2/13/2023		2nd Event - 5/1/2023		3rd Event - 6/26/2023		4th Event - 11/14/2023	
Well Name	**Top of Casing Elevation (ft msl)[2]**	**Depth to Groundwater (ft btoc)[2]**	**Groundwater Elevation (ft msl)[2]**	**Depth to Groundwater (ft btoc)[2]**	**Groundwater Elevation (ft msl)[2]**	**Depth to Groundwater (ft btoc)[2]**	**Groundwater Elevation (ft msl)[2]**	**Depth to Groundwater (ft btoc)[2]**	**Groundwater Elevation (ft msl)[2]**
PM-1	83.24	8.24	75.00	7.89	75.35	7.91	75.33	8.61	74.63
CBW-1	85.80	9.00	76.80	9.57	76.23	9.65	76.15	10.11	75.69
CAP-1	82.70	6.25	76.45	6.42	76.28	6.32	76.38	6.79	75.91
CAP-2[1]	89.70	15.66	76.19	15.73	73.97	15.71	73.99	16.16	73.54
CAP-3	91.49	15.41	76.08	15.34	76.15	15.34	76.15	15.74	75.75
CAP-4	91.77	15.80	75.97	15.74	76.03	15.74	76.03	16.15	75.62
CAP-5	91.78	14.90	76.88	15.82	75.96	15.88	75.90	16.21	75.57
CAP-6	91.82	15.44	76.38	16.31	75.51	16.44	75.38	16.92	74.90
CAP-7	91.64	14.65	76.99	15.68	75.96	15.74	75.90	16.37	75.27
CAP-8	91.61	16.08	75.53	17.02	74.59	17.10	74.51	17.72	73.89
CAP-9	91.59	14.00	77.59	15.20	76.39	14.97	76.62	15.45	76.14
CAP-10	95.68	20.39	75.29	21.35	74.33	21.33	74.35	22.00	73.68
CAP-11[1]	95.55	19.06	76.49	19.33	76.22	18.55	77.00	19.03	76.52
CAP-12[1]	98.33	22.65	75.68	23.10	75.23	22.86	75.47	23.42	74.91
CAP-13	80.77	3.68	77.09	5.63	75.14	5.39	75.38	5.80	74.97
CAP-14[1]	80.77	3.91	76.86	5.65	75.12	5.56	75.21	5.82	74.95
CCMLF-1	80.86	3.44	77.42	5.04	75.82	4.69	76.17	5.14	75.72
CCMLF-1D	80.65	3.26	77.39	4.78	75.87	4.44	76.21	4.86	75.79
CCMLF-2	84.08	6.54	77.54	8.79	75.29	8.63	75.45	9.31	74.77
POZ-3	82.61	4.71	77.90	6.10	76.51	6.03	76.58	6.11	76.50
POZ-4	82.73	4.11	78.62	6.33	76.40	6.19	76.54	6.52	76.21
POZ-5D[1]	82.49	4.30	78.19	6.49	76.00	6.32	76.17	6.67	75.82
POZ-6	83.84	5.40	78.44	7.83	76.01	7.47	76.37	8.03	75.81
POZ-7	82.02	4.31	77.71	5.80	76.22	6.06	75.96	6.08	75.94
POZ-8	83.13	4.94	78.19	7.09	76.04	6.93	76.20	7.28	75.85
CLF1B-1	83.76	6.77	76.99	7.36	76.40	7.42	76.34	7.51	76.25
CLF1B-2	82.04	4.95	77.09	5.75	76.29	5.77	76.27	5.95	76.09
CLF1B-3	82.75	5.23	77.52	6.64	76.11	6.53	76.22	6.74	76.01
CLF1B-4	82.74	4.95	77.09	7.78	74.96	6.60	76.14	6.89	75.85
CLF1B-5	81.09	3.25	77.84	5.32	75.77	5.21	75.88	5.48	75.61
CLF1B-5D	80.93	3.72	77.21	5.51	75.42	5.46	75.47	5.75	75.18
CCMAP-1	80.21	4.28	75.93	6.12	74.09	5.87	74.34	6.64	73.57
CCMAP-2	81.24	6.65	74.59	7.41	73.83	7.42	73.82	8.45	72.79
CCMAP-3	81.91	6.29	75.62	7.34	74.57	7.43	74.48	8.12	73.79
CCMAP-4	81.83	4.83	77.00	5.74	76.09	5.82	76.01	6.09	75.74
CCMAP-5	83.71	6.58	77.13	7.54	76.17	7.51	76.20	7.77	75.94
CCMAP-6	84.41	7.67	76.74	9.49	74.92	9.59	74.82	9.87	74.54
CCMAP-7	81.57	6.83	74.74	7.53	74.04	7.71	73.86	8.75	72.82
CCMAP-8	82.89	6.38	76.68	7.88	75.01	7.97	74.92	8.41	74.48
CGYP-1	91.89	16.45	75.44	16.81	75.08	16.81	75.08	16.99	74.90
CGYP-2	84.88	8.75	76.13	9.69	75.19	9.70	75.18	9.90	74.98
CGYP-3	83.95	6.63	77.32	8.68	75.27	8.68	75.27	8.76	75.19
CGYP-4	83.49	6.44	77.05	7.84	75.65	7.73	75.76	7.88	75.61
CGYP-5[3]	84.12	7.77	76.35	7.74	76.38	7.69	76.43	8.16	75.96
CGYP-6	83.23	7.61	75.62	7.86	75.37	7.89	75.34	8.31	74.92
CGYP-7	85.37	9.79	75.58	10.19	75.18	10.21	75.16	10.40	74.97
CGSPZ-1	83.31	7.71	75.60	7.96	75.35	7.91	75.40	8.52	74.79
CGSPZ-2	82.56	6.47	76.09	7.71	74.85	7.71	74.85	7.82	74.74
CGSPZ-3	82.85	4.69	78.16	7.97	74.88	8.74	74.11	8.04	74.81
CGSPZ-4	81.28	3.91	77.37	5.27	76.01	5.51	75.77	5.51	75.77
CGSPZ-5	80.56	2.57	77.99	4.71	75.85	4.56	76.00	4.25	76.31
CCMGP-1[4]	84.30	-	-	-	-	9.13	75.17	9.48	74.82
CCMGP-2[4]	96.73	-	-	-	-	21.68	75.05	21.74	74.99
CCMGP-3[4]	84.44	-	-	-	-	9.75	74.69	9.86	74.58
CCMGP-4[4]	84.82	-	-	-	-	9.44	75.38	9.78	75.04
CCMGP-5[4]	79.91	-	-	-	-	6.84	73.07	6.73	73.18
CGS-PSE-1[5]	-	-	75.74	-	74.78	-	74.81	-	75.08
CGS-PSE-2[5]	-	-	81.10	-	80.69	-	89.99	-	79.21
CGS-PSE-3[5]	-	-	82.24	-	81.67	-	81.57	-	79.26
CGS-PSE-4[5]	-	-	83.29	-	77.95	-	NA	-	NA
CGS-PSE-5[5]	-	-	77.60	-	76.46	-	76.71	-	77.10
CGS-PSE-6[5]	-	-	75.73	-	74.72	-	74.64	-	74.52

Notes:

1. Additional groundwater monitoring wells used for development of potentiometric maps. These wells monitor groundwater constituent concentrations under the SC DHEC Wastewater Permit #SC0037401 and are not used for CCR constituent concentrations.
2. Depth to Groundwater is measured below the top of the casing (btoc) to the water surface. The Top of Casing Elevation and GW Elevation are shown relative to mean sea level (msl).
3. Per the 2021 CCR Annual Report, CGYP-5 was no longer sampled for CCR GW constituents. Beginning in June 2022, water level data was collected for potentiometric surface interpretation.
4. Wells were installed between the 2nd and 3rd events.
5. Pond surface elevations (PSE) were collected to aid in the potentiometric surface interpretation. No surface water present at PSE-4 during 3rd and 4th event, so unable to collect surface water elevation.

FIGURES



LEGEND

- CGS LANDFILL PIEZOMETERS
- BACKGROUND WELL
- CLASS 2 LANDFILL MONITORING WELL
- CLASS 2 LANDFILL PROPERTY BOUNDARY WELL
- CLASS 2 LANDFILL NATURE & EXTENT WELL
- BULLTOWN DITCH SURFACE WATER SAMPLE
- CCR UNIT BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY
- POND WATER SURFACE ELEVATION MEASUREMENT LOCATION

NOTES:

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI

N

0 1,000 2,000
SCALE IN FEET

SANTEE COOPER
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA

LOCATION OF CLASS 2 LANDFILL GROUNDWATER MONITORING WELLS FOR CCR COMPLIANCE

JANUARY 2024

FIGURE 1

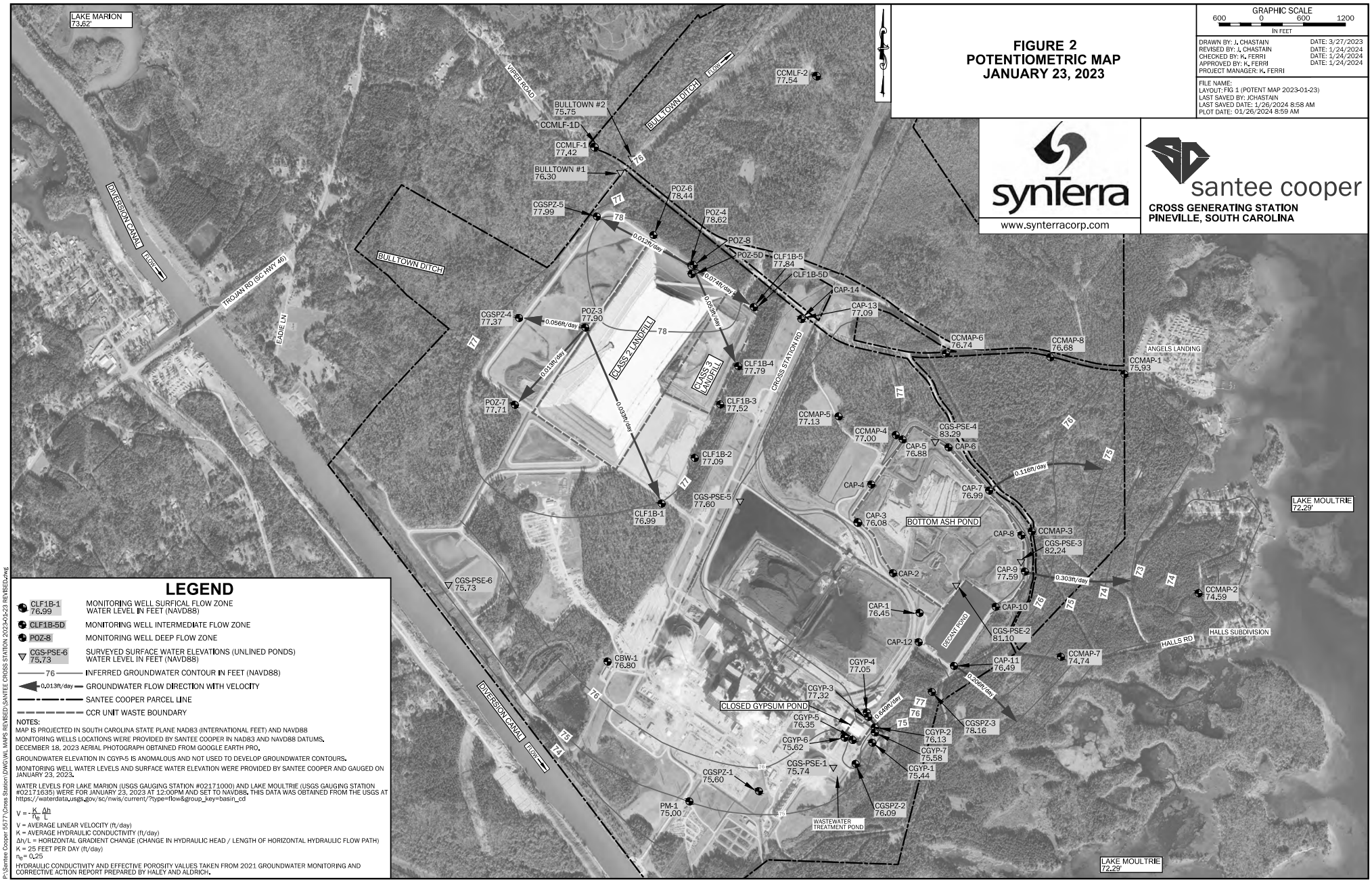


FIGURE 2
POTENTIOMETRIC MAP
JANUARY 23, 2023

GRAPHIC SCALE
600 0 600 1200
IN FEET

DRAWN BY: J. CHASTAIN	DATE: 3/27/2023
REVISED BY: J. CHASTAIN	DATE: 1/24/2024
CHECKED BY: K. FERRI	DATE: 1/24/2024
APPROVED BY: K. FERRI	DATE: 1/24/2024
PROJECT MANAGER: K. FERRI	

FILE NAME:
LAYOUT: FIG 1 (POTENT MAP 2023-01-23)
LAST SAVED BY: JCHASTAIN
LAST SAVED DATE: 1/26/2024 8:58 AM
PLOT DATE: 01/26/2024 8:59 AM

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CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA

LEGEND

- CLF1B-1 76.99 — MONITORING WELL SURFICAL FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- CLF1B-5D — MONITORING WELL INTERMEDIATE FLOW ZONE
- POZ-8 — MONITORING WELL DEEP FLOW ZONE
- CGS-PSE-6 75.73 — SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WATER LEVEL IN FEET (NAVD88)
- 76 — INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- 0.013ft/day — GROUNDWATER FLOW DIRECTION WITH VELOCITY
- SANTEE COOPER PARCEL LINE
- CCR UNIT WASTE BOUNDARY

NOTES:
MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE NAD83 (INTERNATIONAL FEET) AND NAVD88
MONITORING WELLS LOCATIONS WERE PROVIDED BY SANTEE COOPER IN NAD83 AND NAVD88 DATUMS.
DECEMBER 18, 2023 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
GROUNDWATER ELEVATION IN CGYP-5 IS ANOMALOUS AND NOT USED TO DEVELOP GROUNDWATER CONTOURS.
MONITORING WELL WATER LEVELS AND SURFACE WATER ELEVATION WERE PROVIDED BY SANTEE COOPER AND GAUGED ON JANUARY 23, 2023.
WATER LEVELS FOR LAKE MARION (USGS GAUGING STATION #02171000) AND LAKE MOULTRIE (USGS GAUGING STATION #02171635) WERE FOR JANUARY 23, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT https://waterdata.usgs.gov/sc/nwis/current/?type=flow&group_key=basin_cd

$$V = -\frac{K}{n_e}\frac{\Delta h}{L}$$

V = AVERAGE LINEAR VELOCITY (ft/day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
Δh/L = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 25 FEET PER DAY (ft/day)
n_e = 0.25
HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

P:\Santee Cooper (577)\Cross Station (DWG\WL MAPS REVISED\SANTEE CROSS STATION 2023-01-23 REVISED.dwg

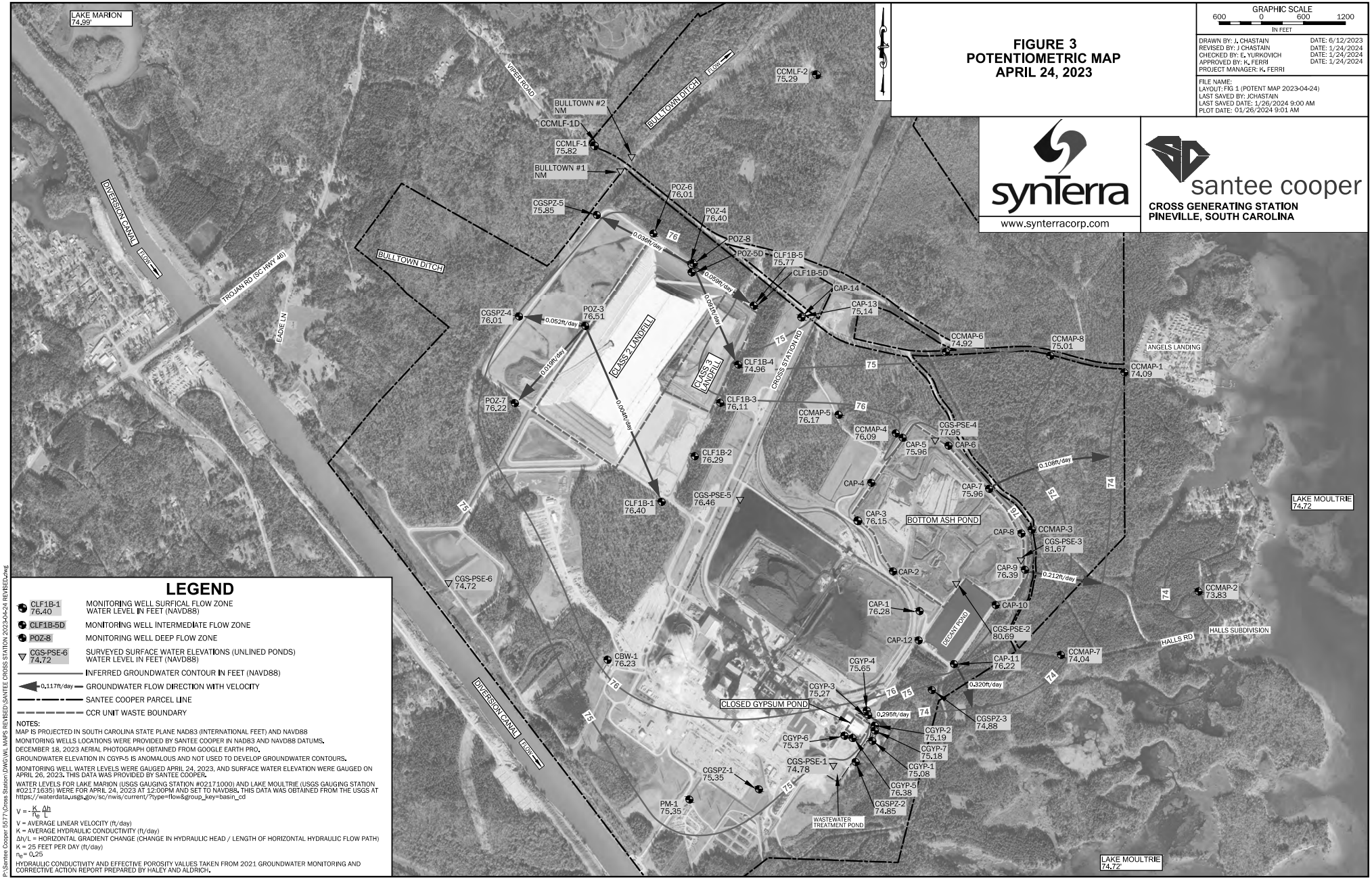

FIGURE 3
POTENTIOMETRIC MAP
APRIL 24, 2023

GRAPHIC SCALE
600 0 600 1200
IN FEET

DRAWN BY: J. CHASTAIN	DATE: 6/12/2023
REVISED BY: J CHASTAIN	DATE: 1/24/2024
CHECKED BY: E. YURKOVICH	DATE: 1/24/2024
APPROVED BY: K. FERRI	DATE: 1/24/2024
PROJECT MANAGER: K. FERRI	

FILE NAME:
LAYOUT: FIG 1 (POTENT MAP 2023-04-24)
LAST SAVED BY: JCHASTAIN
LAST SAVED DATE: 1/26/2024 9:00 AM
PLOT DATE: 01/26/2024 9:01 AM

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CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA

LEGEND

- CLF1B-1 76.40 — MONITORING WELL SURFICAL FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- CLF1B-5D — MONITORING WELL INTERMEDIATE FLOW ZONE
- POZ-8 — MONITORING WELL DEEP FLOW ZONE
- CGS-PSE-6 74.72 — SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WATER LEVEL IN FEET (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- 0.117ft/day — GROUNDWATER FLOW DIRECTION WITH VELOCITY
- SANTEE COOPER PARCEL LINE
- CCR UNIT WASTE BOUNDARY

NOTES:
MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE NAD83 (INTERNATIONAL FEET) AND NAVD88
MONITORING WELLS LOCATIONS WERE PROVIDED BY SANTEE COOPER IN NAD83 AND NAVD88 DATUMS.
DECEMBER 18, 2023 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
GROUNDWATER ELEVATION IN CGYP-5 IS ANOMALOUS AND NOT USED TO DEVELOP GROUNDWATER CONTOURS.
MONITORING WELL WATER LEVELS WERE GAUGED APRIL 24, 2023, AND SURFACE WATER ELEVATION WERE GAUGED ON APRIL 26, 2023. THIS DATA WAS PROVIDED BY SANTEE COOPER.
WATER LEVELS FOR LAKE MARION (USGS GAUGING STATION #02171000) AND LAKE MOULTRIE (USGS GAUGING STATION #02171635) WERE FOR APRIL 24, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT https://waterdata.usgs.gov/sc/nwis/current/?type=flow&group_key=basin_cd

$$V = -\frac{K}{n_e}\frac{\Delta h}{L}$$

V = AVERAGE LINEAR VELOCITY (ft/day)
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$\Delta h/L$ = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 25 FEET PER DAY (ft/day)
n_e = 0.25
HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

P:\Santee Cooper (5577)\Cross Station (DWG\WL MAPS REVISED\SANTEE CROSS STATION 2023-04-24 REVISED.dwg

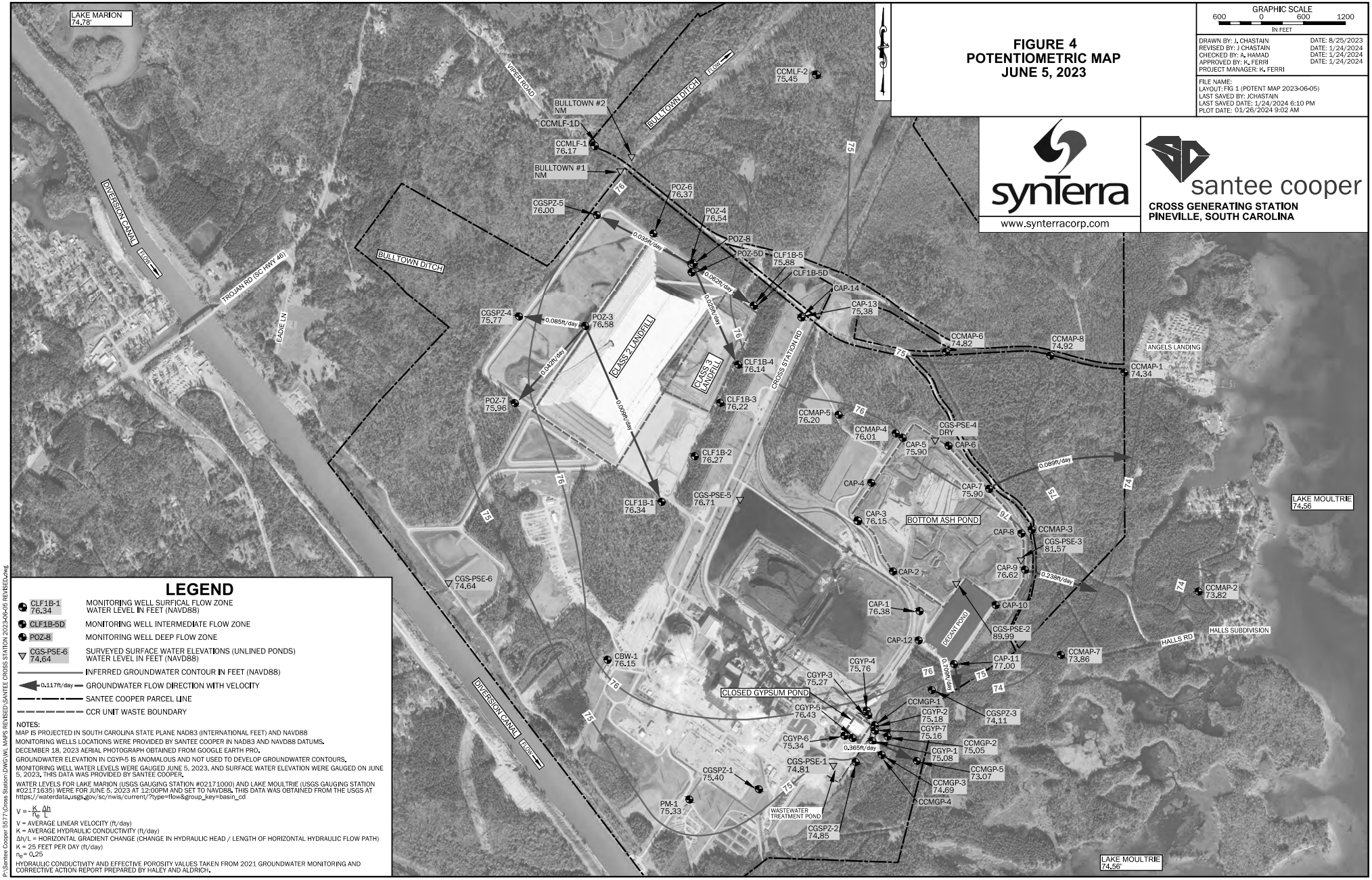

FIGURE 4
POTENTIOMETRIC MAP
JUNE 5, 2023

GRAPHIC SCALE
600 0 600 1200
IN FEET

DRAWN BY: J. CHASTAIN	DATE: 8/25/2023
REVISED BY: J CHASTAIN	DATE: 1/24/2024
CHECKED BY: A. HAMAD	DATE: 1/24/2024
APPROVED BY: K. FERRI	DATE: 1/24/2024
PROJECT MANAGER: K. FERRI	

FILE NAME:
LAYOUT: FIG 1 (POTENT MAP 2023-06-05)
LAST SAVED BY: JCHASTAIN
LAST SAVED DATE: 1/24/2024 6:10 PM
PLOT DATE: 01/26/2024 9:02 AM

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CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA

LEGEND

- CLF1B-1 76.34 — MONITORING WELL SURFICAL FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- CLF1B-5D — MONITORING WELL INTERMEDIATE FLOW ZONE
- POZ-8 — MONITORING WELL DEEP FLOW ZONE
- CGS-PSE-6 74.64 — SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WATER LEVEL IN FEET (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- 0.117ft/day — GROUNDWATER FLOW DIRECTION WITH VELOCITY
- SANTEE COOPER PARCEL LINE
- CCR UNIT WASTE BOUNDARY

NOTES:
MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE NAD83 (INTERNATIONAL FEET) AND NAVD88
MONITORING WELLS LOCATIONS WERE PROVIDED BY SANTEE COOPER IN NAD83 AND NAVD88 DATUMS.
DECEMBER 18, 2023 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
GROUNDWATER ELEVATION IN CGYP-5 IS ANOMALOUS AND NOT USED TO DEVELOP GROUNDWATER CONTOURS.
MONITORING WELL WATER LEVELS WERE GAUGED JUNE 5, 2023, AND SURFACE WATER ELEVATION WERE GAUGED ON JUNE 5, 2023, THIS DATA WAS PROVIDED BY SANTEE COOPER.
WATER LEVELS FOR LAKE MARION (USGS GAUGING STATION #02171000) AND LAKE MOULTRIE (USGS GAUGING STATION #02171635) WERE FOR JUNE 5, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT https://waterdata.usgs.gov/sc/nwis/current/?type=flow&group_key=basin_cd

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HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

P:\Santee Cooper (5577)\Cross Station (DWG\WL MAPS REVISED\SANTEE CROSS STATION 2023-06-05 REVISED.dwg

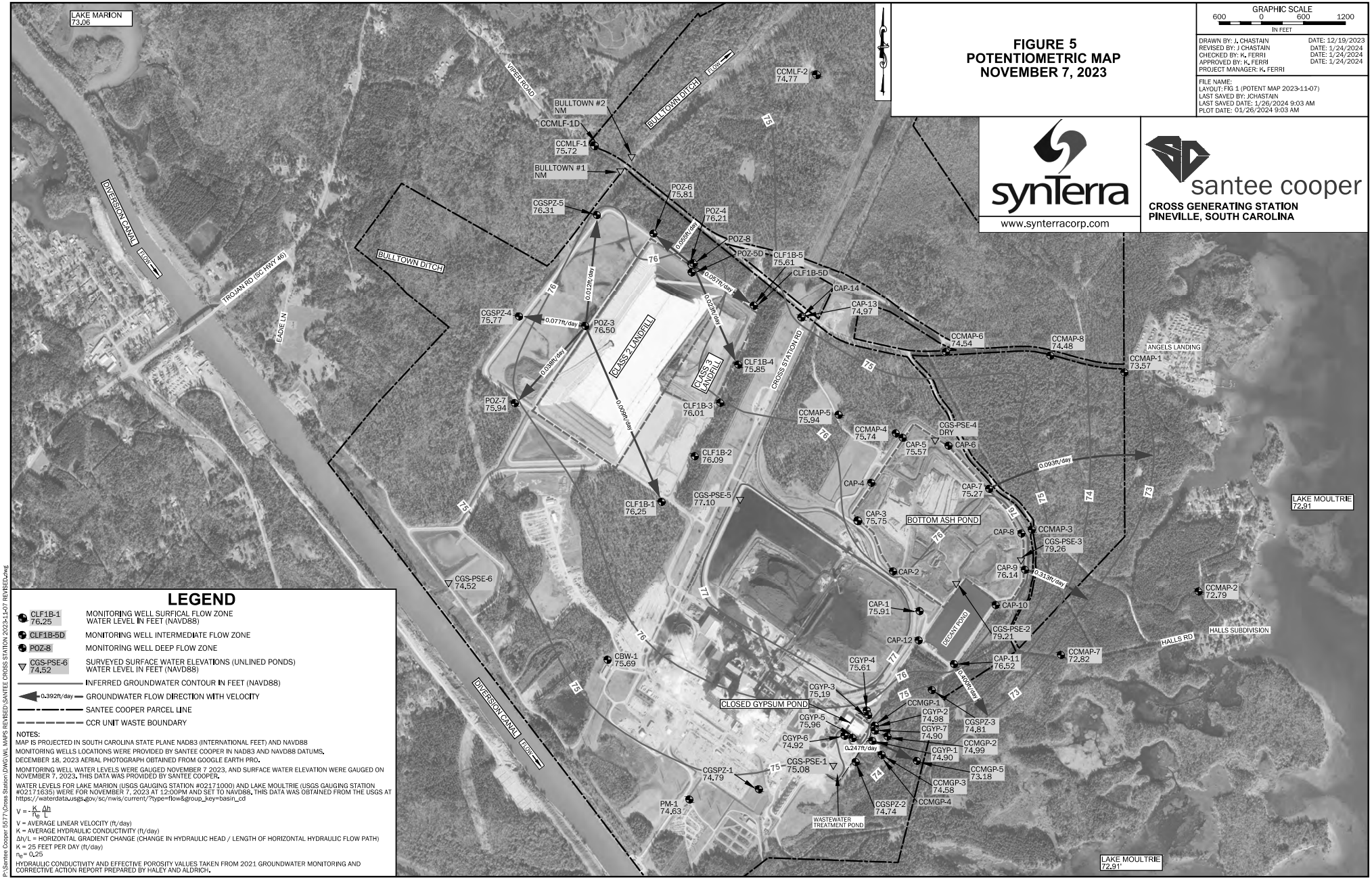

FIGURE 5
POTENTIOMETRIC MAP
NOVEMBER 7, 2023

GRAPHIC SCALE
600 0 600 1200
IN FEET

DRAWN BY: J. CHASTAIN	DATE: 12/19/2023
REVISED BY: J CHASTAIN	DATE: 1/24/2024
CHECKED BY: K. FERRI	DATE: 1/24/2024
APPROVED BY: K. FERRI	DATE: 1/24/2024
PROJECT MANAGER: K. FERRI	

FILE NAME:
LAYOUT: FIG 1 (POTENT MAP 2023-11-07)
LAST SAVED BY: JCHASTAIN
LAST SAVED DATE: 1/26/2024 9:03 AM
PLOT DATE: 01/26/2024 9:03 AM

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LEGEND

- CLF1B-1 76.25 — MONITORING WELL SURFICAL FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- CLF1B-5D — MONITORING WELL INTERMEDIATE FLOW ZONE
- POZ-8 — MONITORING WELL DEEP FLOW ZONE
- CGS-PSE-6 74.52 — SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WATER LEVEL IN FEET (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- 0.392ft/day — GROUNDWATER FLOW DIRECTION WITH VELOCITY
- SANTEE COOPER PARCEL LINE
- CCR UNIT WASTE BOUNDARY

NOTES:
MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE NAD83 (INTERNATIONAL FEET) AND NAVD88
MONITORING WELLS LOCATIONS WERE PROVIDED BY SANTEE COOPER IN NAD83 AND NAVD88 DATUMS.
DECEMBER 18, 2023 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
MONITORING WELL WATER LEVELS WERE GAUGED NOVEMBER 7 2023, AND SURFACE WATER ELEVATION WERE GAUGED ON NOVEMBER 7, 2023. THIS DATA WAS PROVIDED BY SANTEE COOPER.
WATER LEVELS FOR LAKE MARION (USGS GAUGING STATION #02171000) AND LAKE MOULTRIE (USGS GAUGING STATION #02171635) WERE FOR NOVEMBER 7, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT https://waterdata.usgs.gov/sc/nwis/current/?type=flow&group_key=basin_cd

$$V = -\frac{K}{n_e}\frac{\Delta h}{L}$$

V = AVERAGE LINEAR VELOCITY (ft/day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
Δh/L = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 25 FEET PER DAY (ft/day)
n_e = 0.25
HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

P:\Santee Cooper (557)\Cross Station (DWG\WL MAPS REVISED\SANTEE CROSS STATION 2023-11-07 REVISED.dwg

Appendix A – Statistical Analysis

HALEY & ALDRICH, INC.
400 Augusta Street
Suite 100
Greenville, SC 29601
864.214.8750

TECHNICAL MEMORANDUM

March 14, 2023
File No. 132892-100-002-02

SUBJECT: Statistical Evaluation of the November 2022 Corrective Action Groundwater Monitoring Data, Cross Generating Station, Class 2 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the November 2022 corrective action groundwater monitoring event for the Cross Generating Station (CGS) Class 2 Landfill. Data for this groundwater sampling event were validated on December 15, 2022 by Santee Cooper.

BACKGROUND

The CGS Class 2 Landfill was closed with water management enhancements as described in the Remedy Selection Report dated July 31, 2020. At that time, assessment monitoring identified the presence of cobalt in one or more downgradient wells at a statistically significant level (SSL) above the groundwater protection standard (GWPS). In addition to closure and water management enhancements, cobalt is being further addressed through monitored natural attenuation (MNA).

Recent analytical testing results were evaluated to determine if SSLs exist above the GWPS of Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background wells. During previous groundwater sampling events, cobalt was the only Appendix IV constituent detected at a SSL above the GWPS.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the CCR Unit (§257.93(f) (1-4)) represents a SSL of Appendix IV parameters above the GWPS. The selected statistical method used for these evaluations is the tolerance limit (TL) as certified by Haley & Aldrich, Inc. on October 14, 2017.

An interwell evaluation was used for statistical analysis, which compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data. The TL method was used to evaluate potential SSLs above GWPS. The GWPS for each of the Appendix IV constituents has been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or site background concentration. Compliance well data from the most recent groundwater sampling event were compared to the corresponding GWPS to determine if a SSL existed. Statistical analysis results are presented in Table I.

As part of the TL procedure, a concentration limit for each constituent is established from the distribution of the background data with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is termed the upper tolerance limit (UTL). Depending on the assumed distribution of background, parametric or non-parametric procedures were used to develop the UTL. Parametric procedures use assumed distributions of the sample background data to development the limits, whereas non-parametric limits use order statistics or bootstrap methods. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

If an Appendix IV constituent concentration from the event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate the presence of a SSL. The LCL is the lower end of the confidence interval range, which is an estimated concentration range intended to contain the true mean or median of the population from which the sample is drawn. The confidence interval range is designed to locate the true population mean or median with a high degree of statistical confidence.

After testing for outliers, the UTLs were calculated from the background dataset to evaluate whether removal of data was necessary based on sampling or measurement discrepancies. Both visual and statistical outlier tests for the background data were performed. A visual inspection of the data was performed using distribution plots for the downgradient sample data. Based on our review, no sample data were identified as outliers that warranted removal from the dataset.

The background well (CBW-1 and PM-1) analytical results from previous events were combined to calculate the UTL for each detected Appendix IV constituent. Variability and distribution of the pooled dataset were reviewed to establish the method for UTL calculation. The background dataset will be updated after the 2023 second semiannual sampling event in accordance with *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009* (the Unified Guidance).

TREND ANALYSIS

Mann-Kendall trend analyses were performed on datasets of sufficient sample size. Results of the trend analysis are included on Table I. In summary, 100 percent of the trends analyzed for compliance wells are identified as stable or decreasing. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSL. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table I). Based on previous compliance sampling data and statistical evaluations, interwell comparisons were used. Consistent with previous results, cobalt remains the only Appendix IV constituent present at a SSL above GWPS at POZ-4.

All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results reflect the predicted cobalt groundwater flow and fate and transport modeling results.

The ongoing performance of the selected remedy in achieving GWPS will continue to be evaluated during subsequent semiannual monitoring events.

Enclosures:

Table I – CGS Class 2 Landfill November 2022 Corrective Action Monitoring Data

\\haleyaldrich.com\share\grn_common\131539 - Santee Cooper\Cross Generating Station\Statistical Analysis\2022-10\Class 2 Landfill\2023_0314_HAI_CGS_Class II LF_Assessment Monitoring Stats_F.docx

TABLE

TABLE I
CGS CLASS 2 LANDFILL
NOVEMBER 2022 CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis						
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well	November 2022 Concentrations	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Upper Tolerance Limit)	SSL
CCR Appendix-IV: Antimony, Total (mg/L)																										
CBW-1	0/18	100%	0.005-0.025	0.00611	0.005	0.008		0.00002222	0.004714	0.7714	0.006	mg/L	N	0	1	NA	NA	NA	NA				0.025		0.025	
PM-1	0/18	100%	0.005-0.025	0.00639	0.005	0.01225		0.00002296	0.004791	0.75	0.006	mg/L	N	0	2	NA	NA	NA								
POZ-4	0/16	100%	0.005-0.025	0.00625	0.005	0.01		0.000025	0.005	0.8	0.006	mg/L	N	0	1	NA	NA	NA	NA	0.005	N			N		No
POZ-6	0/16	100%	0.005-0.025	0.00625	0.005	0.01		0.000025	0.005	0.8	0.006	mg/L	N	0	1	NA	NA	NA	NA	0.005	N			N		No
POZ-7	0/16	100%	0.005-0.025	0.00625	0.005	0.01		0.000025	0.005	0.8	0.006	mg/L	N	0	1	NA	NA	NA	NA	0.005	N			N		No
CCR Appendix-IV: Arsenic, Total (mg/L)																										
CBW-1	3/20	85%	0.003-0.005	0.00545	0.005	0.007165	0.016	0.000006732	0.002595	0.4758	0.01	mg/L	Y	1	0	Yes	No	NA	Non-parametric				0.016		0.016	
PM-1	2/20	90%	0.003-0.01	0.00503	0.005	0.00525	0.0042	0.000001677	0.001295	0.2572	0.01	mg/L	N	0	0	No	No	NA								
POZ-4	1/19	95%	0.003-0.005	0.00458	0.005	0.005	0.0031	6.847E-07	0.0008275	0.1805	0.01	mg/L	N	0	0	No	No	NA	NA	0.003	N			N		No
POZ-6	1/19	95%	0.003-0.005	0.00463	0.005	0.005	0.0039	5.865E-07	0.0007658	0.1655	0.01	mg/L	N	0	0	No	No	NA	NA	0.003	N			N		No
POZ-7	0/19	100%	0.003-0.005	0.00458	0.005	0.005		7.018E-07	0.0008377	0.1829	0.01	mg/L	N	0	0	NA	NA	NA	NA	0.003	N	-		N		No
CCR Appendix-IV: Barium, Total (mg/L)																										
CBW-1	20/20	0%	-	0.0433	0.0429	0.04798	0.061	0.00002794	0.005286	0.122	2	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.103		2	
PM-1	20/20	0%	-	0.0824	0.081	0.1001	0.103	0.00006988	0.008359	0.1015	2	mg/L	N	0	0	Yes	No	Stable								
POZ-4	19/19	0%	-	0.116	0.102	0.1947	0.255	0.002333	0.04831	0.4162	2	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.121	Y			Y		No
POZ-6	19/19	0%	-	0.0531	0.0499	0.0676	0.1	0.0001798	0.01341	0.2523	2	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.0581	Y			N		No
POZ-7	19/19	0%	-	0.234	0.248	0.3116	0.389	0.004998	0.0707	0.3024	2	mg/L	N	0	0	No	No	Stable	Normal	0.132	Y			Y		No
CCR Appendix-IV: Beryllium, Total (mg/L)																										
CBW-1	1/19	95%	0.0005-0.0005	0.000507	0.0005	0.000513	0.00063	8.895E-10	0.00002982	0.05884	0.004	mg/L	N	0	0	No	No	NA	Non-parametric				0.005		0.005	
PM-1	0/20	100%	0.0005-0.005	0.000725	0.0005	0.000725		0.000001012	0.001006	1.388	0.004	mg/L	N	0	1	NA	NA	NA								
POZ-4	10/18	44%	0.0005-0.0005	0.000658	0.000511	0.001143	0.00139	6.945E-08	0.0002635	0.4002	0.004	mg/L	N	0	0	No	No	Stable	Non-parametric	0.0005	N			N		No
POZ-6	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA	NA	0.0005	N			N		No
POZ-7	11/18	39%	0.0005-0.0005	0.00064	0.00058	0.0008968	0.000935	2.504E-08	0.0001582	0.2473	0.004	mg/L	N	0	0	No	No	Stable	Non-parametric	0.0005	N			N		No
CCR Appendix-IV: Cadmium, Total (mg/L)																										
CBW-1	0/19	100%	0.0005-0.004	0.000684	0.0005	0.00085		6.447E-07	0.000803	1.174	0.005	mg/L	N	0	0	NA	NA	NA	NA				0.005		0.005	
PM-1	0/19	100%	0.0005-0.005	0.000921	0.0005	0.0041		0.000001618	0.001272	1.381	0.005	mg/L	N	0	0	NA	NA	NA								
POZ-4	2/19	89%	0.0005-0.004	0.000706	0.0005	0.001129	0.00081	6.417E-07	0.0008011	1.135	0.005	mg/L	N	0	0	Yes	No	NA	NA	0.0005	N			N		No
POZ-6	0/19	100%	0.0005-0.004	0.000684	0.0005	0.00085		6.447E-07	0.000803	1.174	0.005	mg/L	N	0	0	NA	NA	NA	NA	0.0005	N			N		No
POZ-7	1/19	95%	0.0005-0.004	0.000689	0.0005	0.00094	0.0006	6.432E-07	0.000802	1.163	0.005	mg/L	N	0	0	No	No	NA	NA	0.0005	N			N		No
CCR Appendix-IV: Chromium, Total (mg/L)																										
CBW-1	1/19	95%	0.005-0.005	0.00547	0.005	0.0059	0.014	0.000004263	0.002065	0.3772	0.1	mg/L	N	0	0	No	No	NA	Non-parametric				0.014		0.1	
PM-1	0/18	100%	0.005-0.005	0.005	0.005	0.005		3.189E-21	5.647E-11	1.129E-08	0.1	mg/L	N	0	0	NA	NA	NA								
POZ-4	0/19	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
POZ-6	0/19	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
POZ-7	1/19	95%	0.005-0.005	0.00505	0.005	0.00509	0.0059	4.263E-08	0.0002065	0.04091	0.1	mg/L	N	0	0	No	No	NA	Non-parametric	0.005	N			N		No
CCR Appendix-IV: Cobalt, Total (mg/L)																										
CBW-1	19/20	5%	0.001-0.001	0.00103	0.00087	0.001405	0.0034	3.444E-07	0.0005868	0.5678	0.006	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.005		0.006	
PM-1	19/20	5%	0.005-0.005	0.00118	0.000935	0.002046	0.00189	8.588E-07	0.0009267	0.7856	0.006	mg/L	N	0	0	Yes	No	Increasing								
POZ-4	22/22	0%	-	0.0883	0.06265	0.198	0.21	0.004239	0.06511	0.7371	0.006	mg/L	Y	21	0	No	No	Stable	Normal	0.06	Y	0.0644		Y		Yes
POZ-6	19/19	0%	-	0.00309	0.00314	0.00532	0.0082	0.000002987	0.001728	0.5595	0.006	mg/L	Y	1	0	Yes	No	Stable	Normal	0.00307	Y			N		No
POZ-7	13/19	32%	0.0005-0.0005	0.00108	0.00096	0.00244	0.0028	4.194E-07	0.0006476	0.6017	0.006	mg/L	N	0	0	No	No	Stable	Non-parametric	0.00086	Y			N		No
CCR Appendix-IV: Fluoride (mg/L)																										
CBW-1	19/20	5%	0.1-0.1	0.215	0.21	0.2905	0.3	0.002405	0.04904	0.2281	4	mg/L	N	0	0	No	No	Decreasing	Non-parametric				0.3		4	
PM-1	0/20	100%	0.1-0.1	0.1	0.1	0.1		1.461E-18	1.209E-09	1.209E-08	4	mg/L	N	0	0	NA	NA	NA								
POZ-4	8/19	58%	0.1-0.1	0.111	0.1	0.161	0.17	0.0004497	0.02121	0.1919	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.1	Y			N		No
POZ-6	5/19	74%	0.1-0.1	0.113	0.1	0.151	0.16	0.0004982	0.02232	0.1982	4	mg/L	N	0	0	No	No	Stable	Non-parametric	0.1	N			N		No
POZ-7	7/19	63%	0.1-0.1	0.114	0.1	0.144	0.27	0.001537	0.0392	0.3432	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.1	N			N		No
CCR Appendix-IV: Lead, Total (mg/L)																										
CBW-1	19/20	5%	0.01-0.01	0.00371	0.00305	0.01005	0.011	0.000005534	0.002352	0.6338	0.015	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.011		0.015	
PM-1	0/20	100%	0.001-0.01	0.00213	0.001	0.01		0.000007549	0.002748	1.293	0.015	mg/L	N	0	0	NA	NA	NA								
POZ-4	0/19	100%	0.001-0.01	0.00179	0.001	0.00325		0.000004342	0.002084	1.164	0.015	mg/L	N	0	0	NA	NA	NA	NA	0.0025	N			N		No
POZ-6	0/19	100%	0.001-0.01	0.00179	0.001	0.00325		0.000004342	0.002084	1.164	0.015	mg/L	N	0	0	NA	NA	NA	NA	0.0025	N			N		No
POZ-7	0/19	100%	0.001-0.01	0.00179	0.001	0.00325		0.000004342	0.002084	1.164	0.015	mg/L	N	0	0	NA	NA	NA	NA	0.0025	N			N		No
CCR Appendix-IV: Lithium, Total (mg/L)																										
CBW-1	1/20	95%	0.005-0.02	0.00953	0.01	0.0105	0.00066	0.00001226	0.003501	0.3672	0.04	mg/L	N	0	0	NA	NA	NA	NA				0.02		0.04	
PM-1	2/20	90%	0.005-0.01	0.00921	0.01	0.01	0.00544	0.000003837	0.001959	0.2128	0.04	mg/L	N	0	0	No	No	NA								
POZ-4	11/16	31%	0.01-0.01	0.0128	0.0114	0.02025	0.021	0.00001348	0.003671	0.2867	0.04	mg/L	N	0	0	No	No	Stable	Non-parametric	0.0118	Y			N		No
POZ-6	2/16	88%	0.01-0.01	0.00994	0.01	0.0101	0.0104	1.408E-07	0.0003752	0.03776	0.04	mg/L	N	0	0	No	No	NA	Non-parametric	0.00858	Y			N		No
POZ-7	2/16	88%	0.005-0.01	0.00992	0.01	0.0125	0.02	0.00001097	0.003312	0.334	0.04	mg/L	N	0	0	No	No	NA	NA	0.005	N			N		No
CCR Appendix-IV: Mercury, Total (mg/L)																										
CBW-1	0/20	100%	0.0002-0.001	0.00025	0.0002	0.00043		3.316E-08	0.0001821	0.7284	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.001		0.002	
PM-1	0/20	100%	0.0002-0.001	0.00026	0.0002	0.00062		3.832E-08	0.0001957	0.7529	0.002	mg/L	N	0	0	NA	NA	NA								
POZ-4	0/16	100%	0.0002-0.001	0.000262	0.0002	0.00055		4.117E-08	0.0002029	0.7729	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.0004	N			N		No
POZ-6	0/16	100%	0.0002-0.001	0.00025	0.0002	0.0004		0.00000004	0.0002	0.8	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.0002	N			N		No
POZ-7	2/16	88%	0.0002-0.001	0.000264	0.0002	0.0005335	0.000378	4.054E-08	0.0002014	0.762	0.002	mg/L	N	0	0	Yes	No	NA	NA	0.0002	N			N		No

TABLE I
CGS CLASS 2 LANDFILL
NOVEMBER 2022 CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis						
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well	November 2022 Concentrations	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Upper Tolerance Limit)	SSL
CCR Appendix-IV: Molybdenum, Total (mg/L)																										
CBW-1	0/18	100%	0.005-0.02	0.01	0.01	0.0115		0.000008824	0.00297	0.297	0.1	mg/L	N	0	0	NA	NA	NA	NA				0.02		0.1	
PM-1	0/18	100%	0.005-0.01	0.00944	0.01	0.01		0.000002614	0.001617	0.1712	0.1	mg/L	N	0	0	NA	NA	NA								
POZ-4	0/16	100%	0.005-0.01	0.00937	0.01	0.01		0.000002917	0.001708	0.1822	0.1	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
POZ-6	0/16	100%	0.005-0.01	0.00937	0.01	0.01		0.000002917	0.001708	0.1822	0.1	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
POZ-7	0/16	100%	0.005-0.01	0.00937	0.01	0.01		0.000002917	0.001708	0.1822	0.1	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
CCR Appendix-IV: Radium-226 & 228 (pCi/L)																										
CBW-1	12/19	37%	4-4	3.26	4	5.413	6.34	2.738	1.655	0.5075	5	pCi/L	Y	3	0	No	No	Decreasing	Non-parametric				16.3		16.3	
PM-1	13/19	32%	4-4	4	4	8.011	16.3	11.37	3.372	0.843	5	pCi/L	Y	2	0	Yes	No	Decreasing								
POZ-4	11/18	39%	4-4	3.2	4	4.675	6.29	2.26	1.503	0.4705	5	pCi/L	Y	1	0	No	No	Decreasing	Normal	3.54	Y			N		No
POZ-6	10/18	44%	4-4	2.78	4	4.16	4.78	2.377	1.542	0.5541	5	pCi/L	N	0	0	No	No	Decreasing	Non-parametric	1.76	Y			N		No
POZ-7	15/18	17%	4-4	3.45	4	4.957	5.39	1.86	1.364	0.395	5	pCi/L	Y	1	0	No	No	Stable	Normal	4.2	Y			N		No
CCR Appendix-IV: Selenium, Total (mg/L)																										
CBW-1	0/20	100%	0.01-0.05	0.0133	0.01	0.0215		0.00008506	0.009223	0.6945	0.05	mg/L	N	0	1	NA	NA	NA	NA				0.05		0.05	
PM-1	0/20	100%	0.005-0.02	0.0112	0.01	0.02		0.00001546	0.003932	0.3495	0.05	mg/L	N	0	0	NA	NA	NA								
POZ-4	0/19	100%	0.005-0.02	0.0111	0.01	0.02		0.00001827	0.004275	0.3868	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
POZ-6	0/19	100%	0.005-0.02	0.0111	0.01	0.02		0.00001827	0.004275	0.3868	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
POZ-7	0/19	100%	0.005-0.02	0.0111	0.01	0.02		0.00001827	0.004275	0.3868	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.005	N			N		No
CCR Appendix-IV: Thallium, Total (mg/L)																										
CBW-1	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.01		0.01	
PM-1	0/18	100%	0.001-0.01	0.0015	0.001	0.00235		0.0000045	0.002121	1.414	0.002	mg/L	N	0	1	NA	NA	NA								
POZ-4	0/16	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N			N		No
POZ-6	0/16	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N			N		No
POZ-7	0/16	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N			N		No

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TECHNICAL MEMORANDUM

August 21, 2023
File No. 132892-100-002-02

SUBJECT: Statistical Evaluation of the January 2023 Corrective Action Groundwater Monitoring Data, Cross Generating Station, Class 2 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the January 2023 corrective action groundwater monitoring event for the Cross Generating Station (CGS) Class 2 Landfill. Data for this groundwater sampling event were validated on May 23, 2023 by Santee Cooper.

BACKGROUND

The CGS Class 2 Landfill was closed with water management enhancements as described in the Remedy Selection Report dated July 31, 2020. At that time, assessment monitoring identified the presence of cobalt in one or more downgradient wells at a statistically significant level (SSL) above the groundwater protection standard (GWPS). In addition to closure and water management enhancements, cobalt is being further addressed through monitored natural attenuation (MNA).

Recent analytical testing results were evaluated to determine if SSLs exist above the GWPS of Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background wells. During previous groundwater sampling events, cobalt was the only Appendix IV constituent detected at a SSL above the GWPS.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the CCR Unit (§257.93(f) (1-4)) represents a SSL of Appendix IV parameters above the GWPS. The selected statistical method used for these evaluations is the tolerance limit (TL) as certified by Haley & Aldrich, Inc. on October 14, 2017.

An interwell evaluation was used for statistical analysis, which compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data. The TL method was used to evaluate potential SSLs above GWPS. The GWPS for each of the Appendix IV constituents has been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or site background concentration. Compliance well data from the most recent groundwater sampling event were compared to the corresponding GWPS to determine if a SSL existed. Statistical analysis results are presented in Table I.

As part of the TL procedure, a concentration limit for each constituent is established from the distribution of the background data with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is termed the upper tolerance limit (UTL). Depending on the assumed distribution of background, parametric or non-parametric procedures were used to develop the UTL. Parametric procedures use assumed distributions of the sample background data to development the limits, whereas non-parametric limits use order statistics or bootstrap methods. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

If an Appendix IV constituent concentration from the event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate the presence of a SSL. The LCL is the lower end of the confidence interval range, which is an estimated concentration range intended to contain the true mean or median of the population from which the sample is drawn. The confidence interval range is designed to locate the true population mean or median with a high degree of statistical confidence.

After testing for outliers, the UTLs were calculated from the background dataset to evaluate whether removal of data was necessary based on sampling or measurement discrepancies. Both visual and statistical outlier tests for the background data were performed. A visual inspection of the data was performed using distribution plots for the downgradient sample data. Based on our review, no sample data were identified as outliers that warranted removal from the dataset.

The background well (CBW-1 and PM-1) analytical results from previous events were combined to calculate the UTL for each detected Appendix IV constituent. Variability and distribution of the pooled dataset were reviewed to establish the method for UTL calculation.

Per the document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009* (the Unified Guidance), background concentrations were based on statistical evaluation of analytical results collected through February 2023 and updated in the Chemstat output. The background dataset will be updated in Table 1 again after four additional data points are collected (second semiannual event of 2023) in accordance with the Unified Guidance.

TREND ANALYSIS

Mann-Kendall trend analyses were performed on datasets of sufficient sample size. Results of the trend analysis are included on Table I. In summary, 100 percent of the trends analyzed for compliance wells are identified as stable or decreasing. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSL. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table I). Based on previous compliance sampling data and statistical evaluations,

interwell comparisons were used. Consistent with previous results, cobalt remains the only Appendix IV constituent present at a SSL above the GWPS at POZ-4.

All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results reflect the predicted cobalt groundwater fate and transport modeling results.

The ongoing performance of the selected remedy in achieving GWPS will continue to be evaluated during subsequent semiannual monitoring events.

Enclosures:

Table I – CGS Class 2 Landfill January 2023 Corrective Action Monitoring Data

TABLE

TABLE I
CGS CLASS 2 LANDFILL
JANUARY 2023 CORRECTIVE ACTION MONITORING DATA

																		Inter-well Analysis							
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well*	January 2023 Concentrations	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Upper Tolerance Limit)	Exceedance above GWPS at Individual Well?	SSL
CCR Appendix-IV: Antimony, Total (mg/L)																											
CBW-1	0/19	100%	0.005-0.025	0.00605	0.005	0.007		0.00002105	0.004588	0.7581	0.006	mg/L	N	0	1	NA	NA	NA	NA				0.025		0.025		
PM-1	0/19	100%	0.005-0.025	0.00632	0.005	0.0115		0.00002178	0.004667	0.739	0.006	mg/L	N	0	2	NA	NA	NA									
POZ-4	0/17	100%	0.005-0.025	0.00618	0.005	0.009		0.00002353	0.004851	0.7854	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N			No
POZ-6	0/17	100%	0.005-0.025	0.00618	0.005	0.009		0.00002353	0.004851	0.7854	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N			No
POZ-7	0/17	100%	0.005-0.025	0.00618	0.005	0.009		0.00002353	0.004851	0.7854	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N			No
CCR Appendix-IV: Arsenic, Total (mg/L)																											
CBW-1	3/21	86%	0.003-0.005	0.00534	0.005	0.0067	0.016	0.000006682	0.002585	0.4844	0.01	mg/L	Y	1	0	Yes	No	NA	Non-parametric				0.016		0.016		
PM-1	3/21	86%	0.003-0.01	0.00495	0.005	0.005	0.0042	0.000001733	0.001317	0.2658	0.01	mg/L	N	0	0	Yes	No	NA									
POZ-4	1/20	95%	0.003-0.005	0.0045	0.005	0.005	0.0031	7.742E-07	0.0008799	0.1953	0.01	mg/L	N	0	0	No	No	NA		0.003	N			N			No
POZ-6	1/20	95%	0.003-0.005	0.00454	0.005	0.005	0.0039	6.879E-07	0.0008294	0.1825	0.01	mg/L	N	0	0	No	No	NA		0.003	N			N			No
POZ-7	0/20	100%	0.003-0.005	0.0045	0.005	0.005		7.895E-07	0.0008885	0.1974	0.01	mg/L	N	0	0	NA	NA	NA		0.003	N			N			No
CCR Appendix-IV: Barium, Total (mg/L)																											
CBW-1	21/21	0%	-	0.0433	0.0428	0.0473	0.061	0.00002658	0.005155	0.1191	2	mg/L	N	0	0	Yes	No	Stable	Non-parametric				0.103		2.000		
PM-1	21/21	0%	-	0.0823	0.0808	0.1	0.103	0.0000665	0.008155	0.09909	2	mg/L	N	0	0	Yes	No	Stable									
POZ-4	20/20	0%	-	0.117	0.102	0.1913	0.255	0.002223	0.04715	0.4035	2	mg/L	N	0	0	Yes	No	Stable		0.132	Y			Y			No
POZ-6	20/20	0%	-	0.0544	0.0502	0.0792	0.1	0.0002015	0.01419	0.261	2	mg/L	N	0	0	Yes	No	Stable		0.078	Y			N			No
POZ-7	20/20	0%	-	0.227	0.2415	0.3073	0.389	0.005697	0.07548	0.3327	2	mg/L	N	0	0	No	No	Decreasing		0.095	Y			N			No
CCR Appendix-IV: Beryllium, Total (mg/L)																											
CBW-1	1/20	95%	0.0005-0.0005	0.000507	0.0005	0.0005065	0.00063	8.45E-10	0.00002907	0.05739	0.004	mg/L	N	0	0	No	No	NA	Non-parametric				0.005		0.005		
PM-1	0/21	100%	0.0005-0.005	0.000714	0.0005	0.0005		9.643E-07	0.000982	1.375	0.004	mg/L	N	0	1	NA	NA	NA									
POZ-4	10/19	47%	0.0005-0.0005	0.00065	0.00051	0.001129	0.00139	6.691E-08	0.0002587	0.3979	0.004	mg/L	N	0	0	No	No	Decreasing		0.0005	N			N			No
POZ-6	0/19	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N			No
POZ-7	12/19	37%	0.0005-0.0005	0.000645	0.00063	0.0008945	0.000935	2.412E-08	0.0001553	0.2409	0.004	mg/L	N	0	0	No	No	Stable		0.0007	Y			N			No
CCR Appendix-IV: Cadmium, Total (mg/L)																											
CBW-1	0/20	100%	0.0005-0.004	0.000675	0.0005	0.000675		6.125E-07	0.0007826	1.159	0.005	mg/L	N	0	0	NA	NA	NA	NA				0.0050		0.005		
PM-1	0/20	100%	0.0005-0.005	0.0009	0.0005	0.00405		0.000001542	0.001242	1.38	0.005	mg/L	N	0	0	NA	NA	NA									
POZ-4	2/20	90%	0.0005-0.004	0.000696	0.0005	0.0009695	0.00081	6.101E-07	0.0007811	1.123	0.005	mg/L	N	0	0	Yes	No	NA		0.0005	N			N			No
POZ-6	0/20	100%	0.0005-0.004	0.000675	0.0005	0.000675		6.125E-07	0.0007826	1.159	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N			No
POZ-7	1/20	95%	0.0005-0.004	0.00068	0.0005	0.00077	0.0006	6.112E-07	0.0007818	1.15	0.005	mg/L	N	0	0	No	No	NA		0.0005	N			N			No
CCR Appendix-IV: Chromium, Total (mg/L)																											
CBW-1	1/20	95%	0.005-0.005	0.00545	0.005	0.00545	0.014	0.00000405	0.002012	0.3693	0.1	mg/L	N	0	0	No	No	NA	Non-parametric				0.0140		0.100		
PM-1	0/19	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/20	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N			No
POZ-6	0/20	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N			No
POZ-7	1/20	95%	0.005-0.005	0.00504	0.005	0.005045	0.0059	4.05E-08	0.0002012	0.03989	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N			No
CCR Appendix-IV: Cobalt, Total (mg/L)																											
CBW-1	20/21	5%	0.001-0.001	0.00102	0.00086	0.0013	0.0034	3.307E-07	0.0005751	0.5635	0.006	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.0050		0.006		
PM-1	20/21	5%	0.005-0.005	0.00119	0.00094	0.00189	0.00189	8.174E-07	0.0009041	0.7609	0.006	mg/L	N	0	0	Yes	No	Increasing									
POZ-4	23/23	0%	-	0.0859	0.0603	0.1979	0.21	0.004184	0.06468	0.7532	0.006	mg/L	Y	22	0	No	No	Stable		0.0321	Y	0.064		Y		Y	Yes
POZ-6	20/20	0%	-	0.00309	0.003105	0.00516	0.0082	0.00000283	0.001682	0.5453	0.006	mg/L	Y	1	0	Yes	No	Stable		0.0030	Y			N		N	No
POZ-7	14/20	30%	0.0005-0.0005	0.00109	0.000965	0.00242	0.0028	4.026E-07	0.0006345	0.5808	0.006	mg/L	N	0	0	No	No	Stable		0.0014	Y			N		N	No
CCR Appendix-IV: Fluoride (mg/L)																											
CBW-1	20/21	5%	0.1-0.1	0.212	0.2	0.29	0.3	0.002486	0.04986	0.2353	4	mg/L	N	0	0	No	No	Decreasing	Non-parametric				0.300		4.00		
PM-1	0/21	100%	0.1-0.1	0.1	0.1	0.1		1.388E-18	1.178E-09	1.178E-08	4	mg/L	N	0	0	NA	NA	NA									
POZ-4	8/20	60%	0.1-0.1	0.11	0.1	0.1605	0.17	0.0004316	0.02077	0.1889	4	mg/L	N	0	0	Yes	No	Stable		0.100	N			N			No
POZ-6	5/20	75%	0.1-0.1	0.112	0.1	0.1505	0.16	0.00048	0.02191	0.1956	4	mg/L	N	0	0	No	No	Stable		0.100	N			N			No
POZ-7	7/20	65%	0.1-0.1	0.114	0.1	0.137	0.27	0.001466	0.03829	0.3373	4	mg/L	N	0	0	Yes	No	Stable		0.100	N			N			No
CCR Appendix-IV: Lead, Total (mg/L)																											
CBW-1	20/21	5%	0.01-0.01	0.00366	0.003	0.01	0.011	0.000005317	0.002306	0.6303	0.015	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.0110		0.015		
PM-1	0/21	100%	0.001-0.01	0.00214	0.001	0.01		0.000007179	0.002679	1.25	0.015	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/20	100%	0.001-0.01	0.00183	0.001	0.002875		0.000004139	0.002034	1.115	0.015	mg/L	N	0	0	NA	NA	NA		0.003	N			N			No
POZ-6	0/20	100%	0.001-0.01	0.00183	0.001	0.002875		0.000004139	0.002034	1.115	0.015	mg/L	N	0	0	NA	NA	NA		0.003	N			N			No
POZ-7	0/20	100%	0.001-0.01	0.00183	0.001	0.002875		0.000004139	0.002034	1.115	0.015	mg/L	N	0	0	NA	NA	NA		0.003	N			N			No
CCR Appendix-IV: Lithium, Total (mg/L)																											
CBW-1	1/21	95%	0.005-0.02	0.00932	0.01	0.01	0.00066	0.00001262	0.003553	0.3813	0.04	mg/L	N	0	0	NA	NA	NA	NA				0.020		0.040		
PM-1	2/21	90%	0.005-0.01	0.00901	0.01	0.01	0.00544	0.000004488	0.002119	0.2352	0.04	mg/L	N	0	0	No	No	NA									
POZ-4	12/17	29%	0.01-0.01	0.0128	0.0117	0.0202	0.021	0.00001269	0.003562	0.2793	0.04	mg/L	N	0	0	No	No	Stable		0.012	Y			N			No
POZ-6	3/17	82%	0.01-0.01	0.00992	0.01	0.01008	0.0104	1.361E-07	0.000369	0.03719	0.04	mg/L	N	0	0	No	No	NA		0.010	Y			N			No
POZ-7	2/17	88%	0.005-0.01	0.00963	0.01	0.012	0.02	0.00001171	0.003422	0.3554	0.04	mg/L	N	0	0	No	No	NA		0.005	N			N			No
CCR Appendix-IV: Mercury, Total (mg/L)																											
CBW-1	0/21	100%	0.0002-0.001	0.000248	0.0002	0.0004		3.162E-08	0.0001778	0.7181	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.0010		0.0020		
PM-1	0/21	100%	0.0002-0.001	0.000257	0.0002	0.0006		3.657E-08	0.0001912	0.7437	0.002	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/17	100%	0.0002-0.001	0.000259	0.0002	0.00052		3.882E-08	0.000197	0.7613	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	N			N			No
POZ-6	0/17	100%	0.0002-0.001	0.000247	0.0002	0.00036		3.765E-08	0.000194	0.7854	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	N			N			No
POZ-7	2/17	88%	0.0002-0.001	0.00026	0.0002	0.0005024	0.000378	3.825E-08	0.0001956	0.7509	0.002	mg/L	N	0	0	Yes	No	NA		0.0002	N			N			No
CCR Appendix-IV: Molybdenum, Total (mg/L)																											
CBW-1	0/19	100%	0.005-0.02	0.00974	0.01	0.011		0.000009649	0.003106	0.319	0.1	mg/L	N	0	0	NA	NA	NA	NA				0.020		0.10		
PM-1	0/19	100%	0.005-0.01	0.00921	0.01	0.01		0.000003509	0.001873	0.2034	0.1	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/17	100%	0.005-0.01	0.00912	0.01	0.01		0.00000386	0.001965	0.2155	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N			No
POZ-6	0/17	100%	0.005-0.01	0.00912	0.01	0.01		0.00000386	0.001965	0.2155	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N			No
POZ-7	0/17	100%	0.005-0.01	0.00912	0.01	0.01		0.00000386	0.001965	0.2155	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N			No

TABLE I
CGS CLASS 2 LANDFILL
JANUARY 2023 CORRECTIVE ACTION MONITORING DATA

																		Inter-well Analysis							
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well*	January 2023 Concentrations	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Upper Tolerance Limit)	Exceedance above GWPS at Individual Well?	SSL
CCR Appendix-IV: Radium-226 & 228 (pCi/L)																											
CBW-1	13/20	35%	4-4	3.18	4	5.361	6.34	2.722	1.65	0.5188	5	pCi/L	Y	3	0	No	No	Decreasing	Non-parametric				16.3		16.3		
PM-1	14/20	30%	4-4	3.93	4	7.55	16.3	10.87	3.297	0.8385	5	pCi/L	Y	2	0	Yes	No	Decreasing									
POZ-4	12/19	37%	4-4	3.28	4	4.949	6.29	2.27	1.507	0.4594	5	pCi/L	Y	1	0	No	No	Stable		4.800	Y			N		N	No
POZ-6	11/19	42%	4-4	2.88	4	4.618	4.78	2.419	1.555	0.5404	5	pCi/L	N	0	0	No	No	Decreasing		4.600	Y			N		N	No
POZ-7	16/19	16%	4-4	3.53	4	4.931	5.39	1.862	1.365	0.3869	5	pCi/L	Y	1	0	No	No	Stable		4.870	Y			N		N	No
CCR Appendix-IV: Selenium, Total (mg/L)																											
CBW-1	0/21	100%	0.0025-0.05	0.0128	0.01	0.02		0.00008634	0.009292	0.7278	0.05	mg/L	N	0	1	NA	NA	NA	NA				0.050		0.050		
PM-1	0/21	100%	0.0025-0.02	0.0108	0.01	0.02		0.00001833	0.004282	0.3952	0.05	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/20	100%	0.0025-0.02	0.0106	0.01	0.02		0.00002097	0.004579	0.431	0.05	mg/L	N	0	0	NA	NA	NA		0.003	N			N		N	No
POZ-6	0/20	100%	0.0025-0.02	0.0106	0.01	0.02		0.00002097	0.004579	0.431	0.05	mg/L	N	0	0	NA	NA	NA		0.003	N			N		N	No
POZ-7	0/20	100%	0.0025-0.02	0.0106	0.01	0.02		0.00002097	0.004579	0.431	0.05	mg/L	N	0	0	NA	NA	NA		0.003	N			N		N	No
CCR Appendix-IV: Thallium, Total (mg/L)																											
CBW-1	0/19	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.010		0.010		
PM-1	0/19	100%	0.001-0.01	0.00147	0.001	0.0019		0.000004263	0.002065	1.401	0.002	mg/L	N	0	1	NA	NA	NA									
POZ-4	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
POZ-6	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
POZ-7	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No

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TECHNICAL MEMORANDUM

December 12, 2023
File No. 132892-100-002-02

SUBJECT: Statistical Evaluation of the June 2023 Corrective Action Groundwater Monitoring Data, Cross Generating Station, Class 2 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the June 2023 corrective action groundwater monitoring event for the Cross Generating Station (CGS) Class 2 Landfill. Data for this groundwater sampling event were validated on September 13, 2023 by Santee Cooper.

BACKGROUND

The CGS Class 2 Landfill was closed with water management enhancements as described in the Remedy Selection Report dated July 31, 2020. At that time, assessment monitoring identified the presence of cobalt in one or more downgradient wells at a statistically significant level (SSL) above the groundwater protection standard (GWPS). In addition to closure and water management enhancements, cobalt is being further addressed through monitored natural attenuation (MNA).

Recent analytical testing results were evaluated to determine if SSLs exist above the GWPS of Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background wells. During previous groundwater sampling events, cobalt was the only Appendix IV constituent detected at a SSL above the GWPS.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the CCR Unit (§257.93(f) (1-4)) represents a SSL of Appendix IV parameters above the GWPS. The selected statistical method used for these evaluations is the tolerance limit (TL) as certified by Haley & Aldrich, Inc. on October 14, 2017.

An interwell evaluation was used for statistical analysis, which compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data. The TL method was used to evaluate potential SSLs above GWPS. The GWPS for each of the Appendix IV constituents has been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or site background concentration. Compliance well data from the most recent groundwater sampling event were compared to the corresponding GWPS to determine if a SSL existed. Statistical analysis results are presented in Table I.

As part of the TL procedure, a concentration limit for each constituent is established from the distribution of the background data with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is termed the upper tolerance limit (UTL). Depending on the assumed distribution of background, parametric or non-parametric procedures were used to develop the UTL. Parametric procedures use assumed distributions of the sample background data to development the limits, whereas non-parametric limits use order statistics or bootstrap methods. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

If an Appendix IV constituent concentration from the event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate the presence of a SSL. The LCL is the lower end of the confidence interval range, which is an estimated concentration range intended to contain the true mean or median of the population from which the sample is drawn. The confidence interval range is designed to locate the true population mean or median with a high degree of statistical confidence.

After testing for outliers, the UTLs were calculated from the background dataset to evaluate whether removal of data was necessary based on sampling or measurement discrepancies. Both visual and statistical outlier tests for the background data were performed. A visual inspection of the data was performed using distribution plots for the downgradient sample data. Based on our review, no sample data were identified as outliers that warranted removal from the dataset.

The background well (CBW-1 and PM-1) analytical results from previous events were combined to calculate the UTL for each detected Appendix IV constituent. Variability and distribution of the pooled dataset were reviewed to establish the method for UTL calculation.

Per the document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009* (the Unified Guidance), background concentrations were based on statistical evaluation of analytical results collected through June 2023 and updated in the Chemstat output. The background dataset will be updated in Table 1 again after four additional data points are collected (second semiannual event of 2025) in accordance with the Unified Guidance.

TREND ANALYSIS

Mann-Kendall trend analyses were performed on datasets of sufficient sample size. Results of the trend analysis are included on Table I. In summary, 100 percent of the trends analyzed for downgradient compliance wells are identified as stable or decreasing. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table I). Based on previous compliance sampling data and statistical evaluations,

interwell comparisons were used. Consistent with previous results, cobalt remains the only Appendix IV constituent present at a SSL above the GWPS at POZ-4.

All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results generally reflect the predicted cobalt groundwater fate and transport modeling results. Even though there is variability in the cobalt data, the statistical trends are all stable for the three downgradient wells, POZ-4, POZ-6, and POZ-7.

The ongoing performance of the selected remedy in achieving GWPS will continue to be evaluated during subsequent semiannual monitoring events.

Enclosures:

Table I – CGS Class 2 Landfill June 2023 Corrective Action Monitoring Data

https://haleyaldrich.sharepoint.com/sites/SanteeCooper2/Shared Documents/0132892.Santee Cooper CCR Consulting Service/0_Cross Generating Station/Statistical Analysis/2023-10/Class 2 Landfill/client final/2023_1212_HAI_CGS_Class II LF_Assessment Monitoring Stats_F.docx

TABLE

TABLE I
CGS CLASS 2 LANDFILL
JUNE 2023 CORRECTIVE ACTION MONITORING DATA

Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well*	June 2023 Concentrations	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Upper Tolerance Limit)	Exceedance above Background at Individual Well	SSL
CCR Appendix-IV: Antimony, Total (mg/L)																											
CBW-1	0/20	100%	0.005-0.025	0.006	0.005	0.006		0.00002	0.004472	0.7454	0.006	mg/L	N	0	1	NA	NA	NA	NA				0.025		0.025		
PM-1	0/20	100%	0.005-0.025	0.00625	0.005	0.01075		0.00002072	0.004552	0.7284	0.006	mg/L	N	0	2	NA	NA	NA									
POZ-4	0/18	100%	0.005-0.025	0.00611	0.005	0.008		0.00002222	0.004714	0.7714	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
POZ-6	0/18	100%	0.005-0.025	0.00611	0.005	0.008		0.00002222	0.004714	0.7714	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
POZ-7	0/18	100%	0.005-0.025	0.00611	0.005	0.008		0.00002222	0.004714	0.7714	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
CCR Appendix-IV: Arsenic, Total (mg/L)																											
CBW-1	3/22	86%	0.003-0.005	0.00532	0.005	0.006634	0.016	0.000006369	0.002524	0.4743	0.01	mg/L	Y	1	0	Yes	No	NA	Non-parametric				0.016		0.016		
PM-1	3/22	86%	0.003-0.01	0.00496	0.005	0.005	0.0042	0.000001651	0.001285	0.2593	0.01	mg/L	N	0	0	Yes	No	NA									
POZ-4	1/21	95%	0.003-0.005	0.00453	0.005	0.005	0.0031	7.471E-07	0.0008644	0.1909	0.01	mg/L	N	0	0	No	No	NA		0.005	N			N		N	No
POZ-6	1/21	95%	0.003-0.005	0.00457	0.005	0.005	0.0039	6.633E-07	0.0008145	0.1783	0.01	mg/L	N	0	0	No	No	NA		0.005	N			N		N	No
POZ-7	0/21	100%	0.003-0.005	0.00452	0.005	0.005		7.619E-07	0.0008729	0.193	0.01	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
CCR Appendix-IV: Barium, Total (mg/L)																											
CBW-1	22/22	0%	-	0.0431	0.04275	0.04727	0.061	0.00002623	0.005122	0.1188	2	mg/L	N	0	0	Yes	No	Stable	Non-parametric				0.103		2.000		
PM-1	22/22	0%	-	0.082	0.08055	0.09938	0.103	0.00006481	0.00805	0.09813	2	mg/L	N	0	0	Yes	No	Stable									
POZ-4	21/21	0%	-	0.116	0.102	0.188	0.255	0.002127	0.04611	0.3974	2	mg/L	N	0	0	Yes	No	Stable		0.100	Y			N		N	No
POZ-6	21/21	0%	-	0.056	0.0505	0.0883	0.1	0.0002462	0.01569	0.2801	2	mg/L	N	0	0	Yes	No	Stable		0.088	Y			N		N	No
POZ-7	21/21	0%	-	0.223	0.235	0.303	0.389	0.005731	0.0757	0.3395	2	mg/L	N	0	0	No	No	Decreasing		0.145	Y			Y		N	No
CCR Appendix-IV: Beryllium, Total (mg/L)																											
CBW-1	1/21	95%	0.0005-0.0005	0.000506	0.0005	0.0005	0.00063	8.048E-10	0.00002837	0.05604	0.004	mg/L	N	0	0	No	No	NA	Non-parametric				0.005		0.005		
PM-1	0/22	100%	0.0005-0.005	0.000705	0.0005	0.0005		9.205E-07	0.0009594	1.362	0.004	mg/L	N	0	1	NA	NA	NA									
POZ-4	11/20	45%	0.0005-0.0005	0.000645	0.000511	0.001114	0.00139	0.000000064	0.000253	0.3925	0.004	mg/L	N	0	0	No	No	Stable		0.0005	Y			N		N	No
POZ-6	0/20	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
POZ-7	12/20	40%	0.0005-0.0005	0.000638	0.00058	0.0008922	0.000935	2.39E-08	0.0001546	0.2425	0.004	mg/L	N	0	0	No	No	Stable		0.0005	N			N		N	No
CCR Appendix-IV: Cadmium, Total (mg/L)																											
CBW-1	0/21	100%	0.0005-0.004	0.000667	0.0005	0.0005		5.833E-07	0.0007638	1.146	0.005	mg/L	N	0	0	NA	NA	NA	NA				0.0050		0.005		
PM-1	0/21	100%	0.0005-0.005	0.000881	0.0005	0.004		0.000001473	0.001214	1.378	0.005	mg/L	N	0	0	NA	NA	NA									
POZ-4	2/21	90%	0.0005-0.004	0.000686	0.0005	0.00081	0.00081	5.814E-07	0.0007625	1.111	0.005	mg/L	N	0	0	Yes	No	NA		0.0005	N			N		N	No
POZ-6	0/21	100%	0.0005-0.004	0.000667	0.0005	0.0005		5.833E-07	0.0007638	1.146	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
POZ-7	1/21	95%	0.0005-0.004	0.000671	0.0005	0.0006	0.0006	5.821E-07	0.000763	1.136	0.005	mg/L	N	0	0	No	No	NA		0.0005	N			N		N	No
CCR Appendix-IV: Chromium, Total (mg/L)																											
CBW-1	1/21	95%	0.005-0.005	0.00543	0.005	0.005	0.014	0.000003857	0.001964	0.3618	0.1	mg/L	N	0	0	No	No	NA	Non-parametric				0.0140		0.100		
PM-1	0/20	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/21	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N		N	No
POZ-6	0/21	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
POZ-7	1/21	95%	0.005-0.005	0.00504	0.005	0.005	0.0059	3.857E-08	0.0001964	0.03895	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N		N	No
CCR Appendix-IV: Cobalt, Total (mg/L)																											
CBW-1	21/22	5%	0.001-0.001	0.00101	0.00085	0.001293	0.0034	3.169E-07	0.0005629	0.5568	0.006	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.0050		0.006		
PM-1	21/22	5%	0.005-0.005	0.00119	0.00096	0.001863	0.00189	7.785E-07	0.0008823	0.7425	0.006	mg/L	N	0	0	Yes	No	Increasing									
POZ-4	24/24	0%	-	0.0864	0.06265	0.1979	0.21	0.004009	0.06331	0.7328	0.006	mg/L	Y	23	0	No	No	Stable		0.0984	Y	0.064		Y		Y	Yes
POZ-6	21/21	0%	-	0.00309	0.0031	0.005	0.0082	0.000002689	0.00164	0.5314	0.006	mg/L	Y	1	0	Yes	No	Stable		0.0031	Y			N		N	No
POZ-7	15/21	29%	0.0005-0.0005	0.00107	0.00096	0.0024	0.0028	3.936E-07	0.0006273	0.5866	0.006	mg/L	N	0	0	No	No	Stable		0.0006	Y			N		N	No
CCR Appendix-IV: Fluoride (mg/L)																											
CBW-1	21/22	5%	0.1-0.1	0.213	0.21	0.2895	0.3	0.002383	0.04881	0.2295	4	mg/L	N	0	0	No	No	Decreasing	Non-parametric				0.300		4.00		
PM-1	0/22	100%	0.1-0.1	0.1	0.1	0.1		1.322E-18	1.15E-09	1.15E-08	4	mg/L	N	0	0	NA	NA	NA									
POZ-4	8/21	62%	0.1-0.1	0.11	0.1	0.16	0.17	0.0004148	0.02037	0.1859	4	mg/L	N	0	0	Yes	No	Stable		0.100	N			N		N	No
POZ-6	5/21	76%	0.1-0.1	0.111	0.1	0.15	0.16	0.0004629	0.02151	0.1931	4	mg/L	N	0	0	No	No	NA		0.100	N			N		N	No
POZ-7	7/21	67%	0.1-0.1	0.113	0.1	0.13	0.27	0.001401	0.03744	0.3317	4	mg/L	N	0	0	Yes	No	Stable		0.100	N			N		N	No
CCR Appendix-IV: Lead, Total (mg/L)																											
CBW-1	21/22	5%	0.01-0.01	0.00361	0.0029	0.009688	0.011	0.00000512	0.002263	0.6272	0.015	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric				0.0110		0.015		
PM-1	0/22	100%	0.001-0.01	0.00209	0.001	0.009625		0.000006896	0.002626	1.256	0.015	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/21	100%	0.001-0.01	0.00179	0.001	0.0025		0.000003964	0.001991	1.115	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
POZ-6	0/21	100%	0.001-0.01	0.00179	0.001	0.0025		0.000003964	0.001991	1.115	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
POZ-7	0/21	100%	0.001-0.01	0.00179	0.001	0.0025		0.000003964	0.001991	1.115	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
CCR Appendix-IV: Lithium, Total (mg/L)																											
CBW-1	1/22	95%	0.005-0.02	0.00912	0.01	0.01	0.00066	0.00001287	0.003587	0.3933	0.04	mg/L	N	0	0	NA	NA	NA	NA				0.020		0.040		
PM-1	2/22	91%	0.005-0.01	0.00882	0.01	0.01	0.00544	0.000005004	0.002237	0.2535	0.04	mg/L	N	0	0	No	No	NA									
POZ-4	13/18	28%	0.01-0.01	0.0133	0.01175	0.02124	0.0226	0.00001733	0.004162	0.313	0.04	mg/L	N	0	0	No	No	Stable		0.023	Y			Y		N	No
POZ-6	4/18	78%	0.01-0.01	0.0105	0.01	0.01185	0.0201	0.000005885	0.002426	0.2313	0.04	mg/L	N	0	0	No	No	NA		0.020	Y			Y		N	No
POZ-7	3/18	83%	0.005-0.01	0.00971	0.01	0.01235	0.02	0.00001113	0.003335	0.3437	0.04	mg/L	N	0	0	No	No	NA		0.011	Y			N		N	No
CCR Appendix-IV: Mercury, Total (mg/L)																											
CBW-1	0/22	100%	0.0002-0.001	0.000245	0.0002	0.00039		3.022E-08	0.0001738	0.7082	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.0010		0.0020		
PM-1	0/22	100%	0.0002-0.001	0.000255	0.0002	0.00058		3.498E-08	0.000187	0.7347	0.002	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/18	100%	0.0002-0.001	0.000256	0.0002	0.00049		3.673E-08	0.0001917	0.75	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	N			N		N	No
POZ-6	0/18	100%	0.0002-0.001	0.000244	0.0002	0.00032		3.556E-08	0.0001886	0.7714	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	N			N		N	No
POZ-7	2/18	89%	0.0002-0.001	0.000257	0.0002	0.0004713	0.000378	3.62E-08	0.0001903	0.74	0.002	mg/L	N	0	0	Yes	No	NA		0.0002	N			N		N	No
CCR Appendix-IV: Molybdenum, Total (mg/L)																											
CBW-1	0/20	100%	0.005-0.02	0.0095	0.01	0.0105		0.00001026	0.003204	0.3372	0.1	mg/L	N	0	0	NA	NA	NA	NA				0.020		0.10		
PM-1	0/20	100%	0.005-0.01	0.009	0.01	0.01		0.000004211	0.002052	0.228	0.1	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/18	100%	0.005-0.01	0.00889	0.01	0.01		0.000004575	0.002139	0.2406	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
POZ-6	0/18	100%	0.005-0.01	0.00889	0.01	0.01		0.000004575	0.002139	0.2406	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
POZ-7	0/18	100%	0.005-0.01	0.00889	0.01	0.01		0.000004575	0.002139	0.2406	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
CCR Appendix-IV: Radium-226 & 228 (pCi/L)																											
CBW-1	14/21	33%	4-4	3.27	4	5.31	6.34	2.758	1.661	0.5077	5	pCi/L	Y	4	0	No	No	Decreasing	Non-parametric				16.3		16.3		
PM-1	15/21	29%	4-4	3.92	4	7.09	16.3	10.33	3.213	0.8196	5	pCi/L	Y	2	0	Yes	No	Decreasing									

TABLE I
CGS CLASS 2 LANDFILL
JUNE 2023 CORRECTIVE ACTION MONITORING DATA

POZ-4	13/20	35%	4-4	3.36	4	5.017	6.29	2.29	1.513	0.45	5	pCi/L	Y	1	0	No	No	Stable		4.950	Y			N		N	No
POZ-6	12/20	40%	4-4	2.82	4	4.609	4.78	2.367	1.538	0.5462	5	pCi/L	N	0	0	No	No	Decreasing		1.650	Y			N		N	No
POZ-7	17/20	15%	4-4	3.41	4	4.905	5.39	2.059	1.435	0.4213	5	pCi/L	Y	1	0	No	No	Stable		1.100	Y			N		N	No
CCR Appendix-IV: Selenium, Total (mg/L)																											
CBW-1	0/22	100%	0.0025-0.05	0.0126	0.01	0.02		0.00008258	0.009087	0.7189	0.05	mg/L	N	0	1	NA	NA	NA	NA				0.050		0.050		
PM-1	0/22	100%	0.0025-0.02	0.0108	0.01	0.02		0.00001749	0.004182	0.3874	0.05	mg/L	N	0	0	NA	NA	NA									
POZ-4	0/21	100%	0.0025-0.02	0.0106	0.01	0.02		0.00001994	0.004465	0.4215	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
POZ-6	0/21	100%	0.0025-0.02	0.0106	0.01	0.02		0.00001994	0.004465	0.4215	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
POZ-7	0/21	100%	0.0025-0.02	0.0106	0.01	0.02		0.00001994	0.004465	0.4215	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
CCR Appendix-IV: Thallium, Total (mg/L)																											
CBW-1	0/20	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.010		0.010		
PM-1	0/20	100%	0.001-0.01	0.00145	0.001	0.00145		0.00000405	0.002012	1.388	0.002	mg/L	N	0	1	NA	NA	NA									
POZ-4	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
POZ-6	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
POZ-7	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No

Appendix B – Laboratory Analytical Results

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54600 **Location:** GW Well PM-1 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM

Loc. Code PM-1 **Time:** 10:18

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/02/2023	GEL	SM2320B
Alkalinity	33.4	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	33.4	mg/L	02/02/2023	GEL	SM 2320B
Arsenic	3.32	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	11.4	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Boron Dissolved	13.8	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Barium	80.8	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	76.3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	12.6	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	12	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	12.3	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	1.36	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	1.2	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	100	uS	01/24/2023	ZDM/MDG	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	8.29	Feet	01/24/2023	ZDM/MDG	
Dissolved Oxygen	0.660	ppm	01/24/2023	ZDM/MDG	
Dissoloved Organic Carbon	6.14	mg/L	02/02/2023	GEL	SM 5310B
Elevation	74.95	Feet	02/17/2023	ZDMCHENR	
Iron	11100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	10100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	<5.00	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	0.717	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	0.710	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	10.7	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	10.00	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Molybdenum Dissolved	<5.00	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Sodium	6.54	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	6.26	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54600 **Location:** GW Well PM-1 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM

Loc. Code PM-1 **Time:** 10:18

Analysis	Result	Units	Test Date	Analyst	Method
Nickel - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	37.0	mv	01/24/2023	ZDM/MDG	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
pH	4.84	SU	01/24/2023	ZDM/MDG	
Radium 226	0.845	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	1.79	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.63	pCi/L	02/24/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Silica	33000.0	ug/l	02/23/2023	EUROFINS SAV	EPA 200.7
SiO2 Dissolved	33000	ug/l	02/23/2023	EUROFINS SAV	EPA 200.7
Sulfate	8.12	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	111.2	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	17.68	C	01/24/2023	ZDM/MDG	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	5.09	mg/L	01/31/2023	GEL	SM 5310B
Total Phosphorus	<0.025	mg/L	01/30/2023	KCWELLS	EPA 365.1
Turbidity	2.90	NTU	01/24/2023	ZDM/MDG	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: U-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54572 **Location:** GW Well CBW-1 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM

Loc. Code CBW-1 **Time:** 11:46

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	0.752	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	0.650	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/02/2023	GEL	SM2320B
Alkalinity	5.00	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	5.00	mg/L	02/02/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	17.5	ug/L	02/15/2023	AMSTOCKH	EPA 6010D
Boron Dissolved	17.7	ug/L	03/01/2023	SJHATCHE	EPA 6010D
Barium	42.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	42.6	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	29.3	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	31	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	3.0	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	0.760	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	0.77	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	181	uS	01/24/2023	ZDM/MDG	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	9.29	Feet	01/24/2023	ZDM/MDG	
Dissolved Oxygen	0.720	ppm	01/24/2023	ZDM/MDG	
Dissoloved Organic Carbon	3.52	mg/L	02/01/2023	GEL	SM 5310B
Elevation	76.51	Feet	02/17/2023	ZDMCHENR	
Iron	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	0.15	mg/L	01/28/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.00	ug/L	02/15/2023	AMSTOCKH	EPA 6010D
Lithium Dissolved	<5.00	ug/L	03/01/2023	SJHATCHE	EPA 6010D
Magnesium	2.29	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	2.28	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	28.9	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	28.6	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	02/15/2023	AMSTOCKH	EPA 6010D
Molybdenum Dissolved	<5.00	ug/L	03/01/2023	SJHATCHE	EPA 6010D
Sodium	8.62	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	8.71	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54572 **Location:** GW Well CBW-1 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM

Loc. Code CBW-1 **Time:** 11:46

Analysis	Result	Units	Test Date	Analyst	Method
Nickel - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Nitrate	0.71	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	347	mv	01/24/2023	ZDM/MDG	SM2580
Lead	2.59	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
pH	4.23	SU	01/24/2023	ZDM/MDG	
Radium 226	0.509	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	1.15	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.66	pCi/L	02/24/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Silica	3110.0	ug/l	02/23/2023	EUROFINS SAV	EPA 200.7
SiO2 Dissolved	3110	ug/l	02/23/2023	EUROFINS SAV	EPA 200.7
Sulfate	84.2	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	142.5	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	18.20	C	01/24/2023	ZDM/MDG	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	2.28	mg/L	01/31/2023	GEL	SM 5310B
Total Phosphorus	<0.025	mg/L	01/30/2023	KCWELLS	EPA 365.1
Turbidity	0	NTU	01/24/2023	ZDM/MDG	
Zinc	241	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	234	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54601 **Location:** GW Well POZ-3 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-3 **Time:** 11:17

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	469	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	469	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	35.0	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	96.3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	103	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	193	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	206	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	14.3	mg/L	02/03/2023	KCWELLS	EPA 300.0
Cobalt	0.865	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	0.99	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	767	uS	01/31/2023	ZDM/BSB	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	4.16	Feet	01/31/2023	ZDM/BSB	
Dissolved Oxygen	0.780	ppm	01/31/2023	ZDM/BSB	
Dissoloved Organic Carbon	2.75	mg/L	02/08/2023	GEL	SM 5310B
Elevation	78.45	Feet	02/17/2023	ZDMCHENR	
Iron	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/03/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	<5.00	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	8.50	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	9.49	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	23.0	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	38.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	49.9	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	54.0	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/03/2023	KCWELLS	EPA 300.0

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54601 **Location:** GW Well POZ-3 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-3 **Time:** 11:17

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	02/03/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	132	mv	01/31/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	6.53	SU	01/31/2023	ZDM/BSB	
Radium 226	0.570	pCi/L	03/02/2023	GEL	EPA 903.1 Mod
Radium 228	1.32	pCi/L	03/01/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.89	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	87.7	mg/L	02/03/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	663.8	mg/L	02/08/2023	SJBROWN	SM 2540C
Temp	17.75	C	01/31/2023	ZDM/BSB	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	3.01	mg/L	02/06/2023	GEL	SM 5310B
Turbidity	0	NTU	01/31/2023	ZDM/BSB	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: U-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54602 **Location:** GW Well POZ-4 **Date:** 01/30/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-4 **Time:** 11:26

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<5	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	246	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	246	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	18.6	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Boron Dissolved	20.7	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Barium	132	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	131	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	277	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	282	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	347	mg/L	02/01/2023	KCWELLS	EPA 300.0
Cobalt	32.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	31.4	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	1130	uS	01/30/2023	ZDM/BSB	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	3.71	Feet	01/30/2023	ZDM/BSB	
Dissolved Oxygen	0.760	ppm	01/30/2023	ZDM/BSB	
Dissoloved Organic Carbon	1.93	mg/L	02/08/2023	GEL	SM 5310B
Elevation	79.02	Feet	02/17/2023	ZDMCHENR	
Iron	135	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	809	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	2.01	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	2.0	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	11.9	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	12.7	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	4.19	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	4.23	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	950	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	955	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Molybdenum Dissolved	<5.00	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Sodium	65.7	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	65.1	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	6.66	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54602 **Location:** GW Well POZ-4 **Date:** 01/30/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-4 **Time:** 11:26

Analysis	Result	Units	Test Date	Analyst	Method
Nickel - Dissolved	7.11	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	74.0	mv	01/30/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
pH	6.12	SU	01/30/2023	ZDM/BSB	
Radium 226	0.818	pCi/L	03/02/2023	GEL	EPA 903.1 Mod
Radium 228	3.98	pCi/L	03/01/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.80	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Silica	22500.0	ug/l	02/23/2023	EUROFINS SAV	EPA 200.7
SiO2 Dissolved	22500	ug/l	02/23/2023	EUROFINS SAV	EPA 200.7
Sulfate	101	mg/L	02/01/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	1466	mg/L	02/08/2023	SJBROWN	SM 2540C
Temp	16.86	C	01/30/2023	ZDM/BSB	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/l	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	1.92	mg/L	02/06/2023	GEL	SM 5310B
Total Phosphorus	<0.025	mg/L	02/07/2023	KCWELLS	EPA 365.1
Turbidity	0.500	NTU	01/30/2023	ZDM/BSB	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54604 **Location:** GW Well POZ-6 **Date:** 01/30/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-6 **Time:** 09:37

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Aluminum	0.758	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	309	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	309	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/24/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/24/2023	EUROFINS SAV	EPA 6020B
Boron	39.0	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	78.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	74.6	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/24/2023	EUROFINS SAV	EPA 6020B
Calcium	459	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	448	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Chloride	305	mg/L	02/01/2023	KCWELLS	EPA 300.0
Cobalt	3.01	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	2.2	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	2040	uS	01/30/2023	ZDM/BSB	
Chromium	<5	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Depth	5.18	Feet	01/30/2023	ZDM/BSB	
Dissolved Oxygen	0.430	ppm	01/30/2023	ZDM/BSB	
Dissoloved Organic Carbon	2.47	mg/L	02/08/2023	GEL	SM 5310B
Elevation	78.66	Feet	02/17/2023	ZDMCHENR	
Iron	15200	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	13000	ug/L	02/23/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	1.58	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	1.5	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	9.67	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	11.9	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	8.43	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	7.83	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	619	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	571	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	65.7	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	61.7	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54604 **Location:** GW Well POZ-6 **Date:** 01/30/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-6 **Time:** 09:37

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	-14.0	mv	01/30/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
pH	6.26	SU	01/30/2023	ZDM/BSB	
Radium 226	0.786	pCi/L	03/02/2023	GEL	EPA 903.1 Mod
Radium 228	3.82	pCi/L	03/01/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.60	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Sulfate	474	mg/L	02/01/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	2010	mg/L	02/08/2023	SJBROWN	SM 2540C
Temp	18.77	C	01/30/2023	ZDM/BSB	
Thallium	<1	ug/L	02/24/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/23/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	2.62	mg/L	02/06/2023	GEL	SM 5310B
Turbidity	392	NTU	01/30/2023	ZDM/BSB	
Zinc	<20	ug/l	02/24/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/23/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54605 **Location:** GW Well POZ-7 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-7 **Time:** 09:40

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	9.60	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	9.60	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	<10.0	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	95.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	99.2	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	0.735	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	0.84	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	7.57	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	8	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	18.7	mg/L	02/01/2023	KCWELLS	EPA 300.0
Cobalt	1.40	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	1.2	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	64.0	uS	01/31/2023	ZDM/BSB	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	3.68	Feet	01/31/2023	ZDM/BSB	
Dissolved Oxygen	1.25	ppm	01/31/2023	ZDM/BSB	
Dissoloved Organic Carbon	<1	mg/L	02/08/2023	GEL	SM 5310B
Elevation	78.34	Feet	02/17/2023	ZDMCHENR	
Iron	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	2.15	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	2.2	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	<5.00	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	0.732	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	0.760	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	11.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	8.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	7.38	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	7.61	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54605 **Location:** GW Well POZ-7 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-7 **Time:** 09:40

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	246	mv	01/31/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	4.72	SU	01/31/2023	ZDM/BSB	
Radium 226	0.854	pCi/L	03/02/2023	GEL	EPA 903.1 Mod
Radium 228	4.02	pCi/L	03/03/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.87	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	<2.0	mg/L	02/01/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	185.0	mg/L	02/08/2023	SJBROWN	SM 2540C
Temp	18.78	C	01/31/2023	ZDM/BSB	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	<1	mg/L	02/06/2023	GEL	SM 5310B
Turbidity	7.90	NTU	01/31/2023	ZDM/BSB	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54606 **Location:** GW Well POZ-7 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-7 DUP **Time:** 09:45

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	10.8	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	10.8	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	<10.0	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	106	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	105	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	0.755	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	0.78	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	9.84	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	11	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	21.4	mg/L	02/01/2023	KCWELLS	EPA 300.0
Cobalt	1.22	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	1.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Dissoloved Organic Carbon	<1	mg/L	02/08/2023	GEL	SM 5310B
Iron	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	2.24	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	2.2	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	<5.00	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	0.857	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	0.900	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	9.62	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	8.4	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	7.81	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	7.79	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Radium 226	0.643	pCi/L	03/02/2023	GEL	EPA 903.1 Mod

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54606 **Location:** GW Well POZ-7 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-7 DUP **Time:** 09:45

Analysis	Result	Units	Test Date	Analyst	Method
Radium 228	3.80	pCi/L	03/01/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.44	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	<2.0	mg/L	02/01/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	86.25	mg/L	02/08/2023	SJBROWN	SM 2540C
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	<1	mg/L	02/06/2023	GEL	SM 5310B
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54607 **Location:** GW Well POZ-8 **Date:** 01/30/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-8 **Time:** 14:10

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	185	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	185	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	22.2	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	520	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	513	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	631	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	639	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	636	mg/L	02/01/2023	KCWELLS	EPA 300.0
Cobalt	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	1940	uS	01/30/2023	ZDM/BSB	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	4.46	Feet	01/30/2023	ZDM/BSB	
Dissolved Oxygen	0.390	ppm	01/30/2023	ZDM/BSB	
Dissoloved Organic Carbon	1.45	mg/L	02/08/2023	GEL	SM 5310B
Elevation	78.67	Feet	02/17/2023	ZDMCHENR	
Iron	16600	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	16300	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	4.95	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	4.9	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	144	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	154	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	14.7	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	14.4	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	1150	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	1140	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	102	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	100	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54607 **Location:** GW Well POZ-8 **Date:** 01/30/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-8 **Time:** 14:10

Analysis	Result	Units	Test Date	Analyst	Method
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	-79.0	mv	01/30/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	6.78	SU	01/30/2023	ZDM/BSB	
Radium 226	0.304	pCi/L	03/02/2023	GEL	EPA 903.1 Mod
Radium 228	1.44	pCi/L	03/01/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.74	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	27.7	mg/L	02/01/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	2854	mg/L	02/08/2023	SJBROWN	SM 2540C
Temp	17.51	C	01/30/2023	ZDM/BSB	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	1.64	mg/L	02/06/2023	GEL	SM 5310B
Turbidity	33.0	NTU	01/30/2023	ZDM/BSB	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54582 **Location:** GW Well CCMLF-1 **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG

Loc. Code CCMLF-1 **Time:** 11:19

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/02/2023	GEL	SM2320B
Alkalinity	21.6	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	21.6	mg/L	02/02/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	24.6	ug/L	03/16/2023	AMSTOCKH	EPA 6010D
Barium	151	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	155	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	29.0	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	31	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	12.0	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	7.28	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	7.7	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	171	uS	01/26/2023	ZDM/MDG	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	3.32	Feet	01/26/2023	ZDM/MDG	
Dissolved Oxygen	1.01	ppm	01/26/2023	ZDM/MDG	
Dissoloved Organic Carbon	2.85	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.54	Feet	02/17/2023	ZDMCHENR	
Iron	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	1.63	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	1.7	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.0	ug/L	03/16/2023	AMSTOCKH	EPA 6010D
Lithium Dissolved	<5.0	ug/L	04/05/2023	LCWILLIA	EPA 6010D
Magnesium	2.41	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	2.54	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	301	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	312	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.0	ug/L	03/16/2023	AMSTOCKH	EPA 6010D
Sodium	8.78	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	9.49	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54582 **Location:** GW Well CCMLF-1 **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG

Loc. Code CCMLF-1 **Time:** 11:19

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	0.33	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	228	mv	01/26/2023	ZDM/MDG	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	5.27	SU	01/26/2023	ZDM/MDG	
Radium 226	0.439	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	-1.13	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.439	pCi/L	02/24/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	51.9	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	146.2	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	15.76	C	01/26/2023	ZDM/MDG	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	<1	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	4.80	NTU	01/26/2023	ZDM/MDG	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54583 **Location:** GW Well CCMLF-1D **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG

Loc. Code CCMLF-1D **Time:** 13:00

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/02/2023	GEL	SM2320B
Alkalinity	131	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	131	mg/L	02/02/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	14.3	ug/L	04/12/2023	LCWILLIA	EPA 6010D
Barium	38.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	41.2	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	54.2	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	57	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	6.0	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	204	uS	01/26/2023	ZDM/MDG	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	3.12	Feet	01/26/2023	ZDM/MDG	
Dissolved Oxygen	1.36	ppm	01/26/2023	ZDM/MDG	
Dissoloved Organic Carbon	2.94	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.53	Feet	02/17/2023	ZDMCHENR	
Iron	1640	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	1.19	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	1.2	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5	ug/L	04/12/2023	LCWILLIA	EPA 6010D
Lithium Dissolved	<5.0	ug/L	04/05/2023	LCWILLIA	EPA 6010D
Magnesium	1.28	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	1.39	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	70.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	66.7	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5	ug/L	04/12/2023	LCWILLIA	EPA 6010D
Sodium	3.86	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	4.33	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54583 **Location:** GW Well CCMLF-1D **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG

Loc. Code CCMLF-1D **Time:** 13:00

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	52.0	mv	01/26/2023	ZDM/MDG	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	7.08	SU	01/26/2023	ZDM/MDG	
Radium 226	0.443	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	1.21	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.66	pCi/L	02/24/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	4.72	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	167.5	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	15.35	C	01/26/2023	ZDM/MDG	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	1.23	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	0	NTU	01/26/2023	ZDM/MDG	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: U-Value below RL; **H**-Holding Time Exceded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54584 **Location:** GW Well CCMLF-2 **Date:** 02/07/2023 **Sample Collector:** ZDM/BSB

Loc. Code CCMLF-2 **Time:** 15:22

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/18/2023	SUB_GEL	SM2320B
Alkalinity	13.2	mg/L	02/18/2023	SUB_GEL	SM 2320B
Bicarbonate Alkalinity	13.2	mg/L	02/18/2023	SUB_GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	16.1	ug/L	04/12/2023	LCWILLIA	EPA 6010D
Barium	25.8	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	36.6	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	5.07	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	5	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	3.68	mg/L	02/10/2023	KCWELLS	EPA 300.0
Cobalt	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	34.0	uS	02/07/2023	ZDM/BSB	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	6.73	Feet	02/07/2023	ZDM/BSB	
Dissolved Oxygen	2.13	ppm	02/07/2023	ZDM/BSB	
Dissoloved Organic Carbon	<1	mg/L	02/15/2023	SUB_GEL	SM 5310B
Elevation	77.35	Feet	02/17/2023	ZDMCHENR	
Iron	<100	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	<100	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/10/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/22/2023	EUROFINS SAV	EPA 7470
Potassium	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5	ug/L	04/12/2023	LCWILLIA	EPA 6010D
Lithium Dissolved	<5.0	ug/L	04/05/2023	LCWILLIA	EPA 6010D
Magnesium	0.250	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	0.250	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	64.0	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	63.4	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5	ug/L	04/12/2023	LCWILLIA	EPA 6010D
Sodium	4.85	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	4.76	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54584 **Location:** GW Well CCMLF-2 **Date:** 02/07/2023 **Sample Collector:** ZDM/BSB

Loc. Code CCMLF-2 **Time:** 15:22

Analysis	Result	Units	Test Date	Analyst	Method
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/10/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	02/10/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	280	mv	02/07/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	5.39	SU	02/07/2023	ZDM/BSB	
Radium 226	0.748	pCi/L	03/12/2023	GEL	EPA 903.1 Mod
Radium 228	0.445	pCi/L	03/08/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.19	pCi/L	03/14/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	2.72	mg/L	02/10/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/14/2023	SUB_GEL	EPA 9034
Total Dissolved Solids	40.00	mg/L	02/14/2023	KCWELLS	SM 2540C
Temp	20.68	C	02/07/2023	ZDM/BSB	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	<1	mg/L	02/16/2023	SUB_GEL	SM 5310B
Turbidity	0	NTU	02/07/2023	ZDM/BSB	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54570 **Location:** GW Well CAP-13 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code CAP-13 **Time:** 12:49

Analysis	Result	Units	Test Date	Analyst	Method
Silver	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Silver- Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Aluminum	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Aluminum - Dissolved	<0.1	mg/l	02/17/2023	EUROFINS SAV	EPA 200.7
Alkalinity as CaCO3	<4	mg/L	02/10/2023	GEL	SM2320B
Alkalinity	39.4	mg/L	02/10/2023	GEL	SM 2320B
Bicarbonate Alkalinity	39.4	mg/L	02/10/2023	GEL	SM 2320B
Arsenic	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Arsenic Dissolved	<3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Boron	13.5	ug/L	02/15/2023	AMSTOCKH	EPA 6010D
Barium	199	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	197	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Beryllium Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium	55.9	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	54	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cadmium - Dissolved	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Chloride	4.81	mg/L	02/01/2023	KCWELLS	EPA 300.0
Cobalt	<0.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	<0.5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	255	uS	01/31/2023	ZDM/BSB	
Chromium	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Chromium - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Depth	3.67	Feet	01/31/2023	ZDM/BSB	
Dissolved Oxygen	0.370	ppm	01/31/2023	ZDM/BSB	
Dissoloved Organic Carbon	10.2	mg/L	02/08/2023	GEL	SM 5310B
Elevation	77.10	Feet	02/17/2023	ZDMCHENR	
Iron	9860	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	6990	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Fluoride	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Mercury	<0.2	ug/l	02/21/2023	EUROFINS SAV	EPA 7470
Potassium	1.69	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	1.7	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	<5.00	ug/L	02/15/2023	AMSTOCKH	EPA 6010D
Lithium Dissolved	<5.00	ug/L	03/01/2023	SJHATCHE	EPA 6010D
Magnesium	2.55	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	2.52	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	65.9	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	64.3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	02/15/2023	AMSTOCKH	EPA 6010D
Sodium	6.17	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	6.07	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Nickel - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Nitrite	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF54570 **Location:** GW Well CAP-13 **Date:** 01/31/2023 **Sample Collector:** ZDM/BSB

Loc. Code CAP-13 **Time:** 12:49

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	02/01/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	94.0	mv	01/31/2023	ZDM/BSB	SM2580
Lead	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Lead - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
pH	5.37	SU	01/31/2023	ZDM/BSB	
Radium 226	0.405	pCi/L	03/02/2023	GEL	EPA 903.1 Mod
Radium 228	3.71	pCi/L	03/01/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.11	pCi/L	03/03/2023	GEL	EPA 903.1 Mod
Antimony	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Antimony - Dissolved	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Selenium	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Selenium - Dissolved	<2.5	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Sulfate	106	mg/L	02/24/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	02/06/2023	GEL	EPA 9034
Total Dissolved Solids	293.8	mg/L	02/08/2023	SJBROWN	SM 2540C
Temp	18.91	C	01/31/2023	ZDM/BSB	
Thallium	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Thallium - Dissolved	<1	ug/L	02/17/2023	EUROFINS SAV	EPA 200.8
Total Organic Carbon	11.1	mg/L	02/06/2023	GEL	SM 5310B
Turbidity	55.5	NTU	01/31/2023	ZDM/BSB	
Zinc	<20	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	<20	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: U-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated: 5/19/23

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF58979 **Location:** GW Well POZ-3 **Date:** 03/20/2023 **Sample Collector:** ZDM/BSB

Loc. Code POZ-3 **Time:** 09:28

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<3	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Barium	105	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Calcium	192000	ug/L	04/03/2023	EUROFINS SAV	EPA 6010D
Cadmium	<0.5	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Cobalt	0.660	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Chromium	<5	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Lead	<2.5	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Antimony	<5	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Selenium	<15	ug/L	04/03/2023	EUROFINS SAV	EPA 6010D
Thallium	<1	ug/L	03/29/2023	EUROFINS SAV	EPA 6020B
Boron	51.5	ug/L	04/05/2023	EUROFINS SAV	EPA 6010D
Lithium	<50	ug/L	04/05/2023	EUROFINS SAV	EPA 6010D
Molybdenum	<40	ug/L	04/05/2023	EUROFINS SAV	EPA 6010D
Mercury	<0.2	ug/L	03/30/2023	EUROFINS SAV	EPA 7470
Fluoride	0.10	mg/L	03/29/2023	KCWELLS	EPA 300.0
Chloride	13.1	mg/L	03/29/2023	KCWELLS	EPA 300.0
Sulfate	88.9	mg/L	03/29/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	696.2	mg/L	03/28/2023	KCWELLS	SM 2540C
Radium 226	0.421	pCi/L	04/17/2023	GEL	EPA 903.1 Mod
Radium 228	0.713	pCi/L	04/10/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.13	pCi/L	04/21/2023	GEL	EPA 903.1 Mod
pH	6.30	SU	03/20/2023	ZDM/BSB	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date:

Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF59978 **Location:** GW Well CCMLF-1 **Date:** 03/29/2023 **Sample Collector:** ZDM/BSB

Loc. Code CCMLF-1 **Time:** 09:24

Analysis	Result	Units	Test Date	Analyst	Method
Cobalt	2.8	ug/L	04/04/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	2.9	ug/L	04/05/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	119	uS	03/29/2023	ZDM/BSB	
Depth	4.21	Feet	03/29/2023	ZDM/BSB	
Dissolved Oxygen	0.620	ppm	03/29/2023	ZDM/BSB	
Elevation	76.65	Feet	04/06/2023	ZDMCHENR	
Oxidation Reduction Potential	98.0	mv	03/29/2023	ZDM/BSB	SM2580
pH	5.78	SU	03/29/2023	ZDM/BSB	
Temp	16.50	C	03/29/2023	ZDM/BSB	
Turbidity	0	NTU	03/29/2023	ZDM/BSB	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID# 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"- Pace Analytical Services, LLC.- Lab ID# 99030, "ROGERSNCALLC"-Rogers & Callcott, Inc. - Lab ID# 23105001; "Cornwell"-Cornwell Engineering Group Laboratory-Lab ID# 93013

Qualifiers: U-Value below RL; **H**-Holding Time Exceded; **J**-Value is Estimated; **M**-Matrix Interference; **F1**-MS and/or MSD failure

Analysis Validated:

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66439 **Location:** GW Well PM-1 **Date:** 06/05/2023 **Sample Collector:** WJK/ML

Loc. Code PM-1 **Time:** 14:55

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	<0.1	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<10.0	ug/L	07/20/2023	SKJACOBS	EPA 6020B
Barium	76.6	ug/L	06/20/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Calcium	12.7	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Cobalt	1.19	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Iron	11100	ug/L	06/20/2023	SKJACOBS	EPA 6020B
Potassium	0.623	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Magnesium	0.712	mg/L	06/20/2023	SKJACOBS	EPA 6020B
Sodium	6.16	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Boron	18.4	ug/L	07/05/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/20/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/20/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Zinc	13.3	ug/L	07/26/2023	LCWILLIA	EPA 6020B
Total Organic Carbon	5.69	mg/L	06/14/2023	GEL	SM 5310B
Nitrate	<0.10	mg/L	06/06/2023	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	06/06/2023	KCWELLS	EPA 300.0
Chloride	12.4	mg/L	06/06/2023	KCWELLS	EPA 300.0
Sulfate	9.11	mg/L	06/06/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	130.0	mg/L	06/07/2023	KCWELLS	SM 2540C
Radium 226	3.47	pCi/L	07/07/2023	GEL	EPA 903.1 Mod
Radium 228	0.236	pCi/L	06/29/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.70	pCi/L	07/07/2023	GEL	EPA 903.1 Mod
pH	5.08	SU	06/05/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 8/29/23

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66407 **Location:** GW Well CBW-1 **Date:** 06/06/2023 **Sample Collector:** WK/ML

Loc. Code CBW-1 **Time:** 08:59

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	0.79	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<10.0	ug/L	07/27/2023	TDHARRIS	EPA 6020B
Barium	38.8	ug/L	06/20/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Calcium	33.9	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Cobalt	0.814	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Iron	<50.0	ug/L	06/20/2023	SKJACOBS	EPA 6020B
Potassium	0.78	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Magnesium	2.44	mg/L	06/20/2023	SKJACOBS	EPA 6020B
Sodium	10.1	mg/L	07/06/2023	SKJACOBS	EPA 6020B
Lead	2.55	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Boron	836	ug/L	07/05/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/20/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/20/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Total Organic Carbon	2.17	mg/L	06/14/2023	GEL	SM 5310B
Nitrate	1.49	mg/L	06/13/2023	KCWELLS	EPA 300.0
Fluoride	0.23	mg/L	06/13/2023	KCWELLS	EPA 300.0
Chloride	3.73	mg/L	06/13/2023	KCWELLS	EPA 300.0
Sulfate	97.1	mg/L	06/13/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	178.8	mg/L	06/14/2023	KCWELLS	SM 2540C
Radium 226	0.968	pCi/L	07/07/2023	GEL	EPA 903.1 Mod
Radium 228	4.12	pCi/L	06/29/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	5.08	pCi/L	07/07/2023	GEL	EPA 903.1 Mod
pH	4.34	SU	06/06/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: _____ Validation date: 8/29/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66440 **Location:** GW Well POZ-3 **Date:** 06/13/2023 **Sample Collector:** WJK/ML

Loc. Code POZ-3 **Time:** 10:32

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/08/2023	SKJACOBS	EPA 6020B
Barium	91.1	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	2.1	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	72.6	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Boron	14.2	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Total Organic Carbon	2.85	mg/L	06/20/2023	GEL	SM 5310B
Chloride	15.0	mg/L	06/15/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	97.7	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	642.5	mg/L	06/20/2023	NTCHIN	SM 2540C
pH	6.49	SU	06/13/2023	WJK/ML	

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010

Sample Validated: Linda Williams - Manager, Analytical Services

Final Validation Date: 8/28/23

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66441 **Location:** GW Well POZ-4 **Date:** 06/13/2023 **Sample Collector:** WJK/ML

Loc. Code POZ-4 **Time:** 15:00

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/08/2023	SKJACOBS	EPA 6020B
Barium	99.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Beryllium	0.54	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Calcium	358	mg/L	08/09/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	98.4	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	438	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Boron	27.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Lithium	22.6	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Molybdenum	<5.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Total Organic Carbon	1.67	mg/L	06/20/2023	GEL	SM 5310B
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Chloride	568	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	156	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	2084	mg/L	06/20/2023	NTCHIN	SM 2540C
Radium 226	2.17	pCi/L	07/14/2023	GEL	EPA 903.1 Mod
Radium 228	2.78	pCi/L	06/30/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.95	pCi/L	07/17/2023	GEL	EPA 903.1 Mod
pH	6.20	SU	06/13/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 8/29/23

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66443 **Location:** GW Well POZ-6 **Date:** 06/13/2023 **Sample Collector:** WJK/ML

Loc. Code POZ-6 **Time:** 09:19

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/08/2023	SKJACOBS	EPA 6020B
Barium	88.3	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Calcium	496	mg/L	08/09/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	3.1	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	17500	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Boron	39.7	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Lithium	20.1	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Molybdenum	<5.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Total Organic Carbon	2.70	mg/L	06/20/2023	GEL	SM 5310B
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Chloride	376	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	554	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	2262	mg/L	06/20/2023	NTCHIN	SM 2540C
Radium 226	0.873	pCi/L	07/14/2023	GEL	EPA 903.1 Mod
Radium 228	0.773	pCi/L	06/30/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.65	pCi/L	07/17/2023	GEL	EPA 903.1 Mod
pH	6.35	SU	06/13/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 8/29/23

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66444 **Location:** GW Well POZ-7 **Date:** 06/13/2023 **Sample Collector:** WJK/ML

Loc. Code POZ-7 **Time:** 12:21

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/08/2023	SKJACOBS	EPA 6020B
Barium	145	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Calcium	26.5	mg/L	08/09/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	0.61	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	137	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Boron	11.2	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Lithium	11.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Molybdenum	<5.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Total Organic Carbon	<1	mg/L	06/20/2023	GEL	SM 5310B
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Chloride	36.5	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	<2.0	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	196.2	mg/L	06/20/2023	NTCHIN	SM 2540C
Radium 226	0.445	pCi/L	07/14/2023	GEL	EPA 903.1 Mod
Radium 228	0.655	pCi/L	06/30/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.10	pCi/L	07/17/2023	GEL	EPA 903.1 Mod
pH	5.93	SU	06/13/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 8/29/23

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66445 **Location:** GW Well POZ-7 **Date:** 06/13/2023 **Sample Collector:** WJK/ML

Loc. Code POZ-7 DUP **Time:** 12:26

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/08/2023	SKJACOBS	EPA 6020B
Barium	143	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Calcium	25.9	mg/L	08/09/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	0.68	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	109	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Boron	10.9	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Lithium	8.68	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Molybdenum	<5.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	08/09/2023	SKJACOBS	EPA 6020B
Total Organic Carbon	<1	mg/L	06/20/2023	GEL	SM 5310B
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Chloride	36.6	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	<2.0	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	170.0	mg/L	06/26/2023	NTCHIN	SM 2540C
Radium 226	0.822	pCi/L	07/14/2023	GEL	EPA 903.1 Mod
Radium 228	1.80	pCi/L	06/30/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.63	pCi/L	07/17/2023	GEL	EPA 903.1 Mod

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 8/29/23

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66446 **Location:** GW Well POZ-8 **Date:** 06/22/2023 **Sample Collector:** WJK/ML

Loc. Code POZ-8 **Time:** 09:46

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Barium	326	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	09/01/2023	SKJACOBS	EPA 6020B
Calcium	427	mg/L	08/18/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	09/01/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Boron	19.8	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Lithium	65.9	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/29/2023	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	06/27/2023	KCWELLS	EPA 300.0
Chloride	774	mg/L	06/27/2023	KCWELLS	EPA 300.0
Sulfate	40.4	mg/L	06/27/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	2630	mg/L	06/28/2023	NTCHIN	SM 2540C
Radium 226	0.301	pCi/L	07/20/2023	GEL	EPA 903.1 Mod
Radium 228	2.71	pCi/L	07/15/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.01	pCi/L	07/21/2023	GEL	EPA 903.1 Mod
pH	6.54	SU	06/21/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: _____ Validation date: 9/11/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66422 **Location:** GW Well CCMLF-1 **Date:** 06/21/2023 **Sample Collector:** WJK/ML

Loc. Code CCMLF-1 **Time:** 13:27

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Barium	79.3	ug/L	08/16/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Calcium	21.5	mg/L	08/16/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Cobalt	1.68	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Boron	20.0	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/29/2023	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	06/27/2023	KCWELLS	EPA 300.0
Chloride	8.25	mg/L	06/27/2023	KCWELLS	EPA 300.0
Sulfate	12.8	mg/L	06/27/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	103.8	mg/L	06/28/2023	NTCHIN	SM 2540C
Radium 226	0.983	pCi/L	07/20/2023	GEL	EPA 903.1 Mod
Radium 228	2.50	pCi/L	07/15/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.48	pCi/L	07/21/2023	GEL	EPA 903.1 Mod
pH	5.94	SU	06/21/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date: 9/11/23

Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66423 **Location:** GW Well CCMLF-1D **Date:** 06/21/2023 **Sample Collector:** WJK/ML

Loc. Code CCMLF-1D **Time:** 14:38

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Barium	38.1	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Calcium	51.0	mg/L	08/10/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Boron	14.3	ug/L	08/10/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	08/10/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	08/10/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/29/2023	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	06/27/2023	KCWELLS	EPA 300.0
Chloride	6.21	mg/L	06/27/2023	KCWELLS	EPA 300.0
Sulfate	3.45	mg/L	06/27/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	177.5	mg/L	06/28/2023	NTCHIN	SM 2540C
Radium 226	0.680	pCi/L	07/20/2023	GEL	EPA 903.1 Mod
Radium 228	1.19	pCi/L	07/15/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.87	pCi/L	07/21/2023	GEL	EPA 903.1 Mod
pH	7.21	SU	06/21/2023	WJK/ML	

Comments:
Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date: 9/11/23

Linda Williams - Manager Analytical Services

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santee cooper

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66424 **Location:** GW Well CCMLF-2 **Date:** 06/22/2023 **Sample Collector:** WJK/ML

Loc. Code CCMLF-2 **Time:** 10:58

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Barium	31.1	ug/L	08/16/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Calcium	12.1	mg/L	08/16/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Cobalt	0.71	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/18/2023	SKJACOBS	EPA 6020B
Boron	14.5	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	08/16/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/29/2023	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	06/27/2023	KCWELLS	EPA 300.0
Chloride	5.84	mg/L	06/27/2023	KCWELLS	EPA 300.0
Sulfate	<2.0	mg/L	06/27/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	53.75	mg/L	06/28/2023	NTCHIN	SM 2540C
Radium 226	0.451	pCi/L	07/20/2023	GEL	EPA 903.1 Mod
Radium 228	2.87	pCi/L	07/15/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.32	pCi/L	07/21/2023	GEL	EPA 903.1 Mod
pH	5.97	SU	06/22/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date: 9/11/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF66405 **Location:** GW Well CAP-13 **Date:** 06/15/2023 **Sample Collector:** WJK/ML

Loc. Code CAP-13 **Time:** 09:52

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	<0.1	mg/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/07/2023	SKJACOBS	EPA 6020B
Barium	160	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Calcium	42.9	mg/L	08/01/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	13700	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Potassium	1.7	mg/L	08/01/2023	SKJACOBS	EPA 6020B
Magnesium	2.0	mg/L	08/01/2023	SKJACOBS	EPA 6020B
Sodium	5.8	mg/L	08/01/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Boron	31.7	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Lithium	<5.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Molybdenum	<5.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Mercury	<0.2	ug/L	06/22/2023	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	06/23/2023	KCWELLS	EPA 300.0
Chloride	4.63	mg/L	06/23/2023	KCWELLS	EPA 300.0
Sulfate	79.7	mg/L	06/23/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	231.2	mg/L	06/26/2023	NTCHIN	SM 2540C
Radium 226	0.287	pCi/L	07/14/2023	GEL	EPA 903.1 Mod
Radium 228	0.954	pCi/L	06/30/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.24	pCi/L	07/17/2023	GEL	EPA 903.1 Mod
pH	5.19	SU	06/15/2023	WJK/ML	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date:

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF71899 **Location:** GW Well POZ-3 **Date:** 07/19/2023 **Sample Collector:** WJK/BB

Loc. Code POZ-3 **Time:** 11:37

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<3	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Barium	96.5	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Beryllium	<0.5	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Calcium	159000	ug/L	08/11/2023	EUROFINS SAV	EPA 6010D
Cadmium	<0.5	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Cobalt	2.39	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Chromium	<5	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Lead	<2.5	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Antimony	<5	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Selenium	<20	ug/L	08/11/2023	EUROFINS SAV	EPA 6010D
Thallium	<1	ug/L	08/11/2023	EUROFINS SAV	EPA 6020B
Boron	19.6	ug/L	08/28/2023	SKJACOBS	EPA 6010D
Lithium	3.17	ug/L	08/28/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	08/28/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/15/2023	EUROFINS SAV	EPA 7470
Fluoride	0.14	mg/L	08/05/2023	KCWELLS	EPA 300.0
Chloride	12.2	mg/L	08/05/2023	KCWELLS	EPA 300.0
Sulfate	25.2	mg/L	08/05/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	653.8	mg/L	08/04/2023	NTCHIN	SM 2540C
Radium 226	0.706	pCi/L	09/01/2023	GEL	EPA 903.1 Mod
Radium 228	0.477	pCi/L	08/22/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.18	pCi/L	09/01/2023	GEL	EPA 903.1 Mod
pH	6.38	SU	08/02/2023	WJK/BB	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date: 9/18/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF80267 **Location:** GW Well POZ-3 **Date:** 10/10/2023 **Sample Collector:** ZM/BB

Loc. Code POZ-3 **Time:** 10:15

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Barium	99.9	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Calcium	166	mg/L	10/24/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Cobalt	2.7	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	10/24/2023	SKJACOBS	EPA 6020B
Boron	20.5	ug/L	10/26/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	10/26/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	10/26/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	10/19/2023	EUROFINS SAV	EPA 7470
Fluoride	0.21	mg/L	10/18/2023	GEL	EPA 300.0
Chloride	11.2	mg/L	10/19/2023	GEL	EPA 300.0
Sulfate	80.0	mg/L	10/19/2023	GEL	EPA 300.0
Total Dissolved Solids	715.0	mg/L	10/18/2023	KCWELLS	SM 2540C
Radium 226	0.205	pCi/L	11/02/2023	GEL	EPA 903.1 Mod
Radium 228	-1.54	pCi/L	10/24/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.205	pCi/L	11/03/2023	GEL	EPA 903.1 Mod
pH	6.10	SU	10/10/2023	ZM/BB	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America " - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117 ; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date: 11/27/23

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF84385 **Location:** GW Well POZ-3 **Date:** 12/05/2023 **Sample Collector:** ZM/BB

Loc. Code POZ-3 **Time:** 10:14

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Barium	99.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Calcium	185	mg/L	12/07/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Cobalt	1.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	12/07/2023	SKJACOBS	EPA 6020B
Boron	15.8	ug/L	12/12/2023	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	12/12/2023	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	12/12/2023	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	12/13/2023	EUROFINS SAV	EPA 7470
Fluoride	0.11	mg/L	12/20/2023	KCWELLS	EPA 300.0
Chloride	11.2	mg/L	12/20/2023	KCWELLS	EPA 300.0
Sulfate	81.7	mg/L	12/20/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	698.8	mg/L	12/12/2023	KCWELLS	SM 2540C
Radium 226	0.281	pCi/L	01/02/2024	GEL	EPA 903.1 Mod
Radium 228	1.21	pCi/L	12/29/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.49	pCi/L	01/04/2024	GEL	EPA 903.1 Mod
pH	6.29	SU	12/05/2023	ZM/BB	

Comments:

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Test America" - TestAmerica Laboratories, Inc. - Lab ID# 98001; "DavisBrown"- Davis & Brown Lab ID # 21117; "Shealy"- Shealy Environmental Services, Inc.- Lab ID# 32010 "ROGERSCALLCO"- Rogers & Callcot, Inc.- Lab ID # 23105001

Analysis Validated: Validation date: 1/10/24

Linda Williams - Manager Analytical Services

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GEL Laboratories LLC
a member of The GEL Group INC

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February 24, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 608830

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 27, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Heather Millar

Heather Millar for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 608830 GEL Work Order: 608830

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, Julie Robinson.

Reviewed by Heather Millar

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

Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54572	Project:	SOOP00119
Sample ID:	608830001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	24-JAN-23 11:46		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.15	+/-1.31	2.19	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.66	+/-1.33			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.509	+/-0.247	0.268	1.00	pCi/L			LXP1	02/22/23	1035	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54597	Project:	SOOP00119
Sample ID:	608830002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	24-JAN-23 15:40		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.247	+/-1.23	2.36	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.518	+/-1.27			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.518	+/-0.298	0.386	1.00	pCi/L			LXP1	02/22/23	1035	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			75.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54598	Project:	SOOP00119
Sample ID:	608830003	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	24-JAN-23 13:27		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.766	+/-1.10	2.32	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.507	+/-1.14			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.507	+/-0.292	0.367	1.00	pCi/L			LXP1	02/22/23	1035	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54600	Project:	SOOP00119
Sample ID:	608830004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	24-JAN-23 10:18		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.79	+/-1.47	2.35	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.63	+/-1.52			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.845	+/-0.355	0.372	1.00	pCi/L			LXP1	02/22/23	1035	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			63.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54595	Project:	SOOP00119
Sample ID:	608830005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	25-JAN-23 11:00		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.37	+/-1.42	2.36	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.01	+/-1.46			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.638	+/-0.331	0.407	1.00	pCi/L			LXP1	02/22/23	1106	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			80.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54596	Project:	SOOP00119
Sample ID:	608830006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	25-JAN-23 09:54		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.906	+/-1.36	2.35	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.27	+/-1.38			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.364	+/-0.222	0.232	1.00	pCi/L			LXP1	02/22/23	1106	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			79.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54593	Project:	SOOP00119
Sample ID:	608830007	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	26-JAN-23 09:38		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.06	+/-1.49	2.56	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.42	+/-1.51			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.358	+/-0.222	0.263	1.00	pCi/L			LXP1	02/22/23	1106	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			55.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54594	Project:	SOOP00119
Sample ID:	608830008	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	26-JAN-23 09:43		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.08	+/-1.29	2.18	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.43	+/-1.31			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.354	+/-0.240	0.271	1.00	pCi/L			LXP1	02/22/23	1106	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			67.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54582	Project:	SOOP00119
Sample ID:	608830009	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	26-JAN-23 11:19		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-1.13	+/-1.04	2.28	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.439	+/-1.07			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.439	+/-0.236	0.224	1.00	pCi/L			LXP1	02/22/23	1106	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			74.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 24, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54583	Project:	SOOP00119
Sample ID:	608830010	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	26-JAN-23 13:00		
Receive Date:	27-JAN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.21	+/-1.33	2.22	3.00	pCi/L			JE1	02/23/23	1238	2377480	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.66	+/-1.35			pCi/L		1	NXL1	02/24/23	0841	2377478	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.443	+/-0.243	0.265	1.00	pCi/L			LXP1	02/22/23	1106	2377434	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: February 24, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **608830**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 2377480											
QC1205310041 608830001 DUP											
Radium-228	U	1.15	U	2.38	pCi/L	N/A		N/A	JE1	02/23/23	12:37
	Uncertainty	+/-1.31		+/-1.62							
QC1205310042 LCS											
Radium-228	63.5			66.1	pCi/L		104	(75%-125%)		02/23/23	12:38
	Uncertainty			+/-5.06							
QC1205310040 MB											
Radium-228			U	0.177	pCi/L					02/23/23	12:37
	Uncertainty			+/-1.21							
Rad Ra-226											
Batch 2377434											
QC1205309937 608830001 DUP											
Radium-226		0.509	U	0.258	pCi/L	65.6		(0% - 100%)	LXP1	02/22/23	11:38
	Uncertainty	+/-0.247		+/-0.217							
QC1205309939 LCS											
Radium-226	26.6			22.1	pCi/L		83.3	(75%-125%)		02/22/23	11:38
	Uncertainty			+/-1.48							
QC1205309936 MB											
Radium-226			U	0.137	pCi/L					02/22/23	11:38
	Uncertainty			+/-0.269							
QC1205309938 608830001 MS											
Radium-226	133	0.509		102	pCi/L		75.8	(75%-125%)		02/22/23	11:38
	Uncertainty	+/-0.247		+/-7.91							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **608830**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 608830

Product: **Radium-226+Radium-228 Calculation**
Analytical Method: Calculation
Analytical Procedure: GL-RAD-D-003 REV# 45
Analytical Batch: 2377478

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

GEL Sample ID#	Client Sample Identification
608830001	AF54572
608830002	AF54597
608830003	AF54598
608830004	AF54600
608830005	AF54595
608830006	AF54596
608830007	AF54593
608830008	AF54594
608830009	AF54582
608830010	AF54583

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

Data Summary:

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

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2377480

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

GEL Sample ID#	Client Sample Identification
608830001	AF54572
608830002	AF54597
608830003	AF54598
608830004	AF54600
608830005	AF54595
608830006	AF54596
608830007	AF54593
608830008	AF54594
608830009	AF54582

608830010	AF54583
1205310040	Method Blank (MB)
1205310041	608830001(AF54572) Sample Duplicate (DUP)
1205310042	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: 2377434

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

GEL Sample ID#	Client Sample Identification
608830001	AF54572
608830002	AF54597
608830003	AF54598
608830004	AF54600
608830005	AF54595
608830006	AF54596
608830007	AF54593
608830008	AF54594
608830009	AF54582
608830010	AF54583
1205309936	Method Blank (MB)
1205309937	608830001(AF54572) Sample Duplicate (DUP)
1205309938	608830001(AF54572) Matrix Spike (MS)
1205309939	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205309938 (AF54572MS), 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.

RAD - 2/27/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 6 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

608826/608830

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G01.1 / 36500

Rerun request for any flagged QC: Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC / DOC	TOTAL ALK BICARB CARB	SULFIDE	*TOTAL CALC. RAD 224/228
AF54599	CLFIB-5D	1/24/23	1438	BSB CDM	1	G	G	GW	3/1	→THIS SAMPLE NEEDS TOC ONLY.	X			
AF54572	CBW-1	"	1146	MDG COM	6	G+P	G	GW	*		2	1	1	2
AF54597	CLFIB-4	"	1540	"	"	"	"	"	"	* PRESERVATIVES: TOC H2SO4	"	"	"	"
AF54598	CLFIB-5	"	1327	"	"	"	"	"	"	SULFIDE ZINC ACETATE, NaOH RAD HNO3	"	"	"	"
AF54600	PM-1	"	1018	"	"	"	"	"	"	<4°C	"	"	"	"
AF54595	CLFIB-2	1/25/23	1100	ZDM MDG	"	"	"	"	"	ALKAL-TOTAL, BICARB + CARB	"	"	"	"
AF54596	CLFIB-3	"	0954	"	"	"	"	"	"		"	"	"	"
AF54593	CLFIB-1	1/26/23	0938	"	"	"	"	"	"	* SULFIDE HAS SHORT HOLD.	"	"	"	"
AF54594	CLFIB-1 DUP	"	0943	"	"	"	"	"	"		"	"	"	"
AF54582	CCMLF-1	"	1119	"	"	"	"	"	"		"	"	"	"

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	1/27/23	0958		GEL	1/27/23	0958
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
		1-28-23	1555	Thermo Fisher	GEL	1-27-23	1555
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

RAD 2/27/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 6 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL ALK BICARB/CARB	SULFIDE	RAD 226/228 TOTAL CALC
AF54583	CCMLF-ID	1/26/23	1300	EDM MDG	6	G+P	G	GW	*	*PRESERVATIVES:	2	1	1	2
										TOC H_2SO_4 SULFIDE ZINC ACETATE, NaOH				
										RAD HNO_3 <4°C				
										ALK - TOTAL, BICARB + CARB				
										*SULFIDE HAS SHORT HOLD.				

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	1/27/23	0958	MP	GEL	1/27/23	0958
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
MP	GEL	1/27/23	1555	Thyasia Patten	GEL	1-27-23	1555
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCSP	**SDG/AR/COC/Work Order:** 608826/608830 S.R.
Received By: Thyasia Tatum	**Date Received:** 1-24-23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 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?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials HM Date 1/30/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 24 February 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

February 13, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 609427

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 03, 2023. 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. 4289.

Sincerely,

Jessica Ward for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 609427 GEL Work Order: 609427

The Qualifiers in this report are defined as follows:

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

J Value is estimated

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

** Analyte is a Tracer compound

J See case narrative for an explanation

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54602	Project:	SOOP00119
Sample ID:	609427001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 11:26		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.92	0.330	1.00	mg/L		1	RM3	02/06/23	1925	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1952	2379521	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		246	1.81	5.00	mg/L			EK1	02/10/23	1250	2382176	3
Bicarbonate alkalinity (CaCO3)		246	1.81	5.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.81	5.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54602 (DOC)	Project:	SOOP00119
Sample ID:	609427002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 11:26		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		1.93	0.330	1.00	mg/L		1	TSM	02/08/23	1415	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54604	Project:	SOOP00119
Sample ID:	609427003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 09:37		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.62	0.330	1.00	mg/L		1	RM3	02/06/23	2026	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1952	2379521	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		309	1.45	4.00	mg/L			EK1	02/10/23	1308	2382176	3
Bicarbonate alkalinity (CaCO3)		309	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54604 (DOC)	Project:	SOOP00119
Sample ID:	609427004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 09:37		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		2.47	0.330	1.00	mg/L		1	TSM	02/08/23	1515	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54607	Project:	SOOP00119
Sample ID:	609427005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 14:10		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.64	0.330	1.00	mg/L		1	RM3	02/06/23	2106	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1953	2379521	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		185	1.45	4.00	mg/L			EK1	02/10/23	1309	2382176	3
Bicarbonate alkalinity (CaCO3)		185	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54607 (DOC)	Project:	SOOP00119
Sample ID:	609427006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 14:10		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		1.45	0.330	1.00	mg/L		1	TSM	02/08/23	1535	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54603	Project:	SOOP00119
Sample ID:	609427007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	30-JAN-23 13:08		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.41	0.330	1.00	mg/L		1	RM3	02/06/23	2128	2379317	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54570	Project:	SOOP00119
Sample ID:	609427008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 12:49		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		11.1	0.330	1.00	mg/L		1	RM3	02/06/23	2149	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1954	2379521	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		39.4	1.45	4.00	mg/L			EK1	02/10/23	1315	2382176	3
Bicarbonate alkalinity (CaCO3)		39.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54570 (DOC)	Project:	SOOP00119
Sample ID:	609427009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 12:49		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		10.2	0.330	1.00	mg/L		1	TSM	02/08/23	1557	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54601	Project:	SOOP00119
Sample ID:	609427010	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 11:17		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.01	0.330	1.00	mg/L		1	RM3	02/06/23	2210	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1954	2379521	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		469	1.45	4.00	mg/L			EK1	02/10/23	1318	2382176	3
Bicarbonate alkalinity (CaCO3)		469	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54601 (DOC)	Project:	SOOP00119
Sample ID:	609427011	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 11:17		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		2.75	0.330	1.00	mg/L		1	TSM	02/08/23	1617	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54605	Project:	SOOP00119
Sample ID:	609427012	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 09:40		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.683	0.330	1.00	mg/L		1	RM3	02/06/23	2230	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1955	2379521	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		9.60	1.45	4.00	mg/L			EK1	02/10/23	1321	2382176	3
Bicarbonate alkalinity (CaCO3)		9.60	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54605 (DOC)	Project:	SOOP00119
Sample ID:	609427013	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 09:40		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.803	0.330	1.00	mg/L		1	TSM	02/08/23	1658	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54606	Project:	SOOP00119
Sample ID:	609427014	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 09:45		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.359	0.330	1.00	mg/L		1	RM3	02/06/23	2250	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1841	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		10.8	1.45	4.00	mg/L			EK1	02/10/23	1323	2382176	3
Bicarbonate alkalinity (CaCO3)		10.8	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54606 (DOC)	Project:	SOOP00119
Sample ID:	609427015	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	31-JAN-23 09:45		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.558	0.330	1.00	mg/L		1	TSM	02/08/23	1718	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: February 13, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **609427**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis											
Batch 2379317											
QC1205312930 609427001 DUP											
Total Organic Carbon Average		1.92		1.97	mg/L	2.47 ^		(+/-1.00)	RM3	02/06/23	19:45
QC1205312932 609445003 DUP											
Total Organic Carbon Average		3.57		3.56	mg/L	0.224 ^		(+/-1.00)		02/06/23	23:52
QC1205312929 LCS											
Total Organic Carbon Average	10.0			9.55	mg/L		95.5	(80%-120%)		02/06/23	18:55
QC1205312928 MB											
Total Organic Carbon Average			U	ND	mg/L					02/06/23	18:45
QC1205312931 609427001 PS											
Total Organic Carbon Average	10.0	1.92		11.6	mg/L		96.8	(65%-120%)		02/06/23	20:06
QC1205312933 609445003 PS											
Total Organic Carbon Average	10.0	3.57		12.4	mg/L		88.6	(65%-120%)		02/07/23	00:15
Batch 2379995											
QC1205312846 609445012 DUP											
Dissolved Organic Carbon Average		3.13		3.00	mg/L	4.18 ^		(+/-1.00)	TSM	02/08/23	19:51
QC1205312847 609427002 DUP											
Dissolved Organic Carbon Average		1.93		1.92	mg/L	0.728 ^		(+/-1.00)		02/08/23	14:35
QC1205313808 FLTB											
Dissolved Organic Carbon Average			U	ND	mg/L					02/08/23	13:52
QC1205314036 LCS											
Dissolved Organic Carbon Average	10.0			9.93	mg/L		99.3	(80%-120%)		02/08/23	14:02

QC Summary

Workorder: **609427**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 2379995										
QC1205314035 MB										
Dissolved Organic Carbon Average			U	ND	mg/L				TSM	02/08/23 13:43
QC1205312848 609445012 PS										
Dissolved Organic Carbon Average	10.0	3.13		12.1	mg/L		89.4	(65%-120%)		02/08/23 20:13
QC1205312849 609427002 PS										
Dissolved Organic Carbon Average	10.0	1.93		11.9	mg/L		100	(65%-120%)		02/08/23 14:55
Spectrometric Analysis										
Batch 2379521										
QC1205313136 LCS										
Total Sulfide	0.400			0.401	mg/L		100	(85%-115%)	HH2	02/06/23 19:38
QC1205313135 MB										
Total Sulfide			U	ND	mg/L					02/06/23 19:36
QC1205313139 609276004 PS										
Total Sulfide	0.400 U	ND		0.354	mg/L		88.1	(75%-125%)		02/06/23 19:43
QC1205313140 609276004 PSD										
Total Sulfide	0.400 U	ND		0.358	mg/L	1	89	(0%-15%)		02/06/23 19:43
Batch 2379523										
QC1205313148 LCS										
Total Sulfide	0.400			0.399	mg/L		99.7	(85%-115%)	HH2	02/06/23 18:38
QC1205313147 MB										
Total Sulfide			U	ND	mg/L					02/06/23 18:37
QC1205313151 609445017 PS										
Total Sulfide	0.400 U	ND		0.208	mg/L		51.9*	(75%-125%)		02/06/23 18:47

QC Summary

Workorder: **609427**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Spectrometric Analysis											
Batch 2379523											
QC1205313152 609445017 PSD											
Total Sulfide	0.400	U	ND		0.208	mg/L	0	51.9*	(0%-15%)	HH2	02/06/23 18:47
Titration and Ion Analysis											
Batch 2382176											
QC1205317754 609427001 DUP											
Alkalinity, Total as CaCO3			246		247	mg/L	0.203		(0%-20%)	EK1	02/10/23 12:58
Bicarbonate alkalinity (CaCO3)			246		247	mg/L	0.203		(0%-20%)		
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A				
QC1205317756 609445007 DUP											
Alkalinity, Total as CaCO3			191		191	mg/L	0.131		(0%-20%)		02/10/23 13:42
Bicarbonate alkalinity (CaCO3)			191		191	mg/L	0.131		(0%-20%)		
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A				
QC1205317753 LCS											
Alkalinity, Total as CaCO3	100				104	mg/L		104	(90%-110%)		02/10/23 12:41
QC1205317755 609427001 MS											
Alkalinity, Total as CaCO3	125		246		377	mg/L		104	(80%-120%)		02/10/23 13:02
QC1205317757 609445007 MS											
Alkalinity, Total as CaCO3	125		191		319	mg/L		102	(80%-120%)		02/10/23 13:45

Notes:

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

QC Summary

Workorder: **609427**

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

H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
B	The target analyte was detected in the associated blank.
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
J	See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 609427

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2379317

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

GEL Sample ID#	Client Sample Identification
609427001	AF54602
609427003	AF54604
609427005	AF54607
609427007	AF54603
609427008	AF54570
609427010	AF54601
609427012	AF54605
609427014	AF54606
1205312928	Method Blank (MB)
1205312929	Laboratory Control Sample (LCS)
1205312930	609427001(AF54602) Sample Duplicate (DUP)
1205312931	609427001(AF54602) Post Spike (PS)
1205312932	609445003(AF54560) Sample Duplicate (DUP)
1205312933	609445003(AF54560) Post Spike (PS)

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: **Carbon, Dissolved Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2379995

Filtration Method: EPA 160
Filtration Procedure: GL-LB-E-034 REV# 4
Filtration Batch: 2379287

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

GEL Sample ID#	Client Sample Identification
609427002	AF54602 (DOC)
609427004	AF54604 (DOC)
609427006	AF54607 (DOC)

609427009	AF54570 (DOC)
609427011	AF54601 (DOC)
609427013	AF54605 (DOC)
609427015	AF54606 (DOC)
1205312846	609445012(AF54564 (DOC)) Sample Duplicate (DUP)
1205312847	609427002(AF54602 (DOC)) Sample Duplicate (DUP)
1205312848	609445012(AF54564 (DOC)) Post Spike (PS)
1205312849	609427002(AF54602 (DOC)) Post Spike (PS)
1205313808	Filtration Blank (FLTB)
1205314035	Method Blank (MB)
1205314036	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Container scanning event for custody missed, however all samples was in the custody of the Analyst at the time of analysis.

Product: **Sulfide, Total**
Analytical Method: SM 4500-S (2-) D
Analytical Procedure: GL-GC-E-052 REV# 12
Analytical Batch: 2379521

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

GEL Sample ID#	Client Sample Identification
609427001	AF54602
609427003	AF54604
609427005	AF54607
609427008	AF54570
609427010	AF54601
609427012	AF54605
1205313135	Method Blank (MB)
1205313136	Laboratory Control Sample (LCS)
1205313139	609276004(NonSDG) Post Spike (PS)
1205313140	609276004(NonSDG) Post Spike Duplicate (PSD)

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: **Sulfide, Total**

Analytical Method: SM 4500-S (2-) D
Analytical Procedure: GL-GC-E-052 REV# 12
Analytical Batch: 2379523

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

GEL Sample ID#	Client Sample Identification
609427014	AF54606
1205313147	Method Blank (MB)
1205313148	Laboratory Control Sample (LCS)
1205313151	609445017(AF54567) Post Spike (PS)
1205313152	609445017(AF54567) Post Spike Duplicate (PSD)

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
Total Sulfide	1205313151 (AF54567PS) and 1205313152 (AF54567PSD)	51.9* (75%-125%)

Product: **Alkalinity**
Analytical Method: SM 2320B
Analytical Procedure: GL-GC-E-033 REV# 14
Analytical Batch: 2382176

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

GEL Sample ID#	Client Sample Identification
609427001	AF54602
609427003	AF54604
609427005	AF54607
609427008	AF54570
609427010	AF54601
609427012	AF54605
609427014	AF54606
1205317753	Laboratory Control Sample (LCS)
1205317754	609427001(AF54602) Sample Duplicate (DUP)
1205317755	609427001(AF54602) Matrix Spike (MS)
1205317756	609445007(AF54562) Sample Duplicate (DUP)
1205317757	609445007(AF54562) Matrix Spike (MS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
40 mL aliquots used due to sample availability; low pH values verified by pH strip 1205317754 (AF54602DUP), 1205317755 (AF54602MS), 1205317756 (AF54562DUP), 1205317757 (AF54562MS) and 609427001 (AF54602).

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.

RAD 3/10/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 13 / 22 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

609427/609440

Customer Email/Report Recipient: LCWILLIA @santeecooper.com **Date Results Needed by:** / / **Project/Task/Unit #:** 125915 / JM02.09.G01.1 / 36500 **Rerun request for any flagged QC** Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL ALK BICARB CARB	SULFIDE	RAD 226/228 TOTALCALC
AF 54602	POZ-4	1/30/23	1126	ZDM BSB	6	G P	G	GW	*	* SULFIDE HAS SHORT HOLD	2	1	1	2
AF54604	POZ-6	"	0937	"	"	"	"	"	"		"	"	"	"
" 7	POZ-8	"	1410	"	"	"	"	"	"		"	"	"	"
AF54603	POZ-5D	1/30/23	1308	"	1	G	G	GW	3/1	→ THIS SAMPLE NEEDS TOC ONLY.	1			
AF54570	CAP-13	1/31/23	1249	"	6	G P	G	"	*	* PRESERVATIVES TOC H2SO4	2	1	1	2
AF54601	POZ-3	"	1117	"	"	"	"	"	"	SULFIDE ZINC ACETATE, NaOH RAD HNO3	"	"	"	"
" 05	POZ-7	"	0940	"	"	"	"	"	"	<4°C	"	"	"	"
" 06	POZ-7 DUP	"	0945	"	"	"	"	"	"	ALKAL-TOTAL, BICARB, CARB	"	"	"	"

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/3/23	0947		GEL	2/3/23	0947
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	2-3-23	1530		GEL	2/3/23	1530
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): Initial:
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCOP	SDG/AR/COC/Work Order: 609427/609440
Received By: JW	Date Received: 2/3/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:_____
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials KM Date 2/4/23 Page 1 of 1

List of current GEL Certifications as of 13 February 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

March 03, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 609440

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 03, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Heather Millar

Heather Millar for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 609440 GEL Work Order: 609440

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, Julie Robinson.

Reviewed by Heather Millar

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

Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54602	Project:	SOOP00119
Sample ID:	609440001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	30-JAN-23 11:26		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.98	+/-1.70	2.40	3.00	pCi/L			JE1	03/01/23	1337	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.80	+/-1.79			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.818	+/-0.547	0.724	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			68.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54604	Project:	SOOP00119
Sample ID:	609440002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	30-JAN-23 09:37		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.82	+/-1.73	2.45	3.00	pCi/L			JE1	03/01/23	1337	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.60	+/-1.84			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.786	+/-0.622	0.875	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			64.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54607	Project:	SOOP00119
Sample ID:	609440003	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	30-JAN-23 14:10		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.44	+/-1.30	2.12	3.00	pCi/L			JE1	03/01/23	1337	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.74	+/-1.34			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.304	+/-0.335	0.514	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54570	Project:	SOOP00119
Sample ID:	609440004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	31-JAN-23 12:49		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.71	+/-1.72	2.63	3.00	pCi/L			JE1	03/01/23	1502	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.11	+/-1.77			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.405	+/-0.411	0.635	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			65.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54601	Project:	SOOP00119
Sample ID:	609440005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	31-JAN-23 11:17		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.32	+/-1.37	2.26	3.00	pCi/L			JE1	03/01/23	1337	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.89	+/-1.44			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.570	+/-0.458	0.588	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			56.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54605	Project:	SOOP00119
Sample ID:	609440006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	31-JAN-23 09:40		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.02	+/-1.66	2.17	3.00	pCi/L			JE1	03/03/23	0851	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.87	+/-1.74			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.854	+/-0.498	0.448	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			55.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54606	Project:	SOOP00119
Sample ID:	609440007	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	31-JAN-23 09:45		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.80	+/-1.72	2.35	3.00	pCi/L			JE1	03/01/23	1338	2382900	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.44	+/-1.79			pCi/L			NXL1	03/03/23	1123	2382899	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.643	+/-0.480	0.586	1.00	pCi/L			LXP1	03/02/23	1054	2382886	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			59.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: March 3, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **609440**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2382900										
QC1205319023 609440001 DUP										
Radium-228		3.98	U	0.908	pCi/L	126*		(0% - 100%)	JE1	03/01/23 13:36
	Uncertainty	+/-1.70		+/-1.42						
QC1205319025 LCS										
Radium-228	62.8			64.3	pCi/L		102	(75%-125%)		03/01/23 13:37
	Uncertainty			+/-5.21						
QC1205319022 MB										
Radium-228				2.74	pCi/L					03/01/23 13:36
	Uncertainty			+/-1.51						
Rad Ra-226										
Batch 2382886										
QC1205318990 609440001 DUP										
Radium-226		0.818		0.658	pCi/L	21.8		(0% - 100%)	LXP1	03/02/23 11:16
	Uncertainty	+/-0.547		+/-0.446						
QC1205318994 LCS										
Radium-226	26.5			24.7	pCi/L		93.2	(75%-125%)		03/02/23 11:41
	Uncertainty			+/-2.44						
QC1205318989 MB										
Radium-226				0.462	pCi/L					03/02/23 11:16
	Uncertainty			+/-0.359						
QC1205318992 609440001 MS										
Radium-226	131	0.818		105	pCi/L		79.5	(75%-125%)		03/02/23 11:16
	Uncertainty	+/-0.547		+/-11.1						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **609440**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 609440

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2382900

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

GEL Sample ID#	Client Sample Identification
609440001	AF54602
609440002	AF54604
609440003	AF54607
609440004	AF54570
609440005	AF54601
609440006	AF54605
609440007	AF54606
1205319022	Method Blank (MB)
1205319023	609440001(AF54602) Sample Duplicate (DUP)
1205319025	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
1205319022 (MB)	Radium-228	Result: 2.74 pCi/L > MDA: 2.17 pCi/L <= RDL: 3.00 pCi/L

Duplication Criteria between QC Sample and Duplicate Sample
The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1205319023 (AF54602DUP)	Radium-228	RPD 126* (0%-20%) RER 2.46 (0-3)

Technical Information

Recounts

Sample 609440006 (AF54605) was re-eluted and recounted to verify sample result. The recount is reported.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2382886

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

GEL Sample ID#	Client Sample Identification
609440001	AF54602
609440002	AF54604
609440003	AF54607
609440004	AF54570
609440005	AF54601
609440006	AF54605
609440007	AF54606
1205318989	Method Blank (MB)
1205318990	609440001(AF54602) Sample Duplicate (DUP)
1205318992	609440001(AF54602) Matrix Spike (MS)
1205318994	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
1205318989 (MB)	Radium-226	Result: 0.462 pCi/L > MDA: 0.407 pCi/L <= RDL: 1.00 pCi/L

Miscellaneous Information

Additional Comments
Aliquots for the matrix spikes, 1205318992 (AF54602MS), were 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.

RAD 3/10/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 13 / 22 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

609427/609440

Customer Email/Report Recipient: LCWILLIA @santeecooper.com **Date Results Needed by:** ___/___/___ **Project/Task/Unit #:** 125915 / JM02.09.G01.1 / 36500 **Rerun request for any flagged QC** Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL ALK BICARB CARB	SULFIDE	RAD 226/228 TOTALCALC
AF 54602	POZ-4	1/30/23	1126	ZDM BSB	6	G P	G	GW	*	* SULFIDE HAS SHORT HOLD	2	1	1	2
AF54604	POZ-6	"	0937	"	"	"	"	"	"		"	"	"	"
" 7	POZ-8	"	1410	"	"	"	"	"	"		"	"	"	"
AF54603	POZ-5D	1/30/23	1308	"	1	G	G	GW	3/1	→ THIS SAMPLE NEEDS TOC ONLY.	1			
AF54570	CAP-13	1/31/23	1249	"	6	G P*	G	"	*	* PRESERVATIVES TOC H2SO4	2	1	1	2
AF54601	POZ-3	"	1117	"	"	"	"	"	"	SULFIDE ZINC ACETATE, NaOH RAD HNO3	"	"	"	"
" 05	POZ-7	"	0940	"	"	"	"	"	"	<4°C	"	"	"	"
" 06	POZ-7 DUP	"	0945	"	"	"	"	"	"	ALKAL-TOTAL, BICARB, CARB	"	"	"	"

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	35594	2/3/23	0947	[signature]	GEL	2/3/23	0947
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
[signature]	GEL	2-3-23	1530	[signature]	GEL	2/3/23	1530
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code: 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCOP	SDG/AR/COC/Work Order: 609427/609440
Received By: JW	Date Received: 2/3/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:_____
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JW Date 2/4/23 Page 1 of 1

List of current GEL Certifications as of 03 March 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

February 13, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 609445

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 03, 2023. 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. 4289.

Sincerely,

Jessica Ward for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 609445 GEL Work Order: 609445

The Qualifiers in this report are defined as follows:

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

J Value is estimated

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

** Analyte is a Tracer compound

J See case narrative for an explanation

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54559	Project:	SOOP00119
Sample ID:	609445001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 09:34		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		4.56	0.330	1.00	mg/L		1	RM3	02/06/23	2310	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1842	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		291	1.45	4.00	mg/L			EK1	02/10/23	1326	2382176	3
Bicarbonate alkalinity (CaCO3)		291	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54559 (DOC)	Project:	SOOP00119
Sample ID:	609445002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 09:34		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		4.77	0.330	1.00	mg/L		1	TSM	02/08/23	1739	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54560	Project:	SOOP00119
Sample ID:	609445003	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 11:13		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.57	0.330	1.00	mg/L		1	RM3	02/06/23	2330	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1842	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		213	1.45	4.00	mg/L			EK1	02/10/23	1336	2382176	3
Bicarbonate alkalinity (CaCO3)		213	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54560 (DOC)	Project:	SOOP00119
Sample ID:	609445004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 11:13		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		3.05	0.330	1.00	mg/L		1	TSM	02/08/23	1801	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54561	Project:	SOOP00119
Sample ID:	609445005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 12:32		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.97	0.330	1.00	mg/L		1	RM3	02/07/23	0056	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1843	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			EK1	02/10/23	1338	2382176	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54561 (DOC)	Project:	SOOP00119
Sample ID:	609445006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 12:32		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		3.70	0.330	1.00	mg/L		1	TSM	02/08/23	1823	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54562	Project:	SOOP00119
Sample ID:	609445007	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 13:44		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.70	0.330	1.00	mg/L		1	RM3	02/07/23	0116	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1844	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		191	1.81	5.00	mg/L			EK1	02/10/23	1341	2382176	3
Bicarbonate alkalinity (CaCO3)		191	1.81	5.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.81	5.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF5462 (DOC)	Project:	SOOP00119
Sample ID:	609445008	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 13:44		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		2.59	0.330	1.00	mg/L		1	TSM	02/08/23	1845	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54563	Project:	SOOP00119
Sample ID:	609445009	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 14:52		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		9.73	0.330	1.00	mg/L		1	RM3	02/07/23	0137	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1844	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		78.4	1.45	4.00	mg/L			EK1	02/10/23	1349	2382176	3
Bicarbonate alkalinity (CaCO3)		78.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54563 (DOC)	Project:	SOOP00119
Sample ID:	609445010	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 14:52		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		7.56	0.330	1.00	mg/L		1	TSM	02/08/23	1907	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54564	Project:	SOOP00119
Sample ID:	609445011	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 09:42		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.64	0.330	1.00	mg/L		1	RM3	02/07/23	0159	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1845	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		207	1.45	4.00	mg/L			EK1	02/10/23	1354	2382176	3
Bicarbonate alkalinity (CaCO3)		207	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54564 (DOC)	Project:	SOOP00119
Sample ID:	609445012	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 09:42		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		3.13	0.330	1.00	mg/L		1	TSM	02/08/23	1929	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54565	Project:	SOOP00119
Sample ID:	609445013	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 11:13		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.87	0.330	1.00	mg/L		1	RM3	02/07/23	0222	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1845	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			EK1	02/10/23	1358	2382176	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54565 (DOC)	Project:	SOOP00119
Sample ID:	609445014	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 11:13		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		3.12	0.330	1.00	mg/L		1	TSM	02/08/23	2057	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54566	Project:	SOOP00119
Sample ID:	609445015	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 11:18		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.88	0.330	1.00	mg/L		1	RM3	02/07/23	0244	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1845	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			EK1	02/10/23	1400	2382176	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54566 (DOC)	Project:	SOOP00119
Sample ID:	609445016	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 11:18		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		3.09	0.330	1.00	mg/L		1	TSM	02/08/23	2119	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54567	Project:	SOOP00119
Sample ID:	609445017	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 13:21		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.745	0.330	1.00	mg/L		1	RM3	02/07/23	0307	2379317	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/06/23	1846	2379523	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		182	1.45	4.00	mg/L			EK1	02/10/23	1401	2382176	3
Bicarbonate alkalinity (CaCO3)		182	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54567 (DOC)	Project:	SOOP00119
Sample ID:	609445018	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 13:21		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.810	0.330	1.00	mg/L		1	TSM	02/08/23	2141	2379995	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/07/23	1115	2379287

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: February 13, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **609445**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis											
Batch 2379317											
QC1205312930 609427001 DUP											
Total Organic Carbon Average		1.92		1.97	mg/L	2.47 ^		(+/-1.00)	RM3	02/06/23	19:45
QC1205312932 609445003 DUP											
Total Organic Carbon Average		3.57		3.56	mg/L	0.224 ^		(+/-1.00)		02/06/23	23:52
QC1205312929 LCS											
Total Organic Carbon Average	10.0			9.55	mg/L		95.5	(80%-120%)		02/06/23	18:55
QC1205312928 MB											
Total Organic Carbon Average			U	ND	mg/L					02/06/23	18:45
QC1205312931 609427001 PS											
Total Organic Carbon Average	10.0	1.92		11.6	mg/L		96.8	(65%-120%)		02/06/23	20:06
QC1205312933 609445003 PS											
Total Organic Carbon Average	10.0	3.57		12.4	mg/L		88.6	(65%-120%)		02/07/23	00:15
Batch 2379995											
QC1205312846 609445012 DUP											
Dissolved Organic Carbon Average		3.13		3.00	mg/L	4.18 ^		(+/-1.00)	TSM	02/08/23	19:51
QC1205312847 609427002 DUP											
Dissolved Organic Carbon Average		1.93		1.92	mg/L	0.728 ^		(+/-1.00)		02/08/23	14:35
QC1205313808 FLTB											
Dissolved Organic Carbon Average			U	ND	mg/L					02/08/23	13:52
QC1205314036 LCS											
Dissolved Organic Carbon Average	10.0			9.93	mg/L		99.3	(80%-120%)		02/08/23	14:02

QC Summary

Workorder: **609445**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis											
Batch 2379995											
QC1205314035 MB											
Dissolved Organic Carbon Average				U	ND	mg/L				TSM	02/08/23 13:43
QC1205312848 609445012 PS											
Dissolved Organic Carbon Average	10.0		3.13		12.1	mg/L		89.4	(65%-120%)		02/08/23 20:13
QC1205312849 609427002 PS											
Dissolved Organic Carbon Average	10.0		1.93		11.9	mg/L		100	(65%-120%)		02/08/23 14:55
Spectrometric Analysis											
Batch 2379523											
QC1205313148 LCS											
Total Sulfide	0.400				0.399	mg/L		99.7	(85%-115%)	HH2	02/06/23 18:38
QC1205313147 MB											
Total Sulfide				U	ND	mg/L					02/06/23 18:37
QC1205313151 609445017 PS											
Total Sulfide	0.400	U	ND		0.208	mg/L		51.9*	(75%-125%)		02/06/23 18:47
QC1205313152 609445017 PSD											
Total Sulfide	0.400	U	ND		0.208	mg/L	0	51.9*	(0%-15%)		02/06/23 18:47
Titration and Ion Analysis											
Batch 2382176											
QC1205317754 609427001 DUP											
Alkalinity, Total as CaCO3			246		247	mg/L	0.203		(0%-20%)	EK1	02/10/23 12:58
Bicarbonate alkalinity (CaCO3)			246		247	mg/L	0.203		(0%-20%)		
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A				
QC1205317756 609445007 DUP											
Alkalinity, Total as CaCO3			191		191	mg/L	0.131		(0%-20%)		02/10/23 13:42

QC Summary

Workorder: **609445**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Titration and Ion Analysis										
Batch 2382176										
Bicarbonate alkalinity (CaCO3)		191		191	mg/L	0.131		(0%-20%)	EK1	02/10/23 13:42
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A				
QC1205317753 LCS										
Alkalinity, Total as CaCO3	100			104	mg/L		104	(90%-110%)		02/10/23 12:41
QC1205317755 609427001 MS										
Alkalinity, Total as CaCO3	125	246		377	mg/L		104	(80%-120%)		02/10/23 13:02
QC1205317757 609445007 MS										
Alkalinity, Total as CaCO3	125	191		319	mg/L		102	(80%-120%)		02/10/23 13:45

Notes:

The Qualifiers in this report are defined as follows:

U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
J	Value is estimated
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.

QC Summary

Workorder: **609445**

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

B The target analyte was detected in the associated blank.

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

J See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 609445

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2379317

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

GEL Sample ID#	Client Sample Identification
609445001	AF54559
609445003	AF54560
609445005	AF54561
609445007	AF54562
609445009	AF54563
609445011	AF54564
609445013	AF54565
609445015	AF54566
609445017	AF54567
1205312928	Method Blank (MB)
1205312929	Laboratory Control Sample (LCS)
1205312930	609427001(AF54602) Sample Duplicate (DUP)
1205312931	609427001(AF54602) Post Spike (PS)
1205312932	609445003(AF54560) Sample Duplicate (DUP)
1205312933	609445003(AF54560) Post Spike (PS)

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: **Carbon, Dissolved Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2379995

Filtration Method: EPA 160
Filtration Procedure: GL-LB-E-034 REV# 4
Filtration Batch: 2379287

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

GEL Sample ID#	Client Sample Identification
609445002	AF54559 (DOC)
609445004	AF54560 (DOC)

609445006	AF54561 (DOC)
609445008	AF5462 (DOC)
609445010	AF54563 (DOC)
609445012	AF54564 (DOC)
609445014	AF54565 (DOC)
609445016	AF54566 (DOC)
609445018	AF54567 (DOC)
1205312846	609445012(AF54564 (DOC)) Sample Duplicate (DUP)
1205312847	609427002(AF54602 (DOC)) Sample Duplicate (DUP)
1205312848	609445012(AF54564 (DOC)) Post Spike (PS)
1205312849	609427002(AF54602 (DOC)) Post Spike (PS)
1205313808	Filtration Blank (FLTB)
1205314035	Method Blank (MB)
1205314036	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Container scanning event for custody missed, however all samples was in the custody of the Analyst at the time of analysis.

Product: **Sulfide, Total**
Analytical Method: SM 4500-S (2-) D
Analytical Procedure: GL-GC-E-052 REV# 12
Analytical Batch: 2379523

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

GEL Sample ID#	Client Sample Identification
609445001	AF54559
609445003	AF54560
609445005	AF54561
609445007	AF54562
609445009	AF54563
609445011	AF54564
609445013	AF54565
609445015	AF54566
609445017	AF54567
1205313147	Method Blank (MB)
1205313148	Laboratory Control Sample (LCS)
1205313151	609445017(AF54567) Post Spike (PS)
1205313152	609445017(AF54567) Post Spike Duplicate (PSD)

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
Total Sulfide	1205313151 (AF54567PS) and 1205313152 (AF54567PSD)	51.9* (75%-125%)

Product: **Alkalinity**
Analytical Method: SM 2320B
Analytical Procedure: GL-GC-E-033 REV# 14
Analytical Batch: 2382176

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

GEL Sample ID#	Client Sample Identification
609445001	AF54559
609445003	AF54560
609445005	AF54561
609445007	AF54562
609445009	AF54563
609445011	AF54564
609445013	AF54565
609445015	AF54566
609445017	AF54567
1205317753	Laboratory Control Sample (LCS)
1205317754	609427001(AF54602) Sample Duplicate (DUP)
1205317755	609427001(AF54602) Matrix Spike (MS)
1205317756	609445007(AF54562) Sample Duplicate (DUP)
1205317757	609445007(AF54562) Matrix Spike (MS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
40 mL aliquots used due to sample availability; low pH values verified by pH strip 1205317754 (AF54602DUP), 1205317755 (AF54602MS), 1205317756 (AF54562DUP), 1205317757 (AF54562MS), 609445005 (AF54561),

609445007 (AF54562), 609445013 (AF54565) and 609445015 (AF54566).

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.

RAD 3/10/23

609445/609452

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 13 / 22 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Jan 24/23
609445

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL ALK BICARB, CARB	SULFIDE	RAD 226/228 TOTAL CALC
AF54559	CAP-3	2/1/23	0934	ZDM BSB	6	P+G	G	GW	3/1	* SULFIDE HAS SHORT HOLD.	2	1	1	2
60	CAP-4		1113											
61	CAP-5		1232							PRESERVATIVES TOC H2SO4				
62	CAP-6		1344							SULFIDE ZINC ACETATE, NaOH RAD HNO3				
63	CAP-7		1452							<4°C				
AF54564	CAP-8	2/2/23	0942											
65	CAP-9		1113											
66	CAP 9D		1118											
67	CAP 10		1321											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	35594	2/3/23	0947	[signature]	GEL	2/3/23	0947
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	GEL	2.3.23	1530	[signature]	GEL	2/3/23	1530
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code: 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCDF	SDG/AR/COC/Work Order: 609445 / 609452
Received By: JW	Date Received: 2/3/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:_____
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JW Date 2/4/23 Page 1 of 1

List of current GEL Certifications as of 13 February 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

March 13, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 609452

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 03, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 609452 GEL Work Order: 609452

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, Julie Robinson.

Reviewed by Julie Robinson

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54559	Project:	SOOP00119
Sample ID:	609452001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 09:34		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.308	+/-1.10	2.25	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.828	+/-1.16			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.828	+/-0.353	0.275	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			54.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54560	Project:	SOOP00119
Sample ID:	609452002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 11:13		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.281	+/-1.16	2.23	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.654	+/-1.22			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.654	+/-0.376	0.496	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54561	Project:	SOOP00119
Sample ID:	609452003	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 12:32		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		12.8	+/-2.22	2.36	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		17.2	+/-2.37			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		4.47	+/-0.822	0.543	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54562	Project:	SOOP00119
Sample ID:	609452004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 13:44		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.885	+/-1.37	2.38	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.10	+/-1.45			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.22	+/-0.478	0.449	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			50.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54563	Project:	SOOP00119
Sample ID:	609452005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	01-FEB-23 14:52		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.559	+/-1.26	2.24	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.11	+/-1.29			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.553	+/-0.278	0.249	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54564	Project:	SOOP00119
Sample ID:	609452006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 09:42		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.03	+/-1.33	2.26	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.50	+/-1.36			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.470	+/-0.275	0.277	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54565	Project:	SOOP00119
Sample ID:	609452007	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 11:13		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.90	+/-1.58	2.25	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.93	+/-1.64			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.03	+/-0.446	0.494	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			54.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54566	Project:	SOOP00119
Sample ID:	609452008	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 11:18		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.318	+/-1.22	2.22	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.962	+/-1.27			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.644	+/-0.335	0.422	1.00	pCi/L			LXP1	03/12/23	0845	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			66.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54567	Project:	SOOP00119
Sample ID:	609452009	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	02-FEB-23 13:21		
Receive Date:	03-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.445	+/-1.26	2.26	3.00	pCi/L			JE1	03/09/23	1042	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.872	+/-1.31			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.427	+/-0.349	0.520	1.00	pCi/L			LXP1	03/12/23	0917	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: March 13, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **609452**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 2387247											
QC1205326727 609452001 DUP											
Radium-228	U	-0.308	U	1.30	pCi/L	N/A		N/A	JE1	03/09/23	10:42
	Uncertainty	+/-1.10		+/-1.38							
QC1205326728 LCS											
Radium-228	62.6			65.2	pCi/L		104	(75%-125%)		03/09/23	10:42
	Uncertainty			+/-4.40							
QC1205326726 MB											
Radium-228			U	-0.360	pCi/L					03/09/23	10:41
	Uncertainty			+/-1.12							
Rad Ra-226											
Batch 2387198											
QC1205326617 609452001 DUP											
Radium-226		0.828		0.696	pCi/L	17.4		(0% - 100%)	LXP1	03/12/23	09:49
	Uncertainty	+/-0.353		+/-0.386							
QC1205326619 LCS											
Radium-226	26.4			25.2	pCi/L		95.6	(75%-125%)		03/12/23	10:21
	Uncertainty			+/-1.91							
QC1205326616 MB											
Radium-226			U	0.225	pCi/L					03/12/23	09:49
	Uncertainty			+/-0.247							
QC1205326618 609452001 MS											
Radium-226	129	0.828		111	pCi/L		84.9	(75%-125%)		03/12/23	09:49
	Uncertainty	+/-0.353		+/-8.55							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **609452**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 609452

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2387247

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

GEL Sample ID#	Client Sample Identification
609452001	AF54559
609452002	AF54560
609452003	AF54561
609452004	AF54562
609452005	AF54563
609452006	AF54564
609452007	AF54565
609452008	AF54566
609452009	AF54567
1205326726	Method Blank (MB)
1205326727	609452001(AF54559) Sample Duplicate (DUP)
1205326728	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Sample results verify with historical activity.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2387198

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

GEL Sample ID#	Client Sample Identification
609452001	AF54559
609452002	AF54560

609452003	AF54561
609452004	AF54562
609452005	AF54563
609452006	AF54564
609452007	AF54565
609452008	AF54566
609452009	AF54567
1205326616	Method Blank (MB)
1205326617	609452001(AF54559) Sample Duplicate (DUP)
1205326618	609452001(AF54559) Matrix Spike (MS)
1205326619	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205326618 (AF54559MS), 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.

RAD 3/10/23

609445/609452

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 13 / 22 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

Rec'd 2/4/23
609445

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com **Date Results Needed by:** ___/___/___ **Project/Task/Unit #:** 125915 / JM02.08.G01.1 / 36500 **Rerun request for any flagged QC** Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL ALK BICARB, CARB	SULFIDE	RAD 226/228 TOTAL CALC
AF54559	CAP-3	2/1/23	0934	ZDM BSB	6	P+G	G	GW	3/1	* SULFIDE HAS SHORT HOLD.	2	1	1	2
60	CAP-4		1113											
61	CAP-5		1232							PRESERVATIVES TOC H2SO4				
62	CAP-6		1344							SULFIDE ZINC ACETATE, NaOH RAD HNO3				
63	CAP-7		1452							<4°C				
AF54564	CAP-8	2/2/23	0942											
65	CAP-9		1113											
66	CAP 9D		1118											
67	CAP 10		1321											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	35594	2/3/23	0947	[signature]	GEL	2/3/23	0947
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	GEL	2.3.23	1530	[signature]	GEL	2/3/23	1530
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code: 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCDF	SDG/AR/COC/Work Order: 609445 / 609452
Received By: JW	Date Received: 2/3/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:_____
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR2-21 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JW Date 2/4/23 Page 1 of 1

List of current GEL Certifications as of 13 March 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

February 20, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 610529

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 10, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Alkalinity container was not received. *610529009(AF54579)*.

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. 4289.

Sincerely,

Heather Millar

Heather Millar for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 610529 GEL Work Order: 610529

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 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, Julie Robinson.

Reviewed by Heather Millar

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54575	Project:	SOOP00119
Sample ID:	610529001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 09:30		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.98	0.330	1.00	mg/L		1	TSM	02/15/23	2202	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1906	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		254	2.42	6.67	mg/L			MS3	02/18/23	1245	2385420	3
Bicarbonate alkalinity (CaCO3)		254	2.42	6.67	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	2.42	6.67	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54575	Project:	SOOP00119
Sample ID:	610529002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 09:30		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		4.06	0.330	1.00	mg/L		1	TSM	02/15/23	1322	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54576	Project:	SOOP00119
Sample ID:	610529003	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 12:29		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.06	0.330	1.00	mg/L		1	TSM	02/15/23	2329	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1907	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		177	1.45	4.00	mg/L			MS3	02/18/23	1256	2385420	3
Bicarbonate alkalinity (CaCO3)		177	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54576	Project:	SOOP00119
Sample ID:	610529004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 12:29		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		1.34	0.330	1.00	mg/L		1	TSM	02/15/23	1429	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54577	Project:	SOOP00119
Sample ID:	610529005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 12:34		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.17	0.330	1.00	mg/L		1	TSM	02/15/23	2349	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1908	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		173	1.45	4.00	mg/L			MS3	02/18/23	1259	2385420	3
Bicarbonate alkalinity (CaCO3)		173	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54577	Project:	SOOP00119
Sample ID:	610529006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 12:34		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		1.16	0.330	1.00	mg/L		1	TSM	02/15/23	1449	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54578	Project:	SOOP00119
Sample ID:	610529007	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 14:48		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.893	0.330	1.00	mg/L		1	TSM	02/16/23	0009	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1909	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		298	1.45	4.00	mg/L			MS3	02/18/23	1301	2385420	3
Bicarbonate alkalinity (CaCO3)		298	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54578	Project:	SOOP00119
Sample ID:	610529008	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 14:48		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		1.18	0.330	1.00	mg/L		1	TSM	02/15/23	1509	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54579	Project:	SOOP00119
Sample ID:	610529009	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 10:43		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.39	0.330	1.00	mg/L		1	TSM	02/16/23	0029	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1909	2383570	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54579	Project:	SOOP00119
Sample ID:	610529010	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 10:43		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		3.25	0.330	1.00	mg/L		1	TSM	02/15/23	1529	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54557	Project:	SOOP00119
Sample ID:	610529011	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 11:39		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		8.13	0.330	1.00	mg/L		1	TSM	02/16/23	0049	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/13/23	1733	2383083	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		20.0	1.45	4.00	mg/L			MS3	02/18/23	1303	2385420	3
Bicarbonate alkalinity (CaCO3)		20.0	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54557	Project:	SOOP00119
Sample ID:	610529012	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 11:39		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		7.69	0.330	1.00	mg/L		1	TSM	02/15/23	1609	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54586	Project:	SOOP00119
Sample ID:	610529013	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 14:02		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		7.36	0.330	1.00	mg/L		1	TSM	02/16/23	0109	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/13/23	1733	2383083	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1304	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54586	Project:	SOOP00119
Sample ID:	610529014	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 14:02		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		7.75	0.330	1.00	mg/L		1	TSM	02/15/23	1629	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54587	Project:	SOOP00119
Sample ID:	610529015	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 14:07		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		7.48	0.330	1.00	mg/L		1	TSM	02/16/23	0129	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/13/23	1733	2383083	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1305	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54587	Project:	SOOP00119
Sample ID:	610529016	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 14:07		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		7.96	0.330	1.00	mg/L		1	TSM	02/15/23	1730	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54588	Project:	SOOP00119
Sample ID:	610529017	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 12:55		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		13.6	0.330	1.00	mg/L		1	TSM	02/16/23	0149	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/13/23	1733	2383083	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1306	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54588	Project:	SOOP00119
Sample ID:	610529018	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 12:55		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		12.2	0.330	1.00	mg/L		1	TSM	02/15/23	1750	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54589	Project:	SOOP00119
Sample ID:	610529019	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 15:32		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		11.7	0.330	1.00	mg/L		1	TSM	02/16/23	0212	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/13/23	1733	2383083	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1309	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54589	Project:	SOOP00119
Sample ID:	610529020	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 15:32		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		11.2	0.330	1.00	mg/L		1	TSM	02/15/23	1812	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54574	Project:	SOOP00119
Sample ID:	610529021	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 14:17		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.23	0.330	1.00	mg/L		1	TSM	02/16/23	0233	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1909	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		7.67	2.42	6.67	mg/L			MS3	02/18/23	1310	2385420	3
Bicarbonate alkalinity (CaCO3)		7.67	2.42	6.67	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	2.42	6.67	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54574	Project:	SOOP00119
Sample ID:	610529022	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 14:17		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		1.27	0.330	1.00	mg/L		1	TSM	02/15/23	1833	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54580	Project:	SOOP00119
Sample ID:	610529023	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 13:08		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.376	0.330	1.00	mg/L		1	TSM	02/16/23	0313	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1909	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		32.4	1.45	4.00	mg/L			MS3	02/18/23	1317	2385420	3
Bicarbonate alkalinity (CaCO3)		32.4	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54580	Project:	SOOP00119
Sample ID:	610529024	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 13:08		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.572	0.330	1.00	mg/L		1	TSM	02/15/23	1853	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54584	Project:	SOOP00119
Sample ID:	610529025	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 15:22		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.431	0.330	1.00	mg/L		1	TSM	02/16/23	0333	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1911	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		13.2	1.45	4.00	mg/L			MS3	02/18/23	1319	2385420	3
Bicarbonate alkalinity (CaCO3)		13.2	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54584	Project:	SOOP00119
Sample ID:	610529026	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 15:22		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.570	0.330	1.00	mg/L		1	TSM	02/15/23	1913	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54585	Project:	SOOP00119
Sample ID:	610529027	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 10:24		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		7.71	0.330	1.00	mg/L		1	TSM	02/16/23	0354	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1911	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1322	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54585	Project:	SOOP00119
Sample ID:	610529028	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 10:24		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		7.32	0.330	1.00	mg/L		1	TSM	02/15/23	1954	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54591	Project:	SOOP00119
Sample ID:	610529029	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 11:40		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		4.65	0.330	1.00	mg/L		1	TSM	02/16/23	0416	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1911	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1323	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54591	Project:	SOOP00119
Sample ID:	610529030	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 11:40		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		4.34	0.330	1.00	mg/L		1	TSM	02/15/23	2016	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54592	Project:	SOOP00119
Sample ID:	610529031	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 09:14		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		9.83	0.330	1.00	mg/L		1	TSM	02/16/23	0438	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.165	0.500	mg/L		5	HH2	02/14/23	1912	2383570	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3	U	ND	1.45	4.00	mg/L			MS3	02/18/23	1323	2385420	3
Bicarbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54592	Project:	SOOP00119
Sample ID:	610529032	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 09:14		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average		9.29	0.330	1.00	mg/L		1	TSM	02/15/23	2038	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54573	Project:	SOOP00119
Sample ID:	610529033	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	09-FEB-23 11:22		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.560	0.330	1.00	mg/L		1	TSM	02/16/23	0501	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1917	2383084	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		146	1.45	4.00	mg/L			MS3	02/18/23	1324	2385420	3
Bicarbonate alkalinity (CaCO3)		146	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54573	Project:	SOOP00119
Sample ID:	610529034	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	09-FEB-23 11:22		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.598	0.330	1.00	mg/L		1	TSM	02/15/23	2101	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54581	Project:	SOOP00119
Sample ID:	610529035	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	09-FEB-23 09:42		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	U	ND	0.330	1.00	mg/L		1	TSM	02/16/23	0521	2383069	1
Spectrometric Analysis												
SM 4500-S(2-) D Sulfide "As Received"												
Total Sulfide	U	ND	0.0330	0.100	mg/L		1	HH2	02/14/23	1918	2383084	2
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		10.8	1.45	4.00	mg/L			MS3	02/18/23	1327	2385420	3
Bicarbonate alkalinity (CaCO3)		10.8	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	SM 4500-S (2-) D	
3	SM 2320B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54581	Project:	SOOP00119
Sample ID:	610529036	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	09-FEB-23 09:42		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Dissolved Organic Carbon "As Received"												
Dissolved Organic Carbon Average	J	0.389	0.330	1.00	mg/L		1	TSM	02/15/23	2121	2384265	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration - DOC	TSM	02/14/23	1244	2383064

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: February 20, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **610529**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 2383069										
QC1205319459 610529001 DUP										
Total Organic Carbon Average		3.98		3.96	mg/L	0.479 ^		(+/-1.00)	TSM	02/15/23 22:24
QC1205319457 LCS										
Total Organic Carbon Average	10.0			9.74	mg/L		97.4	(80%-120%)		02/15/23 21:51
QC1205319456 MB										
Total Organic Carbon Average			U	ND	mg/L					02/15/23 21:41
QC1205319461 610529001 PS										
Total Organic Carbon Average	10.0	3.98		12.6	mg/L		86.3	(65%-120%)		02/15/23 22:46
Batch 2384265										
QC1205319423 610529002 DUP										
Dissolved Organic Carbon Average		4.06		3.88	mg/L	4.41 ^		(+/-1.00)	TSM	02/15/23 13:44
QC1205319424 610529014 DUP										
Dissolved Organic Carbon Average		7.75		7.81	mg/L	0.823		(0%-20%)		02/15/23 16:49
QC1205319422 FLTB										
Dissolved Organic Carbon Average			U	ND	mg/L					02/15/23 13:02
QC1205321680 LCS										
Dissolved Organic Carbon Average	10.0			9.98	mg/L		99.8	(80%-120%)		02/15/23 13:12
QC1205321679 MB										
Dissolved Organic Carbon Average			U	ND	mg/L					02/15/23 12:52
QC1205319425 610529002 PS										
Dissolved Organic Carbon Average	10.0	4.06		13.1	mg/L		90.3	(65%-120%)		02/15/23 14:07

QC Summary

Workorder: **610529**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis											
Batch 2384265											
QC1205319426 610529014 PS											
Dissolved Organic Carbon Average	10.0		7.75		16.2	mg/L		84.8	(65%-120%)	TSM	02/15/23 17:09
Spectrometric Analysis											
Batch 2383083											
QC1205319504 LCS											
Total Sulfide	0.400				0.394	mg/L		98.6	(85%-115%)	HH2	02/13/23 17:33
QC1205319503 MB											
Total Sulfide				U	ND	mg/L					02/13/23 17:33
QC1205319507 610529013 PS											
Total Sulfide	0.400	U	ND		0.256	mg/L		62.8 *	(75%-125%)		02/13/23 17:33
QC1205319508 610529013 PSD											
Total Sulfide	0.400	U	ND		0.251	mg/L	2.02	61.5 *	(0%-15%)		02/13/23 17:33
Batch 2383084											
QC1205319510 LCS											
Total Sulfide	0.400				0.408	mg/L		102	(85%-115%)	HH2	02/14/23 19:14
QC1205319509 MB											
Total Sulfide				U	ND	mg/L					02/14/23 19:14
QC1205319511 610239003 PS											
Total Sulfide	0.400	U	ND		0.432	mg/L		106	(75%-125%)		02/14/23 19:14
QC1205319512 610239003 PSD											
Total Sulfide	0.400	U	ND		0.423	mg/L	1.96	104	(0%-15%)		02/14/23 19:15
Batch 2383570											
QC1205320600 LCS											
Total Sulfide	0.400				0.408	mg/L		102	(85%-115%)	HH2	02/14/23 19:04

QC Summary

Workorder: **610529**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Spectrometric Analysis											
Batch 2383570											
QC1205320599 MB											
Total Sulfide				U	ND	mg/L				HH2	02/14/23 19:04
QC1205320603 610529023 PS											
Total Sulfide	0.400	U	ND		0.299	mg/L		74.8 *	(75%-125%)		02/14/23 19:10
QC1205320604 610529023 PSD											
Total Sulfide	0.400	U	ND		0.298	mg/L	0.467	74.5 *	(0%-15%)		02/14/23 19:10
Titration and Ion Analysis											
Batch 2385420											
QC1205323656 610529001 DUP											
Alkalinity, Total as CaCO3			254		256	mg/L	0.916		(0%-20%)	MS3	02/18/23 12:50
Bicarbonate alkalinity (CaCO3)			254		256	mg/L	0.916		(0%-20%)		
Carbonate alkalinity (CaCO3)		U	ND	U	ND	mg/L	N/A				
QC1205323655 LCS											
Alkalinity, Total as CaCO3	100				105	mg/L		105	(90%-110%)		02/18/23 12:42
QC1205323657 610529001 MS											
Alkalinity, Total as CaCO3	167		254		422	mg/L		101	(80%-120%)		02/18/23 12:53

Notes:

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **610529**

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

Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
B	The target analyte was detected in the associated blank.
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
J	See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 610529

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2383069

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

GEL Sample ID#	Client Sample Identification
610529001	AF54575
610529003	AF54576
610529005	AF54577
610529007	AF54578
610529009	AF54579
610529011	AF54557
610529013	AF54586
610529015	AF54587
610529017	AF54588
610529019	AF54589
610529021	AF54574
610529023	AF54580
610529025	AF54584
610529027	AF54585
610529029	AF54591
610529031	AF54592
610529033	AF54573
610529035	AF54581
1205319456	Method Blank (MB)
1205319457	Laboratory Control Sample (LCS)
1205319459	610529001(AF54575) Sample Duplicate (DUP)
1205319461	610529001(AF54575) Post Spike (PS)

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: **Carbon, Dissolved Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2384265

Filtration Method: EPA 160
Filtration Procedure: GL-LB-E-034 REV# 4

Filtration Batch: 2383064

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

GEL Sample ID#	Client Sample Identification
610529002	AF54575
610529004	AF54576
610529006	AF54577
610529008	AF54578
610529010	AF54579
610529012	AF54557
610529014	AF54586
610529016	AF54587
610529018	AF54588
610529020	AF54589
610529022	AF54574
610529024	AF54580
610529026	AF54584
610529028	AF54585
610529030	AF54591
610529032	AF54592
610529034	AF54573
610529036	AF54581
1205319422	Filtration Blank (FLTB)
1205319423	610529002(AF54575) Sample Duplicate (DUP)
1205319424	610529014(AF54586) Sample Duplicate (DUP)
1205319425	610529002(AF54575) Post Spike (PS)
1205319426	610529014(AF54586) Post Spike (PS)
1205321679	Method Blank (MB)
1205321680	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: **Sulfide, Total**
Analytical Method: SM 4500-S (2-) D
Analytical Procedure: GL-GC-E-052 REV# 12
Analytical Batch: 2383083

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

GEL Sample ID#	Client Sample Identification
610529011	AF54557
610529013	AF54586
610529015	AF54587
610529017	AF54588
610529019	AF54589
1205319503	Method Blank (MB)
1205319504	Laboratory Control Sample (LCS)
1205319507	610529013(AF54586) Post Spike (PS)

1205319508 610529013(AF54586) Post Spike Duplicate (PSD)

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
Total Sulfide	1205319507 (AF54586PS)	62.8* (75%-125%)
	1205319508 (AF54586PSD)	61.5* (75%-125%)

Product: **Sulfide, Total**
Analytical Method: SM 4500-S (2-) D
Analytical Procedure: GL-GC-E-052 REV# 12
Analytical Batch: 2383084

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

GEL Sample ID#	Client Sample Identification
610529033	AF54573
610529035	AF54581
1205319509	Method Blank (MB)
1205319510	Laboratory Control Sample (LCS)
1205319511	610239003(NonSDG) Post Spike (PS)
1205319512	610239003(NonSDG) Post Spike Duplicate (PSD)

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: **Sulfide, Total**
Analytical Method: SM 4500-S (2-) D
Analytical Procedure: GL-GC-E-052 REV# 12
Analytical Batch: 2383570

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

GEL Sample ID#	Client Sample Identification
610529001	AF54575
610529003	AF54576
610529005	AF54577
610529007	AF54578
610529009	AF54579
610529021	AF54574
610529023	AF54580
610529025	AF54584
610529027	AF54585
610529029	AF54591
610529031	AF54592
1205320599	Method Blank (MB)
1205320600	Laboratory Control Sample (LCS)
1205320603	610529023(AF54580) Post Spike (PS)
1205320604	610529023(AF54580) Post Spike Duplicate (PSD)

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
Total Sulfide	1205320603 (AF54580PS)	74.8* (75%-125%)
	1205320604 (AF54580PSD)	74.5* (75%-125%)

Technical Information

Sample Dilutions
The following sample 610529031 (AF54592) in this sample group was diluted due to matrix interference. 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	610529 031
Total Sulfide	5X

Product: **Alkalinity**
Analytical Method: SM 2320B

Analytical Procedure: GL-GC-E-033 REV# 14
Analytical Batch: 2385420

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

GEL Sample ID#	Client Sample Identification
610529001	AF54575
610529003	AF54576
610529005	AF54577
610529007	AF54578
610529011	AF54557
610529013	AF54586
610529015	AF54587
610529017	AF54588
610529019	AF54589
610529021	AF54574
610529023	AF54580
610529025	AF54584
610529027	AF54585
610529029	AF54591
610529031	AF54592
610529033	AF54573
610529035	AF54581
1205323655	Laboratory Control Sample (LCS)
1205323656	610529001(AF54575) Sample Duplicate (DUP)
1205323657	610529001(AF54575) 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.

610529/610542

RAD - 3/10/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 20 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL, BICARB, CARB ALK	SULFIDE	RAD 226/228 TOTAL CALC.
AF54575	CCMAP-3	2/8/23	0930	ZDM BSB	6	G/P	G GRAB	GW	*		X	X	X	X
76	-4		1229							PRESERVATIVES TOC H_2SO_4				
77	-4D		1234							SULFIDE ZINC ACETATE, NaOH RAD HNO_3				
78	-5		1448							<4°C				
79	-6		1043							ALK-TOTAL, BICARB, CARB				
AF54557	CAP-1	2/6/23	1139							*SULFIDE HAS SHORT HOLD				
86	CGYP2		1402											
87	CGYP2D		1407											
88	CGYP-3		1255											
89	CGYP-4		1532											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/10/23	0943		GEL	2/10/23	0943
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
		2/10/23	1525	Thycia Patton	GEL	2/10/23	15:25
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

RAD 3/10/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 20 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOC/DOC	TOTAL BICARB ALK CARB	SULFIDE	RAD 226/228 TOTAL CALC.
AF54574	CCMAP-2	2/7/23	1417	ZDM BSB	6	G+P	G	GW	*		X	X	X	X
80	CCMAP-7		1308							*PRESERVATIVES: TOC H_2SO_4				
84	CCMLF-2		1522							SULFIDE ZINC ACETATE, NaOH RAD HNO_3				
85	CGYP-1		1024							<4°C				
91	CGYP-6		1140							ALKAL-TOTAL, BICARB & CARB				
92	CGYP-7		0914							*SULFIDE HAS SHORT HOLD				
AF54573	CCMAP-1	2/9/23	1122											
81	CCMAP-8		0942											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/10/23	0943		GEL	2/10/23	0943
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
		2/10/23	1525	Thycola Patton	GEL	2/10/23	15:25
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
- ☐ TOC
- ☐ DOC
- ☐ TP/TPO4
- ☐ NH3-N
- ☐ F
- ☐ Cl
- ☐ NO2
- ☐ Br
- ☐ NO3
- ☐ SO4

MISC.
- ☐ BTEX
- ☐ Napthalene
- ☐ THM/HAA
- ☐ VOC
- ☐ Oil & Grease
- ☐ E. Coli
- ☐ Total Coliform
- ☐ pH
- ☐ Dissolved As
- ☐ Dissolved Fe
- ☐ Rad 226
- ☐ Rad 228
- ☐ PCB

Gypsum
- ☐ Wallboard Gypsum(*all below*)
  - ☐ AIM
  - ☐ TOC
  - ☐ Total metals
  - ☐ Soluble Metals
  - ☐ Purity (CaSO4)
  - ☐ % Moisture
  - ☐ Sulfites
  - ☐ pH
  - ☐ Chlorides
  - ☐ Particle Size
- ☐ Sulfur

Coal
- ☐ Ultimate
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN

Other Tests:
- ☐ XRF Scan
- ☐ HGI
- ☐ Fineness
- ☐ Particulate Matter

Flyash
- ☐ Ammonia
- ☐ LOI
- ☐ % Carbon
- ☐ Mineral Analysis
- ☐ Sieve
- ☐ % Moisture

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

Oil
- ☐ Trans. Oil Qual.
  - ☐ %Moisture
  - ☐ Color
  - ☐ Acidity
  - ☐ Dielectric Strength
  - ☐ IFT
  - ☐ Dissolved Gases
- ☐ Used Oil
  - ☐ Flashpoint
  - ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
  - ☐ TX
- ☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOSP	SDG/AR/COC/Work Order: 610529/610542 SR
Received By: Thyasia Tatum	Date Received: 2/10/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 1°C
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 liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	N/A		✓	Circle Applicable: No container count on COC Other (describe) ID: AF54579 NOT RECEIVED
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓		✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials AM Date 2/11/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

Jordan Melton

From: Jessica Ward
Sent: Monday, February 13, 2023 9:41 AM
To: Sherri Brown; Heather Millar
Cc: Team Robinson
Subject: RE: GEL WOs: 610529 and 610542 Missing Sample

Sherri,
I spent some time looking through all the samples for this analysis. We are only missing the Alkalinity container 125ml for Sample ID AF54579. We have the DOC/TOC containers as well as the RadChem containers for this sample. Unfortunately, I do not think it was included in the coolers, I have checked the labels on all containers and the GEL label matches the client label for all samples.

Thank you,
Jessica Ward

Project Manager Assistant
GEL Laboratories LLC 40
2040 Savage Road, Charleston, SC 29407 | P.O. Box 30712, Charleston, SC 29417
Office Main: 843.556.8171 | Office Direct: 843.556.8171 ext. 4523 | Office Fax: 843.769.7383
E-Mail: Jessica.Ward@gel.com | Website: www.gel.com

From: Sherri Brown <sherri.brown@santeecooper.com>
Sent: Sunday, February 12, 2023 9:19 AM
To: Heather Millar <Heather.Millar@gel.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: RE: GEL WOs: 610529 and 610542 Missing Sample

Good morning,

Ok thanks so much for double checking. So just to recap, you are now only missing one bottle for TOC only? I will double check our lab and get back to you. Thanks again.

Thanks,

Sherri J. Brown
Lab Tech A
Environmental Resources
☎843.761.8000 ext. 5709
sjbrown@santeecooper.com

santee cooper

From: Heather Millar <Heather.Millar@gel.com>
Sent: Saturday, February 11, 2023 1:30 PM
To: Sherri Brown <sherri.brown@santeecooper.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: [EXTERNAL SENDER] RE: GEL WOs: 610529 and 610542 Missing Sample

---

Sherri,

We did a double check, the only container we did not receive is the TOC analysis bottle. Please advise.

Heather Millar
Project Manager Assistant

GEL Laboratories LLC 40

2040 Savage Road, Charleston, SC 29407 | P.O. Box 30712, Charleston, SC 29417
Office Main: 843.556.8171 |Office Fax: 843.769.7383
E-Mail: heather.millar@gel.com | Website: www.gel.com
Follow us on LinkedIn

From: Sherri Brown <sherri.brown@santeecooper.com>
Sent: Saturday, February 11, 2023 12:02 PM
To: Heather Millar <Heather.Millar@gel.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: RE: GEL WOs: 610529 and 610542 Missing Sample
Importance: High

I know we sent a lot of samples. Could you please ask someone to double check all the bottles that you received? I see it's noted on the chain where we received the samples and for that particular sample ID I have found the metals bottles we retained here (which were all collected in a set). Please advise.

Thanks,

Sherri J. Brown
Lab Tech A
Environmental Resources
☎843.761.8000 ext. 5709
sjbrown@santeecooper.com

From: Heather Millar <Heather.Millar@gel.com>
Sent: Saturday, February 11, 2023 10:47 AM
To: Sherri Brown <sherri.brown@santeecooper.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: [EXTERNAL SENDER] RE: GEL WOs: 610529 and 610542 Missing Sample

---

Sherri,

There were no containers for this sample ID received.

Heather Millar
Project Manager Assistant

GEL Laboratories LLC

2040 Savage Road, Charleston, SC 29407 | P.O. Box 30712, Charleston, SC 29417
Office Main: 843.556.8171 |Office Fax: 843.769.7383
E-Mail: heather.millar@gel.com | Website: www.gel.com
Follow us on LinkedIn

From: Sherri Brown <sherri.brown@santeecooper.com>
Sent: Saturday, February 11, 2023 10:39 AM
To: Heather Millar <Heather.Millar@gel.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: RE: GEL WOs: 610529 and 610542 Missing Sample

Good morning,

It wasn't received for any of the analyses or just one? There should have been bottles for RAD, sulfide, TOC, DOC and alkalinity. Please advise.

Thanks,

Sherri J. Brown
Lab Tech A
Environmental Resources
☎843.761.8000 ext. 5709
sjbrown@santeecooper.com

From: Heather Millar <Heather.Millar@gel.com>
Sent: Saturday, February 11, 2023 9:30 AM
To: Sherri Brown <sherri.brown@santeecooper.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: [EXTERNAL SENDER] GEL WOs: 610529 and 610542 Missing Sample

---

Good morning,

GEL received samples via courier yesterday afternoon. Sample ID AF54579 was not received. We will not be able to run the requested analyses due to not having the sample. I apologize for any inconvenience this may cause.

Thank you,

Heather Millar
Project Manager Assistant

GEL Laboratories LLC

2040 Savage Road, Charleston, SC 29407 | P.O. Box 30712, Charleston, SC 29417
Office Main: 843.556.8171 |Office Fax: 843.769.7383
E-Mail: heather.millar@gel.com | Website: www.gel.com
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This e-mail message originated outside of Santee Cooper.
Do not click on any links or open any attachments unless you are confident it is from a trusted source.
If you have questions, please call the Technology Service Desk at Ext. 7777.

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If you have questions, please call the Technology Service Desk at Ext. 7777.

List of current GEL Certifications as of 20 February 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

March 14, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 610542

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 10, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage.

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. 4289.

Sincerely,

Julie Robinson

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 610542 GEL Work Order: 610542

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, Julie Robinson.

Reviewed by Julie Robinson

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

Certificate of Analysis

Report Date: March 14, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54575	Project:	SOOP00119
Sample ID:	610542001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 09:30		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.957	+/-0.645	1.61	3.00	pCi/L			JE1	03/08/23	1342	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.467	+/-0.714			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.467	+/-0.305	0.373	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			76.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 14, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54576	Project:	SOOP00119
Sample ID:	610542002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 12:29		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.63	+/-1.20	1.86	3.00	pCi/L			JE1	03/08/23	1342	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.83	+/-1.23			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.199	+/-0.244	0.409	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			68.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54577	Project:	SOOP00119
Sample ID:	610542003	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 12:34		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.414	+/-1.31	2.35	3.00	pCi/L			JE1	03/08/23	1342	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.10	+/-1.36			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.690	+/-0.352	0.367	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54578	Project:	SOOP00119
Sample ID:	610542004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 14:48		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.643	+/-1.12	1.98	3.00	pCi/L			JE1	03/08/23	1342	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.938	+/-1.18			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.295	+/-0.361	0.605	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			64.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54579	Project:	SOOP00119
Sample ID:	610542005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	08-FEB-23 10:43		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.56	+/-1.41	2.28	3.00	pCi/L			JE1	03/08/23	1342	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.86	+/-1.42			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.304	+/-0.220	0.258	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			63.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54557	Project:	SOOP00119
Sample ID:	610542006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 11:39		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.44	+/-1.32	2.15	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.19	+/-1.37			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.746	+/-0.376	0.455	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54586	Project:	SOOP00119
Sample ID:	610542007	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 14:02		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.06	+/-1.10	1.56	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.52	+/-1.13			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.460	+/-0.281	0.293	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54587	Project:	SOOP00119
Sample ID:	610542008	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 14:07		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.905	+/-1.33	2.28	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.53	+/-1.37			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.629	+/-0.314	0.348	1.00	pCi/L			LXP1	03/12/23	0710	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54588	Project:	SOOP00119
Sample ID:	610542009	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 12:55		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.53	+/-1.82	2.69	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.18	+/-1.85			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.642	+/-0.334	0.307	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			64.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54589	Project:	SOOP00119
Sample ID:	610542010	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	06-FEB-23 15:32		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.869	+/-1.42	2.46	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.81	+/-1.46			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.941	+/-0.365	0.311	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			65.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54574	Project:	SOOP00119
Sample ID:	610542011	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 14:17		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-2.61	+/-1.02	2.67	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.613	+/-1.07			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.613	+/-0.303	0.309	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			58.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54580	Project:	SOOP00119
Sample ID:	610542012	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 13:08		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.44	+/-1.60	2.69	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.73	+/-1.63			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.291	+/-0.294	0.460	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			58.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54584	Project:	SOOP00119
Sample ID:	610542013	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 15:22		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.445	+/-1.24	2.23	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.19	+/-1.28			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.748	+/-0.340	0.326	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54585	Project:	SOOP00119
Sample ID:	610542014	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 10:24		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.37	+/-1.21	1.72	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.13	+/-1.27			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.762	+/-0.384	0.464	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			75.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 14, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54591	Project:	SOOP00119
Sample ID:	610542015	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 11:40		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.89	+/-1.31	2.00	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.08	+/-1.34			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.193	+/-0.273	0.475	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			62.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 14, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54592	Project:	SOOP00119
Sample ID:	610542016	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	07-FEB-23 09:14		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.48	+/-1.65	2.33	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.27	+/-1.68			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.795	+/-0.317	0.234	1.00	pCi/L			LXP1	03/12/23	0742	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 14, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54573	Project:	SOOP00119
Sample ID:	610542017	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	09-FEB-23 11:22		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.963	+/-1.27	2.17	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.31	+/-1.31			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.344	+/-0.290	0.423	1.00	pCi/L			LXP1	03/12/23	0813	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			76.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 14, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54581	Project:	SOOP00119
Sample ID:	610542018	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	09-FEB-23 09:42		
Receive Date:	10-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.600	+/-0.958	1.68	3.00	pCi/L			JE1	03/08/23	1343	2387255	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.02	+/-1.00			pCi/L			NXL1	03/14/23	0853	2387251	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.420	+/-0.290	0.397	1.00	pCi/L			LXP1	03/12/23	0813	2387201	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			66.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: March 14, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **610542**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2387255										
QC1205326737 610542001 DUP										
Radium-228	U	-0.957	U	1.35	pCi/L	N/A		N/A	JE1	03/08/23 13:42
	Uncertainty	+/-0.645		+/-1.39						
QC1205326738 LCS										
Radium-228	62.5			55.8	pCi/L		89.2	(75%-125%)		03/08/23 13:42
	Uncertainty			+/-4.38						
QC1205326736 MB										
Radium-228			U	-0.776	pCi/L					03/08/23 13:42
	Uncertainty			+/-0.755						
Rad Ra-226										
Batch 2387201										
QC1205326629 610542001 DUP										
Radium-226		0.467		0.707	pCi/L	40.8		(0% - 100%)	LXP1	03/12/23 08:13
	Uncertainty	+/-0.305		+/-0.343						
QC1205326631 LCS										
Radium-226	26.5			21.5	pCi/L		81.4	(75%-125%)		03/12/23 08:13
	Uncertainty			+/-1.63						
QC1205326628 MB										
Radium-226			U	0.171	pCi/L					03/12/23 08:13
	Uncertainty			+/-0.276						
QC1205326630 610542001 MS										
Radium-226	134	0.467		114	pCi/L		85.1	(75%-125%)		03/12/23 08:13
	Uncertainty	+/-0.305		+/-8.83						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **610542**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 610542

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2387255

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

GEL Sample ID#	Client Sample Identification
610542001	AF54575
610542002	AF54576
610542003	AF54577
610542004	AF54578
610542005	AF54579
610542006	AF54557
610542007	AF54586
610542008	AF54587
610542009	AF54588
610542010	AF54589
610542011	AF54574
610542012	AF54580
610542013	AF54584
610542014	AF54585
610542015	AF54591
610542016	AF54592
610542017	AF54573
610542018	AF54581
1205326736	Method Blank (MB)
1205326737	610542001(AF54575) Sample Duplicate (DUP)
1205326738	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
610542011 (AF54574)	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: 2387201

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

GEL Sample ID#	Client Sample Identification
610542001	AF54575
610542002	AF54576
610542003	AF54577
610542004	AF54578
610542005	AF54579
610542006	AF54557
610542007	AF54586
610542008	AF54587
610542009	AF54588
610542010	AF54589
610542011	AF54574
610542012	AF54580
610542013	AF54584
610542014	AF54585
610542015	AF54591
610542016	AF54592
610542017	AF54573
610542018	AF54581
1205326628	Method Blank (MB)
1205326629	610542001(AF54575) Sample Duplicate (DUP)
1205326630	610542001(AF54575) Matrix Spike (MS)
1205326631	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205326630 (AF54575MS), 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.

610529/610542

RAD - 3/10/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 20 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Analysis Group: TOC/DOC	TOTAL, BICARB, CARB ALK	SULFIDE	RAD 226/228 TOTAL CALC.
AF54575	CCMAP-3	2/8/23	0930	ZDM BSB	6	G/P	G GRAB	GW	*		X	X	X	X
76	-4		1229							PRESERVATIVES TOC H_2SO_4				
77	-4D		1234							SULFIDE ZINC ACETATE, NaOH RAD HNO_3				
78	-5		1448							<4°C				
79	-6		1043							ALK-TOTAL, BICARB, CARB				
AF54557	CAP-1	2/6/23	1139							*SULFIDE HAS SHORT HOLD				
86	CGYP2		1402											
87	CGYP2D		1407											
88	CGYP-3		1255											
89	CGYP-4		1532											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/10/23	0943		GEL	2/10/23	0943
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	2/10/23	1525	Thycia Patton	GEL	2/10/23	15:25
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

RAD 3/10/23

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 20 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA@santeecooper.com **Date Results Needed by:** ___/___/___ **Project/Task/Unit #:** 125915 / JM02.09.G01.1 / 36500 **Rerun request for any flagged QC** Yes (No)

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Analysis Group: TOC/DOC	TOTAL BICARB ALK CARB	SULFIDE	RAD 226/228 TOTAL CALC
AF54574	CCMAP-2	2/7/23	1417	ZDM BSB	6	G+P	G	GW	*		X	X	X	X
80	CCMAP-7		1308							*PRESERVATIVES: TOC H2SO4				
84	CCMLF-2		1522							SULFIDE ZINC ACETATE, NaOH RAD HNO3				
85	CGYP-1		1024							<4°C				
91	CGYP-6		1140							ALKAL-TOTAL, BICARB & CARB				
92	CGYP-7		0914							*SULFIDE HAS SHORT HOLD				
AF54573	CCMAP-1	2/9/23	1122											
81	CCMAP-8		0942											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/10/23	0943		GEL	2/10/23	0943
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
		2.10.23	1525	Thy Cody Tatum	GEL	2/10/23	15:25
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOSP	SDG/AR/COC/Work Order: 610529/610542 S-R
Received By: Thyasia Tatum	Date Received: 2/10/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 1C
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 liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	~~✓~~ 4/4		✓	Circle Applicable: No container count on COC Other (describe) ID: AF54579 NOT RECEIVED
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓		✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JMM Date 2/11/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 14 March 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

February 20, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 610889

Dear Ms. Gilmetti:

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

The sample was delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,

Heather Millar

Heather Millar for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 610889 GEL Work Order: 610889

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, Julie Robinson.

Reviewed by Heather Millar

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

Certificate of Analysis

Report Date: February 20, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF54579	Project:	SOOP00119
Sample ID:	610889001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-23 10:43		
Receive Date:	14-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Titration and Ion Analysis												
SM 2320B Total Alkalinity "As Received"												
Alkalinity, Total as CaCO3		7.80	1.45	4.00	mg/L			MS3	02/18/23	1329	2385420	1
Bicarbonate alkalinity (CaCO3)		7.80	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO3)	U	ND	1.45	4.00	mg/L							

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 2320B	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: February 20, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **610889**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Titration and Ion Analysis										
Batch 2385420										
QC1205323658 610529021 DUP										
Alkalinity, Total as CaCO3		7.67		8.00	mg/L	4.26 ^		(+/-6.67)	MS3	02/18/23 13:12
Bicarbonate alkalinity (CaCO3)		7.67		8.00	mg/L	4.26 ^		(+/-6.67)		
Carbonate alkalinity (CaCO3)	U	ND	U	ND	mg/L	N/A				
QC1205323655 LCS										
Alkalinity, Total as CaCO3	100			105	mg/L		105	(90%-110%)		02/18/23 12:42
QC1205323659 610529021 MS										
Alkalinity, Total as CaCO3	167	7.67		179	mg/L		103	(80%-120%)		02/18/23 13:15

Notes:

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **610889**

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

Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.

N1 See case narrative

R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.

B The target analyte was detected in the associated blank.

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

J See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 610889

Product: **Alkalinity**
Analytical Method: SM 2320B
Analytical Procedure: GL-GC-E-033 REV# 14
Analytical Batch: 2385420

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

GEL Sample ID#	Client Sample Identification
610889001	AF54579
1205323655	Laboratory Control Sample (LCS)
1205323658	610529021(AF54574) Sample Duplicate (DUP)
1205323659	610529021(AF54574) 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.

610889

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 20 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ____/____/____

Project/Task/Unit #: 125915 / JM02.08.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	ALKALINITY	(TOTAL, BICARB + CARB.)		
AF54579	CCMAP-6	2/8/23	1043	ZDM MDG	1	P	G	GW	1	ALKAL - TOTAL, BICARB + CARBONATE	X			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/14/23	0940	[signature]	GEL	2/14/23	0940
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	GEL	2/14/23	1520	Thyasia Tatum	GEL	2/14/23	15:20
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	**SDG/AR/COC/Work Order:** 610888/610893/610889 SR.
Received By: THYASIA TATUM	**Date Received:** 2/14/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 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?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials SM Date 2-16-23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 20 February 2023

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

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gel.com

March 13, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 610893

Dear Ms. Gilmetti:

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

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 610893 GEL Work Order: 610893

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, Julie Robinson.

Reviewed by Julie Robinson

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF55969	Project:	SOOP00119
Sample ID:	610893001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-23 11:41		
Receive Date:	14-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.878	+/-1.30	2.23	3.00	pCi/L			JE1	03/09/23	1043	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.41	+/-1.34			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.529	+/-0.332	0.434	1.00	pCi/L			LXP1	03/12/23	0949	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			67.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF55970	Project:	SOOP00119
Sample ID:	610893002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-23 11:46		
Receive Date:	14-FEB-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.63	+/-1.47	2.24	3.00	pCi/L			JE1	03/09/23	1044	2387247	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.56	+/-1.52			pCi/L			NXL1	03/13/23	0838	2387244	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.934	+/-0.398	0.311	1.00	pCi/L			LXP1	03/12/23	0949	2387198	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: March 13, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **610893**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 2387247											
QC1205326727 609452001 DUP											
Radium-228	U	-0.308	U	1.30	pCi/L	N/A		N/A	JE1	03/09/23	10:42
	Uncertainty	+/-1.10		+/-1.38							
QC1205326728 LCS											
Radium-228	62.6			65.2	pCi/L		104	(75%-125%)		03/09/23	10:42
	Uncertainty			+/-4.40							
QC1205326726 MB											
Radium-228			U	-0.360	pCi/L					03/09/23	10:41
	Uncertainty			+/-1.12							
Rad Ra-226											
Batch 2387198											
QC1205326617 609452001 DUP											
Radium-226		0.828		0.696	pCi/L	17.4		(0% - 100%)	LXP1	03/12/23	09:49
	Uncertainty	+/-0.353		+/-0.386							
QC1205326619 LCS											
Radium-226	26.4			25.2	pCi/L		95.6	(75%-125%)		03/12/23	10:21
	Uncertainty			+/-1.91							
QC1205326616 MB											
Radium-226			U	0.225	pCi/L					03/12/23	09:49
	Uncertainty			+/-0.247							
QC1205326618 609452001 MS											
Radium-226	129	0.828		111	pCi/L		84.9	(75%-125%)		03/12/23	09:49
	Uncertainty	+/-0.353		+/-8.55							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **610893**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 610893

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2387247

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

GEL Sample ID#	Client Sample Identification
610893001	AF55969
610893002	AF55970
1205326726	Method Blank (MB)
1205326727	609452001(AF54559) Sample Duplicate (DUP)
1205326728	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Sample results verify with historical activity.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2387198

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

GEL Sample ID#	Client Sample Identification
610893001	AF55969
610893002	AF55970
1205326616	Method Blank (MB)
1205326617	609452001(AF54559) Sample Duplicate (DUP)
1205326618	609452001(AF54559) Matrix Spike (MS)
1205326619	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205326618 (AF54559MS), 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.

610893

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 3 / 14 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LCWILLIA @santeecooper.com	/ /	121567 / JM02.09.G01 / 36500	Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC		
AF55969	C3LF LEACH	2/8/23	1141	MDG MD	2	P	G	GW	2		X	X		
AF55970	C3LF LEACH DUP	1	1146	1	1	1	1	1	1		X	X		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/14/23	0940		GEL	2/14/23	0940
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	2.14.23	1520	Thyrasia Tatum	GEL	2/14/23	15:20
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
- ☐ TOC
- ☐ DOC
- ☐ TP/TPO4
- ☐ NH3-N
- ☐ F
- ☐ Cl
- ☐ NO2
- ☐ Br
- ☐ NO3
- ☐ SO4

MISC.
- ☐ BTEX
- ☐ Napthalene
- ☐ THM/HAA
- ☐ VOC
- ☐ Oil & Grease
- ☐ E. Coli
- ☐ Total Coliform
- ☐ pH
- ☐ Dissolved As
- ☐ Dissolved Fe
- ☑ Rad 226
- ☑ Rad 228
- ☐ PCB

Gypsum
- ☐ Wallboard Gypsum(*all below*)
  - ☐ AIM
  - ☐ TOC
  - ☐ Total metals
  - ☐ Soluble Metals
  - ☐ Purity (CaSO4)
  - ☐ % Moisture
  - ☐ Sulfites
  - ☐ pH
  - ☐ Chlorides
  - ☐ Particle Size
- ☐ Sulfur

Coal
- ☐ Ultimate
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN

Other Tests:
- ☐ XRF Scan
- ☐ HGI
- ☐ Fineness
- ☐ Particulate Matter

Flyash
- ☐ Ammonia
- ☐ LOI
- ☐ % Carbon
- ☐ Mineral Analysis
- ☐ Sieve
- ☐ % Moisture

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

Oil
- ☐ Trans. Oil Qual.
  - ☐ %Moisture
  - ☐ Color
  - ☐ Acidity
  - ☐ Dielectric Strength
  - ☐ IFT
  - ☐ Dissolved Gases
- ☐ Used Oil
  - ☐ Flashpoint
  - ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
  - ☐ TX
- ☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	**SDG/AR/COC/Work Order:** 610888/610893/610889 S.R.
Received By: THYASIA TATUM	**Date Received:** 2/14/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius **TEMP:** 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?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JM Date 2-16-23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 13 March 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

April 21, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 615744

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 24, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 615744 GEL Work Order: 615744

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

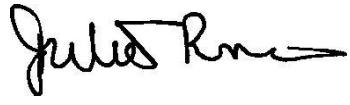
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: April 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF58977	Project:	SOOP00119
Sample ID:	615744001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-MAR-23 10:37		
Receive Date:	24-MAR-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.50	+/-1.32	1.50	3.00	pCi/L			JE1	04/10/23	1452	2406252	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		7.77	+/-1.71			pCi/L		1	TON1	04/21/23	0707	2407955	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		3.26	+/-1.08	0.794	1.00	pCi/L			LXP1	04/17/23	0854	2406211	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			79.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: April 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF58978	Project:	SOOP00119
Sample ID:	615744002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-MAR-23 10:42		
Receive Date:	24-MAR-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		5.38	+/-1.79	2.46	3.00	pCi/L			JE1	04/10/23	1452	2406252	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		6.25	+/-1.85			pCi/L		1	TON1	04/21/23	0707	2407955	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.872	+/-0.463	0.409	1.00	pCi/L			LXP1	04/17/23	0854	2406211	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

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

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: April 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF58979	Project:	SOOP00119
Sample ID:	615744003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-MAR-23 09:28		
Receive Date:	24-MAR-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.713	+/-1.24	2.14	3.00	pCi/L			JE1	04/10/23	1452	2406252	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.13	+/-1.28			pCi/L		1	TON1	04/21/23	0707	2407955	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.421	+/-0.343	0.422	1.00	pCi/L			LXP1	04/17/23	0854	2406211	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: April 21, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **615744**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2406252										
QC1205361128 615744001 DUP										
Radium-228		4.50		3.72	pCi/L	19.2		(0% - 100%)	JE1	04/10/23 14:51
	Uncertainty	+/-1.32		+/-1.24						
QC1205361129 LCS										
Radium-228	83.3			75.2	pCi/L		90.3	(75%-125%)		04/10/23 14:51
	Uncertainty			+/-4.62						
QC1205361127 MB										
Radium-228			U	0.402	pCi/L					04/10/23 14:50
	Uncertainty			+/-1.31						
Rad Ra-226										
Batch 2406211										
QC1205361066 615744001 DUP										
Radium-226		3.26		1.36	pCi/L	82.4		(0% - 100%)	LXP1	04/17/23 09:29
	Uncertainty	+/-1.08		+/-0.560						
QC1205361068 LCS										
Radium-226	26.5			23.5	pCi/L		88.7	(75%-125%)		04/17/23 09:29
	Uncertainty			+/-2.35						
QC1205361065 MB										
Radium-226			U	-0.0363	pCi/L					04/17/23 09:29
	Uncertainty			+/-0.188						
QC1205361067 615744001 MS										
Radium-226	132	3.26		117	pCi/L		86	(75%-125%)		04/17/23 09:29
	Uncertainty	+/-1.08		+/-11.4						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **615744**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 615744

Product: **Radium-226+Radium-228 Calculation**
Analytical Method: Calculation
Analytical Procedure: GL-RAD-D-003 REV# 45
Analytical Batch: 2407955

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

GEL Sample ID#	Client Sample Identification
615744001	AF58977
615744002	AF58978
615744003	AF58979

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

Data Summary:

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

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2406252

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

GEL Sample ID#	Client Sample Identification
615744001	AF58977
615744002	AF58978
615744003	AF58979
1205361127	Method Blank (MB)
1205361128	615744001(AF58977) Sample Duplicate (DUP)
1205361129	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: 2406211

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

GEL Sample ID#	Client Sample Identification
615744001	AF58977
615744002	AF58978
615744003	AF58979
1205361065	Method Blank (MB)
1205361066	615744001(AF58977) Sample Duplicate (DUP)
1205361067	615744001(AF58977) Matrix Spike (MS)
1205361068	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205361067 (AF58977MS), 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.

Contract Lab Info: GEL 615744 Contract Lab Due Date (Lab Only): 4 / 24 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC		
AF58977	CGYP-7	3/20/23	1037	ZDM BSB	2	P	G	GW	2		X	X		
78	CGYP-7D	"	1042	"	"	"	"	"	"		"	"		
79	POZ-3	"	0928	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	3/24/23	1070	[signature]	GEL	3/24/23	1020
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	GEL	3/24/23	1135	[signature]	GEL	3/24/23	1635
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

!R!PSRC100;EXIT;!R!MTYP99;EXIT;!R!spsz6;stm0;exit;

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOCP	**SDG/AR/COC/Work Order:** 615744
Received By: QG	**Date Received:** 3/24/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / uR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 4 °C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR3-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ___ Date 3/27/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 21 April 2023

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 2/28/2023 9:56:23 AM

JOB DESCRIPTION

125915/JM02.09 G01.1/36500

JOB NUMBER

680-230663-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

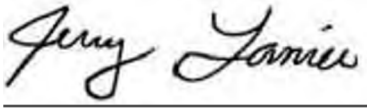
See page two for job notes and contact information.

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
2/28/2023 9:56:23 AM

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Job ID: 680-230663-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-230663-1

Receipt
The samples were received on 2/16/2023 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 18.1°C

Metals
Samples AF54563 (680-230663-19), AF54586 (680-230663-25), AF54604 (680-230663-32), AF54592 (680-230663-39), and AF54565 (680-230663-41), failed MS/MSD and were re-prepped and reported to confirm results per client request. Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-230663-1	AF54593	Water	01/26/23 09:38	02/16/23 11:00
680-230663-2	AF54594	Water	01/26/23 09:43	02/16/23 11:00
680-230663-3	AF54582	Water	01/26/23 11:19	02/16/23 11:00
680-230663-4	AF54583	Water	01/26/23 13:00	02/16/23 11:00
680-230663-5	AF54595	Water	01/25/23 11:00	02/16/23 11:00
680-230663-6	AF54596	Water	01/25/23 09:54	02/16/23 11:00
680-230663-7	AF54572	Water	01/24/23 11:46	02/16/23 11:00
680-230663-8	AF54597	Water	01/24/23 15:40	02/16/23 11:00
680-230663-9	AF54598	Water	01/24/23 13:27	02/16/23 11:00
680-230663-10	AF54600	Water	01/24/23 10:18	02/16/23 11:00
680-230663-11	AF54570	Water	01/31/23 12:49	02/16/23 11:00
680-230663-12	AF54601	Water	01/31/23 11:17	02/16/23 11:00
680-230663-13	AF54605	Water	01/31/23 09:40	02/16/23 11:00
680-230663-14	AF54606	Water	01/31/23 09:45	02/16/23 11:00
680-230663-15	AF54559	Water	02/01/23 09:34	02/16/23 11:00
680-230663-16	AF54560	Water	02/01/23 11:13	02/16/23 11:00
680-230663-17	AF54561	Water	02/01/23 12:32	02/16/23 11:00
680-230663-18	AF54562	Water	02/01/23 13:44	02/16/23 11:00
680-230663-19	AF54563	Water	02/01/23 14:52	02/16/23 11:00
680-230663-20	AF54603	Water	01/30/23 13:08	02/16/23 11:00
680-230663-21	AF54558	Water	01/31/23 15:41	02/16/23 11:00
680-230663-22	AF54571	Water	01/31/23 14:05	02/16/23 11:00
680-230663-23	AF54599	Water	01/24/23 14:38	02/16/23 11:00
680-230663-24	AF54557	Water	02/06/23 11:39	02/16/23 11:00
680-230663-25	AF54586	Water	02/06/23 14:02	02/16/23 11:00
680-230663-26	AF54587	Water	02/06/23 14:07	02/16/23 11:00
680-230663-27	AF54588	Water	02/06/23 12:55	02/16/23 11:00
680-230663-28	AF54589	Water	02/06/23 15:32	02/16/23 11:00
680-230663-29	AF54568	Water	02/06/23 09:17	02/16/23 11:00
680-230663-30	AF54569	Water	02/06/23 10:19	02/16/23 11:00
680-230663-31	AF54602	Water	01/30/23 11:26	02/16/23 11:00
680-230663-32	AF54604	Water	01/30/23 09:37	02/16/23 11:00
680-230663-33	AF54607	Water	01/30/23 14:10	02/16/23 11:00
680-230663-34	AF54574	Water	02/07/23 14:17	02/16/23 11:00
680-230663-35	AF54580	Water	02/07/23 13:08	02/16/23 11:00
680-230663-36	AF54584	Water	02/07/23 15:22	02/16/23 11:00
680-230663-37	AF54585	Water	02/07/23 10:24	02/16/23 11:00
680-230663-38	AF54591	Water	02/07/23 11:40	02/16/23 11:00
680-230663-39	AF54592	Water	02/07/23 09:14	02/16/23 11:00
680-230663-40	AF54564	Water	02/02/23 09:42	02/16/23 11:00
680-230663-41	AF54565	Water	02/02/23 11:13	02/16/23 11:00
680-230663-42	AF54566	Water	02/02/23 11:18	02/16/23 11:00
680-230663-43	AF54567	Water	02/02/23 13:21	02/16/23 11:00

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET SAV
7470A	Mercury (CVAA)	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54593 — Lab Sample ID: 680-230663-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	127		5.00		ug/L	1		6020B	Total Recoverable
Calcium	188000		500		ug/L	1		6020B	Total Recoverable
Cobalt	1.98		0.500		ug/L	1		6020B	Total Recoverable
Magnesium	3050		250		ug/L	1		6020B	Total Recoverable
Manganese	77.8		5.00		ug/L	1		6020B	Total Recoverable
Sodium	23300		500		ug/L	1		6020B	Total Recoverable
Zinc	25.3		20.0		ug/L	1		6020B	Total Recoverable
Barium	130		5.00		ug/L	1		6020B	Dissolved
Calcium	180000		500		ug/L	1		6020B	Dissolved
Cobalt	1.93		0.500		ug/L	1		6020B	Dissolved
Magnesium	3010		250		ug/L	1		6020B	Dissolved
Manganese	76.7		5.00		ug/L	1		6020B	Dissolved
Sodium	22800		500		ug/L	1		6020B	Dissolved
Zinc	25.7		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54594 — Lab Sample ID: 680-230663-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	135		5.00		ug/L	1		6020B	Total Recoverable
Calcium	193000		500		ug/L	1		6020B	Total Recoverable
Cobalt	2.25		0.500		ug/L	1		6020B	Total Recoverable
Magnesium	3250		250		ug/L	1		6020B	Total Recoverable
Manganese	91.1		5.00		ug/L	1		6020B	Total Recoverable
Sodium	26000		500		ug/L	1		6020B	Total Recoverable
Zinc	96.1		20.0		ug/L	1		6020B	Total Recoverable
Barium	125		5.00		ug/L	1		6020B	Dissolved
Calcium	178000		500		ug/L	1		6020B	Dissolved
Cobalt	2.00		0.500		ug/L	1		6020B	Dissolved
Magnesium	2960		250		ug/L	1		6020B	Dissolved
Manganese	84.7		5.00		ug/L	1		6020B	Dissolved
Sodium	23700		500		ug/L	1		6020B	Dissolved
Zinc	61.4		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54582 — Lab Sample ID: 680-230663-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	151		5.00		ug/L	1		6020B	Total Recoverable
Calcium	29000		500		ug/L	1		6020B	Total Recoverable
Cobalt	7.28		0.500		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample ID: AF54582 (Continued)

Lab Sample ID: 680-230663-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2410		250		ug/L	1		6020B	Total Recoverable
Manganese	301		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1630		1000		ug/L	1		6020B	Total Recoverable
Sodium	8780		500		ug/L	1		6020B	Total Recoverable
Barium	155		5.00		ug/L	1		6020B	Dissolved
Calcium	31300		500		ug/L	1		6020B	Dissolved
Cobalt	7.73		0.500		ug/L	1		6020B	Dissolved
Magnesium	2540		250		ug/L	1		6020B	Dissolved
Manganese	312		5.00		ug/L	1		6020B	Dissolved
Potassium	1680		1000		ug/L	1		6020B	Dissolved
Sodium	9490		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54583

Lab Sample ID: 680-230663-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	38.5		5.00		ug/L	1		6020B	Total Recoverable
Calcium	54200		500		ug/L	1		6020B	Total Recoverable
Iron	1640		100		ug/L	1		6020B	Total Recoverable
Magnesium	1280		250		ug/L	1		6020B	Total Recoverable
Manganese	70.1		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1190		1000		ug/L	1		6020B	Total Recoverable
Sodium	3860		500		ug/L	1		6020B	Total Recoverable
Barium	41.2		5.00		ug/L	1		6020B	Dissolved
Calcium	57200		500		ug/L	1		6020B	Dissolved
Magnesium	1390		250		ug/L	1		6020B	Dissolved
Manganese	66.7		5.00		ug/L	1		6020B	Dissolved
Potassium	1230		1000		ug/L	1		6020B	Dissolved
Sodium	4330		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54595

Lab Sample ID: 680-230663-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	177		5.00		ug/L	1		6020B	Total Recoverable
Calcium	147000		500		ug/L	1		6020B	Total Recoverable
Cobalt	1.85		0.500		ug/L	1		6020B	Total Recoverable
Iron	165		100		ug/L	1		6020B	Total Recoverable
Magnesium	2250		250		ug/L	1		6020B	Total Recoverable
Manganese	85.5		5.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54595 (Continued)
Lab Sample ID: 680-230663-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	10600		500		ug/L	1		6020B	Total Recoverable
Barium	186		5.00		ug/L	1		6020B	Dissolved
Calcium	156000		500		ug/L	1		6020B	Dissolved
Cobalt	1.94		0.500		ug/L	1		6020B	Dissolved
Iron	105		100		ug/L	1		6020B	Dissolved
Magnesium	2450		250		ug/L	1		6020B	Dissolved
Manganese	89.3		5.00		ug/L	1		6020B	Dissolved
Sodium	11800		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54596
Lab Sample ID: 680-230663-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	64.5		5.00		ug/L	1		6020B	Total Recoverable
Calcium	208000		500		ug/L	1		6020B	Total Recoverable
Cobalt	19.1		0.500		ug/L	1		6020B	Total Recoverable
Iron	2140		100		ug/L	1		6020B	Total Recoverable
Magnesium	5530		250		ug/L	1		6020B	Total Recoverable
Manganese	547		5.00		ug/L	1		6020B	Total Recoverable
Sodium	9880		500		ug/L	1		6020B	Total Recoverable
Barium	67.3		5.00		ug/L	1		6020B	Dissolved
Calcium	202000		500		ug/L	1		6020B	Dissolved
Cobalt	17.6		0.500		ug/L	1		6020B	Dissolved
Iron	174		100		ug/L	1		6020B	Dissolved
Magnesium	5200		250		ug/L	1		6020B	Dissolved
Manganese	504		5.00		ug/L	1		6020B	Dissolved
Sodium	9020		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54572
Lab Sample ID: 680-230663-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	752		100		ug/L	1		6020B	Total Recoverable
Barium	42.5		5.00		ug/L	1		6020B	Total Recoverable
Calcium	29300		500		ug/L	1		6020B	Total Recoverable
Cobalt	0.760		0.500		ug/L	1		6020B	Total Recoverable
Lead	2.59		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	2290		250		ug/L	1		6020B	Total Recoverable
Manganese	28.9		5.00		ug/L	1		6020B	Total Recoverable
Sodium	8620		500		ug/L	1		6020B	Total Recoverable
Zinc	241		20.0		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54572 (Continued)
Lab Sample ID: 680-230663-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	645		100		ug/L	1		6020B	Dissolved
Barium	42.6		5.00		ug/L	1		6020B	Dissolved
Calcium	30600		500		ug/L	1		6020B	Dissolved
Cobalt	0.765		0.500		ug/L	1		6020B	Dissolved
Magnesium	2280		250		ug/L	1		6020B	Dissolved
Manganese	28.6		5.00		ug/L	1		6020B	Dissolved
Sodium	8710		500		ug/L	1		6020B	Dissolved
Zinc	234		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54597
Lab Sample ID: 680-230663-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	56.6		5.00		ug/L	1		6020B	Total Recoverable
Calcium	133000		500		ug/L	1		6020B	Total Recoverable
Magnesium	3210		250		ug/L	1		6020B	Total Recoverable
Sodium	12600		500		ug/L	1		6020B	Total Recoverable
Barium	57.5		5.00		ug/L	1		6020B	Dissolved
Calcium	136000		500		ug/L	1		6020B	Dissolved
Magnesium	3300		250		ug/L	1		6020B	Dissolved
Sodium	12900		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54598
Lab Sample ID: 680-230663-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	109		5.00		ug/L	1		6020B	Total Recoverable
Calcium	289000		500		ug/L	1		6020B	Total Recoverable
Cobalt	2.24		0.500		ug/L	1		6020B	Total Recoverable
Iron	928		100		ug/L	1		6020B	Total Recoverable
Magnesium	5010		250		ug/L	1		6020B	Total Recoverable
Manganese	169		5.00		ug/L	1		6020B	Total Recoverable
Sodium	21100		500		ug/L	1		6020B	Total Recoverable
Barium	108		5.00		ug/L	1		6020B	Dissolved
Calcium	283000		500		ug/L	1		6020B	Dissolved
Cobalt	2.18		0.500		ug/L	1		6020B	Dissolved
Iron	617		100		ug/L	1		6020B	Dissolved
Magnesium	4990		250		ug/L	1		6020B	Dissolved
Manganese	164		5.00		ug/L	1		6020B	Dissolved
Sodium	21100		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54600
Lab Sample ID: 680-230663-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.32		3.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54600 (Continued)
Lab Sample ID: 680-230663-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	80.8		5.00		ug/L	1		6020B	Total Recoverable
Calcium	12600		500		ug/L	1		6020B	Total Recoverable
Cobalt	1.36		0.500		ug/L	1		6020B	Total Recoverable
Iron	11100		100		ug/L	1		6020B	Total Recoverable
Magnesium	717		250		ug/L	1		6020B	Total Recoverable
Manganese	10.7		5.00		ug/L	1		6020B	Total Recoverable
Sodium	6540		500		ug/L	1		6020B	Total Recoverable
Barium	76.3		5.00		ug/L	1		6020B	Dissolved
Calcium	12300		500		ug/L	1		6020B	Dissolved
Cobalt	1.18		0.500		ug/L	1		6020B	Dissolved
Iron	10100		100		ug/L	1		6020B	Dissolved
Magnesium	712		250		ug/L	1		6020B	Dissolved
Manganese	10.0		5.00		ug/L	1		6020B	Dissolved
Sodium	6260		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54570
Lab Sample ID: 680-230663-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	199		5.00		ug/L	1		6020B	Total Recoverable
Calcium	55900		500		ug/L	1		6020B	Total Recoverable
Iron	9860		100		ug/L	1		6020B	Total Recoverable
Magnesium	2550		250		ug/L	1		6020B	Total Recoverable
Manganese	65.9		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1690		1000		ug/L	1		6020B	Total Recoverable
Sodium	6170		500		ug/L	1		6020B	Total Recoverable
Barium	197		5.00		ug/L	1		6020B	Dissolved
Calcium	54500		500		ug/L	1		6020B	Dissolved
Iron	6990		100		ug/L	1		6020B	Dissolved
Magnesium	2520		250		ug/L	1		6020B	Dissolved
Manganese	64.3		5.00		ug/L	1		6020B	Dissolved
Potassium	1670		1000		ug/L	1		6020B	Dissolved
Sodium	6070		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54601
Lab Sample ID: 680-230663-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	96.3		5.00		ug/L	1		6020B	Total Recoverable
Calcium	193000		500		ug/L	1		6020B	Total Recoverable
Cobalt	0.865		0.500		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54601 (Continued)

Lab Sample ID: 680-230663-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	8500		250		ug/L	1		6020B	Total Recoverable
Manganese	23.0		5.00		ug/L	1		6020B	Total Recoverable
Sodium	49900		500		ug/L	1		6020B	Total Recoverable
Barium	103		5.00		ug/L	1		6020B	Dissolved
Calcium	206000		500		ug/L	1		6020B	Dissolved
Cobalt	0.990		0.500		ug/L	1		6020B	Dissolved
Magnesium	9490		250		ug/L	1		6020B	Dissolved
Manganese	38.1		5.00		ug/L	1		6020B	Dissolved
Sodium	54000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54605

Lab Sample ID: 680-230663-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	95.1		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	0.735		0.500		ug/L	1		6020B	Total Recoverable
Calcium	7570		500		ug/L	1		6020B	Total Recoverable
Cobalt	1.40		0.500		ug/L	1		6020B	Total Recoverable
Magnesium	732		250		ug/L	1		6020B	Total Recoverable
Manganese	11.5		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2150		1000		ug/L	1		6020B	Total Recoverable
Sodium	7380		500		ug/L	1		6020B	Total Recoverable
Barium	99.2		5.00		ug/L	1		6020B	Dissolved
Beryllium	0.835		0.500		ug/L	1		6020B	Dissolved
Calcium	7850		500		ug/L	1		6020B	Dissolved
Cobalt	1.18		0.500		ug/L	1		6020B	Dissolved
Magnesium	755		250		ug/L	1		6020B	Dissolved
Manganese	8.08		5.00		ug/L	1		6020B	Dissolved
Potassium	2230		1000		ug/L	1		6020B	Dissolved
Sodium	7610		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54606

Lab Sample ID: 680-230663-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	106		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	0.755		0.500		ug/L	1		6020B	Total Recoverable
Calcium	9840		500		ug/L	1		6020B	Total Recoverable
Cobalt	1.22		0.500		ug/L	1		6020B	Total Recoverable
Magnesium	857		250		ug/L	1		6020B	Total Recoverable
Manganese	9.62		5.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54606 (Continued)

Lab Sample ID: 680-230663-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	2240		1000		ug/L	1		6020B	Total Recoverable
Sodium	7810		500		ug/L	1		6020B	Total Recoverable
Barium	105		5.00		ug/L	1		6020B	Dissolved
Beryllium	0.775		0.500		ug/L	1		6020B	Dissolved
Calcium	11200		500		ug/L	1		6020B	Dissolved
Cobalt	1.14		0.500		ug/L	1		6020B	Dissolved
Magnesium	900		250		ug/L	1		6020B	Dissolved
Manganese	8.35		5.00		ug/L	1		6020B	Dissolved
Potassium	2180		1000		ug/L	1		6020B	Dissolved
Sodium	7790		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54559

Lab Sample ID: 680-230663-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	45.4		5.00		ug/L	1		6020B	Total Recoverable
Calcium	652000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	32.7		0.500		ug/L	1		6020B	Total Recoverable
Iron	2520		100		ug/L	1		6020B	Total Recoverable
Magnesium	67400		250		ug/L	1		6020B	Total Recoverable
Manganese	4580		5.00		ug/L	1		6020B	Total Recoverable
Nickel	12.7		5.00		ug/L	1		6020B	Total Recoverable
Potassium	4500		1000		ug/L	1		6020B	Total Recoverable
Sodium	96200		500		ug/L	1		6020B	Total Recoverable
Zinc	37.8		20.0		ug/L	1		6020B	Total Recoverable
Barium	52.7		5.00		ug/L	1		6020B	Dissolved
Calcium	711000		5000		ug/L	10		6020B	Dissolved
Cobalt	36.0		0.500		ug/L	1		6020B	Dissolved
Iron	3900		100		ug/L	1		6020B	Dissolved
Magnesium	75400		250		ug/L	1		6020B	Dissolved
Manganese	5080		5.00		ug/L	1		6020B	Dissolved
Nickel	15.1		5.00		ug/L	1		6020B	Dissolved
Potassium	5120		1000		ug/L	1		6020B	Dissolved
Sodium	107000		500		ug/L	1		6020B	Dissolved
Zinc	32.1		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54560

Lab Sample ID: 680-230663-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	125		5.00		ug/L	1		6020B	Total Recoverable
Calcium	709000		5000		ug/L	10		6020B	Total Recoverable
Iron	12800		100		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54560 (Continued)

Lab Sample ID: 680-230663-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	76200		250		ug/L	1		6020B	Total Recoverable
Manganese	623		5.00		ug/L	1		6020B	Total Recoverable
Potassium	8410		1000		ug/L	1		6020B	Total Recoverable
Sodium	129000		500		ug/L	1		6020B	Total Recoverable
Barium	121		5.00		ug/L	1		6020B	Dissolved
Calcium	723000		5000		ug/L	10		6020B	Dissolved
Iron	11900		100		ug/L	1		6020B	Dissolved
Magnesium	75200		250		ug/L	1		6020B	Dissolved
Manganese	622		5.00		ug/L	1		6020B	Dissolved
Potassium	8290		1000		ug/L	1		6020B	Dissolved
Sodium	128000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54561

Lab Sample ID: 680-230663-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6150		100		ug/L	1		6020B	Total Recoverable
Barium	1580		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	5.53		0.500		ug/L	1		6020B	Total Recoverable
Calcium	167000		500		ug/L	1		6020B	Total Recoverable
Cobalt	17.1		0.500		ug/L	1		6020B	Total Recoverable
Iron	140000		100		ug/L	1		6020B	Total Recoverable
Lead	7.05		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	4490		250		ug/L	1		6020B	Total Recoverable
Manganese	80.4		5.00		ug/L	1		6020B	Total Recoverable
Nickel	24.7		5.00		ug/L	1		6020B	Total Recoverable
Sodium	88600		500		ug/L	1		6020B	Total Recoverable
Aluminum	5830		100		ug/L	1		6020B	Dissolved
Barium	1500		5.00		ug/L	1		6020B	Dissolved
Beryllium	5.20		0.500		ug/L	1		6020B	Dissolved
Calcium	163000		500		ug/L	1		6020B	Dissolved
Cobalt	16.5		0.500		ug/L	1		6020B	Dissolved
Iron	137000		100		ug/L	1		6020B	Dissolved
Lead	6.33		2.50		ug/L	1		6020B	Dissolved
Magnesium	4330		250		ug/L	1		6020B	Dissolved
Manganese	75.2		5.00		ug/L	1		6020B	Dissolved
Nickel	23.4		5.00		ug/L	1		6020B	Dissolved
Potassium	1010		1000		ug/L	1		6020B	Dissolved
Sodium	84900		500		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54562 — Lab Sample ID: 680-230663-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	298		5.00		ug/L	1		6020B	Total Recoverable
Calcium	488000		5000		ug/L	10		6020B	Total Recoverable
Iron	15200		100		ug/L	1		6020B	Total Recoverable
Magnesium	14300		250		ug/L	1		6020B	Total Recoverable
Manganese	373		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1510		1000		ug/L	1		6020B	Total Recoverable
Sodium	73400		500		ug/L	1		6020B	Total Recoverable
Barium	290		5.00		ug/L	1		6020B	Dissolved
Calcium	485000		5000		ug/L	10		6020B	Dissolved
Iron	14100		100		ug/L	1		6020B	Dissolved
Magnesium	14500		250		ug/L	1		6020B	Dissolved
Manganese	355		5.00		ug/L	1		6020B	Dissolved
Potassium	1530		1000		ug/L	1		6020B	Dissolved
Sodium	71900		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54563 — Lab Sample ID: 680-230663-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	191		100		ug/L	1		6020B	Total Recoverable
Arsenic	3.35		3.00		ug/L	1		6020B	Total Recoverable
Barium	49.7		5.00		ug/L	1		6020B	Total Recoverable
Calcium	1180000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	10.4		0.500		ug/L	1		6020B	Total Recoverable
Iron	245000		100		ug/L	1		6020B	Total Recoverable
Magnesium	364000		250		ug/L	1		6020B	Total Recoverable
Manganese	10100		5.00		ug/L	1		6020B	Total Recoverable
Potassium	19400		1000		ug/L	1		6020B	Total Recoverable
Sodium	202000		500		ug/L	1		6020B	Total Recoverable
Aluminum	170		100		ug/L	1		6020B	Dissolved
Aluminum	175		100		ug/L	1		6020B	Dissolved
Barium	56.0		5.00		ug/L	1		6020B	Dissolved
Barium	57.1		5.00		ug/L	1		6020B	Dissolved
Calcium	1200000		5000		ug/L	10		6020B	Dissolved
Calcium	1110000		5000		ug/L	10		6020B	Dissolved
Cobalt	9.88		0.500		ug/L	1		6020B	Dissolved
Cobalt	10.6		0.500		ug/L	1		6020B	Dissolved
Iron	234000		100		ug/L	1		6020B	Dissolved
Iron	233000		100		ug/L	1		6020B	Dissolved
Magnesium	335000		250		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54563 (Continued)

Lab Sample ID: 680-230663-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	354000		250		ug/L	1		6020B	Dissolved
Manganese	9280		5.00		ug/L	1		6020B	Dissolved
Manganese	9800		5.00		ug/L	1		6020B	Dissolved
Nickel	5.40		5.00		ug/L	1		6020B	Dissolved
Potassium	18000		1000		ug/L	1		6020B	Dissolved
Potassium	18500		1000		ug/L	1		6020B	Dissolved
Sodium	186000		500		ug/L	1		6020B	Dissolved
Sodium	185000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54603

Lab Sample ID: 680-230663-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	63.6		5.00		ug/L	1		6020B	Total Recoverable
Calcium	783000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	9.40		0.500		ug/L	1		6020B	Total Recoverable
Iron	10600		100		ug/L	1		6020B	Total Recoverable
Magnesium	12400		250		ug/L	1		6020B	Total Recoverable
Manganese	2100		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1570		1000		ug/L	1		6020B	Total Recoverable
Sodium	102000		500		ug/L	1		6020B	Total Recoverable
Barium	68.7		5.00		ug/L	1		6020B	Dissolved
Calcium	789000		5000		ug/L	10		6020B	Dissolved
Cobalt	9.98		0.500		ug/L	1		6020B	Dissolved
Iron	10300		100		ug/L	1		6020B	Dissolved
Magnesium	13300		250		ug/L	1		6020B	Dissolved
Manganese	2220		5.00		ug/L	1		6020B	Dissolved
Potassium	1720		1000		ug/L	1		6020B	Dissolved
Sodium	108000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54558

Lab Sample ID: 680-230663-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	42.0		5.00		ug/L	1		6020B	Total Recoverable
Calcium	797000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	10.1		0.500		ug/L	1		6020B	Total Recoverable
Iron	2400		100		ug/L	1		6020B	Total Recoverable
Magnesium	65700		250		ug/L	1		6020B	Total Recoverable
Manganese	2200		5.00		ug/L	1		6020B	Total Recoverable
Nickel	10.3		5.00		ug/L	1		6020B	Total Recoverable
Potassium	5190		1000		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54558 (Continued)

Lab Sample ID: 680-230663-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	122000		500		ug/L	1		6020B	Total Recoverable
Barium	44.7		5.00		ug/L	1		6020B	Dissolved
Calcium	772000		5000		ug/L	10		6020B	Dissolved
Cobalt	10.8		0.500		ug/L	1		6020B	Dissolved
Iron	2230		100		ug/L	1		6020B	Dissolved
Magnesium	72300		250		ug/L	1		6020B	Dissolved
Manganese	2450		5.00		ug/L	1		6020B	Dissolved
Nickel	11.7		5.00		ug/L	1		6020B	Dissolved
Potassium	5520		1000		ug/L	1		6020B	Dissolved
Sodium	131000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54571

Lab Sample ID: 680-230663-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	63.7		5.00		ug/L	1		6020B	Total Recoverable
Calcium	99900		500		ug/L	1		6020B	Total Recoverable
Iron	1350		100		ug/L	1		6020B	Total Recoverable
Magnesium	1560		250		ug/L	1		6020B	Total Recoverable
Manganese	56.0		5.00		ug/L	1		6020B	Total Recoverable
Sodium	7720		500		ug/L	1		6020B	Total Recoverable
Barium	63.0		5.00		ug/L	1		6020B	Dissolved
Calcium	101000		500		ug/L	1		6020B	Dissolved
Iron	526		100		ug/L	1		6020B	Dissolved
Magnesium	1570		250		ug/L	1		6020B	Dissolved
Manganese	56.9		5.00		ug/L	1		6020B	Dissolved
Sodium	7800		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54599

Lab Sample ID: 680-230663-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	18.7		5.00		ug/L	1		6020B	Total Recoverable
Calcium	66600		500		ug/L	1		6020B	Total Recoverable
Iron	247		100		ug/L	1		6020B	Total Recoverable
Magnesium	3080		250		ug/L	1		6020B	Total Recoverable
Manganese	52.4		5.00		ug/L	1		6020B	Total Recoverable
Potassium	3800		1000		ug/L	1		6020B	Total Recoverable
Sodium	6210		500		ug/L	1		6020B	Total Recoverable
Barium	21.6		5.00		ug/L	1		6020B	Dissolved
Calcium	66900		500		ug/L	1		6020B	Dissolved
Magnesium	2980		250		ug/L	1		6020B	Dissolved
Manganese	50.2		5.00		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54599 (Continued)

Lab Sample ID: 680-230663-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3600		1000		ug/L	1		6020B	Dissolved
Sodium	6040		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54557

Lab Sample ID: 680-230663-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8320		100		ug/L	1		6020B	Total Recoverable
Arsenic	3.12		3.00		ug/L	1		6020B	Total Recoverable
Barium	32.5		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	11.6		0.500		ug/L	1		6020B	Total Recoverable
Calcium	298000		500		ug/L	1		6020B	Total Recoverable
Cobalt	28.7		0.500		ug/L	1		6020B	Total Recoverable
Iron	67400		100		ug/L	1		6020B	Total Recoverable
Magnesium	9270		250		ug/L	1		6020B	Total Recoverable
Manganese	147		5.00		ug/L	1		6020B	Total Recoverable
Nickel	20.9		5.00		ug/L	1		6020B	Total Recoverable
Sodium	71100		500		ug/L	1		6020B	Total Recoverable
Zinc	28.4		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	7570		100		ug/L	1		6020B	Dissolved
Arsenic	3.05		3.00		ug/L	1		6020B	Dissolved
Barium	32.3		5.00		ug/L	1		6020B	Dissolved
Beryllium	11.6		0.500		ug/L	1		6020B	Dissolved
Calcium	292000		500		ug/L	1		6020B	Dissolved
Cobalt	28.1		0.500		ug/L	1		6020B	Dissolved
Iron	65800		100		ug/L	1		6020B	Dissolved
Magnesium	9170		250		ug/L	1		6020B	Dissolved
Manganese	143		5.00		ug/L	1		6020B	Dissolved
Nickel	21.2		5.00		ug/L	1		6020B	Dissolved
Sodium	68800		500		ug/L	1		6020B	Dissolved
Zinc	29.8		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54586

Lab Sample ID: 680-230663-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	24100		100		ug/L	1		6020B	Total Recoverable
Arsenic	9.22		3.00		ug/L	1		6020B	Total Recoverable
Barium	17.1		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	4.24		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	1.01		0.500		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54586 (Continued)

Lab Sample ID: 680-230663-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	301000		500		ug/L	1		6020B	Total Recoverable
Cobalt	22.7		0.500		ug/L	1		6020B	Total Recoverable
Iron	81000		100		ug/L	1		6020B	Total Recoverable
Lead	23.4		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	25100		250		ug/L	1		6020B	Total Recoverable
Manganese	351		5.00		ug/L	1		6020B	Total Recoverable
Nickel	12.1		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2780		1000		ug/L	1		6020B	Total Recoverable
Sodium	10400		500		ug/L	1		6020B	Total Recoverable
Aluminum	21800		100		ug/L	1		6020B	Dissolved
Aluminum	21000		100		ug/L	1		6020B	Dissolved
Arsenic	8.49		3.00		ug/L	1		6020B	Dissolved
Arsenic	8.08		3.00		ug/L	1		6020B	Dissolved
Barium	15.9		5.00		ug/L	1		6020B	Dissolved
Barium	14.7		5.00		ug/L	1		6020B	Dissolved
Beryllium	3.84		0.500		ug/L	1		6020B	Dissolved
Beryllium	3.60		0.500		ug/L	1		6020B	Dissolved
Cadmium	0.885		0.500		ug/L	1		6020B	Dissolved
Cadmium	1.59		0.500		ug/L	1		6020B	Dissolved
Calcium	279000		500		ug/L	1		6020B	Dissolved
Calcium	258000		500		ug/L	1		6020B	Dissolved
Cobalt	20.7		0.500		ug/L	1		6020B	Dissolved
Cobalt	19.2		0.500		ug/L	1		6020B	Dissolved
Iron	74400		100		ug/L	1		6020B	Dissolved
Iron	69600		100		ug/L	1		6020B	Dissolved
Lead	21.2		2.50		ug/L	1		6020B	Dissolved
Lead	20.0		2.50		ug/L	1		6020B	Dissolved
Magnesium	22500		250		ug/L	1		6020B	Dissolved
Magnesium	21500		250		ug/L	1		6020B	Dissolved
Manganese	314		5.00		ug/L	1		6020B	Dissolved
Manganese	312		5.00		ug/L	1		6020B	Dissolved
Nickel	10.7		5.00		ug/L	1		6020B	Dissolved
Nickel	10.2		5.00		ug/L	1		6020B	Dissolved
Potassium	2520		1000		ug/L	1		6020B	Dissolved
Potassium	2340		1000		ug/L	1		6020B	Dissolved
Sodium	9110		500		ug/L	1		6020B	Dissolved
Sodium	8310		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54587

Lab Sample ID: 680-230663-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	23100		100		ug/L	1		6020B	Total Recoverable
Arsenic	9.22		3.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54587 (Continued)

Lab Sample ID: 680-230663-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	16.6		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	3.96		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.895		0.500		ug/L	1		6020B	Total Recoverable
Calcium	292000		500		ug/L	1		6020B	Total Recoverable
Cobalt	22.3		0.500		ug/L	1		6020B	Total Recoverable
Iron	77700		100		ug/L	1		6020B	Total Recoverable
Lead	22.7		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	24500		250		ug/L	1		6020B	Total Recoverable
Manganese	343		5.00		ug/L	1		6020B	Total Recoverable
Nickel	12.1		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2690		1000		ug/L	1		6020B	Total Recoverable
Sodium	10500		500		ug/L	1		6020B	Total Recoverable
Aluminum	20700		100		ug/L	1		6020B	Dissolved
Arsenic	8.02		3.00		ug/L	1		6020B	Dissolved
Barium	15.7		5.00		ug/L	1		6020B	Dissolved
Beryllium	3.87		0.500		ug/L	1		6020B	Dissolved
Cadmium	0.935		0.500		ug/L	1		6020B	Dissolved
Calcium	263000		500		ug/L	1		6020B	Dissolved
Cobalt	19.9		0.500		ug/L	1		6020B	Dissolved
Iron	69000		100		ug/L	1		6020B	Dissolved
Lead	20.0		2.50		ug/L	1		6020B	Dissolved
Magnesium	22300		250		ug/L	1		6020B	Dissolved
Manganese	305		5.00		ug/L	1		6020B	Dissolved
Nickel	10.8		5.00		ug/L	1		6020B	Dissolved
Potassium	2400		1000		ug/L	1		6020B	Dissolved
Sodium	9160		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54588

Lab Sample ID: 680-230663-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	53500		100		ug/L	1		6020B	Total Recoverable
Arsenic	7.95		3.00		ug/L	1		6020B	Total Recoverable
Barium	34.0		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	49.7		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	1.47		0.500		ug/L	1		6020B	Total Recoverable
Calcium	737000		5000		ug/L	10		6020B	Total Recoverable
Chromium	7.26		5.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54588 (Continued)

Lab Sample ID: 680-230663-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	141		0.500		ug/L	1		6020B	Total Recoverable
Iron	157000		100		ug/L	1		6020B	Total Recoverable
Lead	32.8		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	34100		250		ug/L	1		6020B	Total Recoverable
Manganese	629		5.00		ug/L	1		6020B	Total Recoverable
Nickel	127		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2920		1000		ug/L	1		6020B	Total Recoverable
Sodium	118000		500		ug/L	1		6020B	Total Recoverable
Zinc	237		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	52500		100		ug/L	1		6020B	Dissolved
Arsenic	8.64		3.00		ug/L	1		6020B	Dissolved
Barium	34.1		5.00		ug/L	1		6020B	Dissolved
Beryllium	48.6		0.500		ug/L	1		6020B	Dissolved
Cadmium	1.41		0.500		ug/L	1		6020B	Dissolved
Calcium	707000		5000		ug/L	10		6020B	Dissolved
Chromium	7.38		5.00		ug/L	1		6020B	Dissolved
Cobalt	140		0.500		ug/L	1		6020B	Dissolved
Iron	153000		100		ug/L	1		6020B	Dissolved
Lead	32.6		2.50		ug/L	1		6020B	Dissolved
Magnesium	34000		250		ug/L	1		6020B	Dissolved
Manganese	624		5.00		ug/L	1		6020B	Dissolved
Nickel	126		5.00		ug/L	1		6020B	Dissolved
Potassium	2970		1000		ug/L	1		6020B	Dissolved
Sodium	118000		500		ug/L	1		6020B	Dissolved
Zinc	236		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54589

Lab Sample ID: 680-230663-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	16600		100		ug/L	1		6020B	Total Recoverable
Arsenic	4.62		3.00		ug/L	1		6020B	Total Recoverable
Barium	28.6		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	16.2		0.500		ug/L	1		6020B	Total Recoverable
Calcium	266000		500		ug/L	1		6020B	Total Recoverable
Cobalt	39.9		0.500		ug/L	1		6020B	Total Recoverable
Iron	95600		100		ug/L	1		6020B	Total Recoverable
Lead	9.27		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	13400		250		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54589 (Continued)

Lab Sample ID: 680-230663-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	296		5.00		ug/L	1		6020B	Total Recoverable
Nickel	40.0		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2580		1000		ug/L	1		6020B	Total Recoverable
Sodium	77300		500		ug/L	1		6020B	Total Recoverable
Zinc	69.7		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	16300		100		ug/L	1		6020B	Dissolved
Arsenic	4.55		3.00		ug/L	1		6020B	Dissolved
Barium	30.0		5.00		ug/L	1		6020B	Dissolved
Beryllium	15.5		0.500		ug/L	1		6020B	Dissolved
Calcium	255000		500		ug/L	1		6020B	Dissolved
Cobalt	40.1		0.500		ug/L	1		6020B	Dissolved
Iron	90600		100		ug/L	1		6020B	Dissolved
Lead	9.00		2.50		ug/L	1		6020B	Dissolved
Magnesium	13200		250		ug/L	1		6020B	Dissolved
Manganese	292		5.00		ug/L	1		6020B	Dissolved
Nickel	40.2		5.00		ug/L	1		6020B	Dissolved
Potassium	2520		1000		ug/L	1		6020B	Dissolved
Sodium	76000		500		ug/L	1		6020B	Dissolved
Zinc	68.0		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54568

Lab Sample ID: 680-230663-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	195		100		ug/L	1		6020B	Total Recoverable
Barium	126		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	1.43		0.500		ug/L	1		6020B	Total Recoverable
Calcium	19100		500		ug/L	1		6020B	Total Recoverable
Cobalt	7.33		0.500		ug/L	1		6020B	Total Recoverable
Iron	184		100		ug/L	1		6020B	Total Recoverable
Magnesium	878		250		ug/L	1		6020B	Total Recoverable
Manganese	8.85		5.00		ug/L	1		6020B	Total Recoverable
Nickel	6.59		5.00		ug/L	1		6020B	Total Recoverable
Sodium	51000		500		ug/L	1		6020B	Total Recoverable
Aluminum	200		100		ug/L	1		6020B	Dissolved
Barium	131		5.00		ug/L	1		6020B	Dissolved
Beryllium	1.35		0.500		ug/L	1		6020B	Dissolved
Calcium	20000		500		ug/L	1		6020B	Dissolved
Cobalt	7.36		0.500		ug/L	1		6020B	Dissolved
Iron	158		100		ug/L	1		6020B	Dissolved
Magnesium	901		250		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54568 (Continued)

Lab Sample ID: 680-230663-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	9.79		5.00		ug/L	1		6020B	Dissolved
Nickel	6.37		5.00		ug/L	1		6020B	Dissolved
Sodium	50600		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54569

Lab Sample ID: 680-230663-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	165		100		ug/L	1		6020B	Total Recoverable
Barium	208		5.00		ug/L	1		6020B	Total Recoverable
Calcium	263000		500		ug/L	1		6020B	Total Recoverable
Iron	3040		100		ug/L	1		6020B	Total Recoverable
Magnesium	4710		250		ug/L	1		6020B	Total Recoverable
Manganese	232		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2040		1000		ug/L	1		6020B	Total Recoverable
Sodium	20000		500		ug/L	1		6020B	Total Recoverable
Aluminum	383		100		ug/L	1		6020B	Dissolved
Barium	179		5.00		ug/L	1		6020B	Dissolved
Calcium	239000		500		ug/L	1		6020B	Dissolved
Cobalt	1.23		0.500		ug/L	1		6020B	Dissolved
Iron	2960		100		ug/L	1		6020B	Dissolved
Magnesium	4310		250		ug/L	1		6020B	Dissolved
Manganese	206		5.00		ug/L	1		6020B	Dissolved
Potassium	1780		1000		ug/L	1		6020B	Dissolved
Sodium	18200		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54602

Lab Sample ID: 680-230663-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	132		5.00		ug/L	1		6020B	Total Recoverable
Calcium	277000		500		ug/L	1		6020B	Total Recoverable
Cobalt	32.1		0.500		ug/L	1		6020B	Total Recoverable
Iron	135		100		ug/L	1		6020B	Total Recoverable
Magnesium	4190		250		ug/L	1		6020B	Total Recoverable
Manganese	950		5.00		ug/L	1		6020B	Total Recoverable
Nickel	6.66		5.00		ug/L	1		6020B	Total Recoverable
Potassium	2010		1000		ug/L	1		6020B	Total Recoverable
Sodium	65700		500		ug/L	1		6020B	Total Recoverable
Barium	131		5.00		ug/L	1		6020B	Dissolved
Calcium	282000		500		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54602 (Continued)
Lab Sample ID: 680-230663-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	31.4		0.500		ug/L	1		6020B	Dissolved
Iron	809		100		ug/L	1		6020B	Dissolved
Magnesium	4230		250		ug/L	1		6020B	Dissolved
Manganese	955		5.00		ug/L	1		6020B	Dissolved
Nickel	7.11		5.00		ug/L	1		6020B	Dissolved
Potassium	2030		1000		ug/L	1		6020B	Dissolved
Sodium	65100		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54604
Lab Sample ID: 680-230663-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	758		100		ug/L	1		6020B	Total Recoverable
Aluminum	627		100		ug/L	1		6020B	Total Recoverable
Barium	78.1		5.00		ug/L	1		6020B	Total Recoverable
Barium	79.4		5.00		ug/L	1		6020B	Total Recoverable
Calcium	459000		5000		ug/L	10		6020B	Total Recoverable
Calcium	417000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	3.01		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	3.50		0.500		ug/L	1		6020B	Total Recoverable
Iron	15200		100		ug/L	1		6020B	Total Recoverable
Iron	15300		100		ug/L	1		6020B	Total Recoverable
Magnesium	8430		250		ug/L	1		6020B	Total Recoverable
Magnesium	8680		250		ug/L	1		6020B	Total Recoverable
Manganese	619		5.00		ug/L	1		6020B	Total Recoverable
Manganese	650		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1580		1000		ug/L	1		6020B	Total Recoverable
Potassium	1570		1000		ug/L	1		6020B	Total Recoverable
Sodium	65700		500		ug/L	1		6020B	Total Recoverable
Sodium	63700		500		ug/L	1		6020B	Total Recoverable
Barium	74.6		5.00		ug/L	1		6020B	Dissolved
Calcium	448000		500		ug/L	1		6020B	Dissolved
Cobalt	2.17		0.500		ug/L	1		6020B	Dissolved
Iron	13000		100		ug/L	1		6020B	Dissolved
Magnesium	7830		250		ug/L	1		6020B	Dissolved
Manganese	571		5.00		ug/L	1		6020B	Dissolved
Potassium	1460		1000		ug/L	1		6020B	Dissolved
Sodium	61700		500		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54607 — Lab Sample ID: 680-230663-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	520		5.00		ug/L	1		6020B	Total Recoverable
Calcium	631000		5000		ug/L	10		6020B	Total Recoverable
Iron	16600		100		ug/L	1		6020B	Total Recoverable
Magnesium	14700		250		ug/L	1		6020B	Total Recoverable
Manganese	1150		5.00		ug/L	1		6020B	Total Recoverable
Potassium	4950		1000		ug/L	1		6020B	Total Recoverable
Sodium	102000		500		ug/L	1		6020B	Total Recoverable
Barium	513		5.00		ug/L	1		6020B	Dissolved
Calcium	639000		5000		ug/L	10		6020B	Dissolved
Iron	16300		100		ug/L	1		6020B	Dissolved
Magnesium	14400		250		ug/L	1		6020B	Dissolved
Manganese	1140		5.00		ug/L	1		6020B	Dissolved
Potassium	4860		1000		ug/L	1		6020B	Dissolved
Sodium	100000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54574 — Lab Sample ID: 680-230663-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	166		100		ug/L	1		6020B	Total Recoverable
Barium	19.1		5.00		ug/L	1		6020B	Total Recoverable
Calcium	4940		500		ug/L	1		6020B	Total Recoverable
Cobalt	1.57		0.500		ug/L	1		6020B	Total Recoverable
Iron	499		100		ug/L	1		6020B	Total Recoverable
Magnesium	665		250		ug/L	1		6020B	Total Recoverable
Manganese	16.6		5.00		ug/L	1		6020B	Total Recoverable
Sodium	6540		500		ug/L	1		6020B	Total Recoverable
Aluminum	172		100		ug/L	1		6020B	Dissolved
Barium	22.0		5.00		ug/L	1		6020B	Dissolved
Calcium	8080		500		ug/L	1		6020B	Dissolved
Cobalt	2.55		0.500		ug/L	1		6020B	Dissolved
Iron	861		100		ug/L	1		6020B	Dissolved
Magnesium	720		250		ug/L	1		6020B	Dissolved
Manganese	16.0		5.00		ug/L	1		6020B	Dissolved
Sodium	6450		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54580 — Lab Sample ID: 680-230663-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	37.3		5.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54580 (Continued)

Lab Sample ID: 680-230663-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	12400		500		ug/L	1		6020B	Total Recoverable
Cobalt	8.47		0.500		ug/L	1		6020B	Total Recoverable
Magnesium	596		250		ug/L	1		6020B	Total Recoverable
Manganese	457		5.00		ug/L	1		6020B	Total Recoverable
Sodium	7010		500		ug/L	1		6020B	Total Recoverable
Barium	36.2		5.00		ug/L	1		6020B	Dissolved
Calcium	12300		500		ug/L	1		6020B	Dissolved
Cobalt	7.49		0.500		ug/L	1		6020B	Dissolved
Magnesium	623		250		ug/L	1		6020B	Dissolved
Manganese	433		5.00		ug/L	1		6020B	Dissolved
Sodium	6840		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54584

Lab Sample ID: 680-230663-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	25.8		5.00		ug/L	1		6020B	Total Recoverable
Calcium	5070		500		ug/L	1		6020B	Total Recoverable
Magnesium	250		250		ug/L	1		6020B	Total Recoverable
Manganese	64.0		5.00		ug/L	1		6020B	Total Recoverable
Sodium	4850		500		ug/L	1		6020B	Total Recoverable
Barium	36.6		5.00		ug/L	1		6020B	Dissolved
Calcium	5000		500		ug/L	1		6020B	Dissolved
Magnesium	251		250		ug/L	1		6020B	Dissolved
Manganese	63.4		5.00		ug/L	1		6020B	Dissolved
Sodium	4760		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54585

Lab Sample ID: 680-230663-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	17000		100		ug/L	1		6020B	Total Recoverable
Arsenic	9.56		3.00		ug/L	1		6020B	Total Recoverable
Barium	39.1		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	11.0		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	1.28		0.500		ug/L	1		6020B	Total Recoverable
Calcium	264000		500		ug/L	1		6020B	Total Recoverable
Cobalt	48.0		0.500		ug/L	1		6020B	Total Recoverable
Iron	179000		100		ug/L	1		6020B	Total Recoverable
Lead	6.25		2.50		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54585 (Continued)

Lab Sample ID: 680-230663-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	55400		250		ug/L	1		6020B	Total Recoverable
Manganese	437		5.00		ug/L	1		6020B	Total Recoverable
Nickel	32.8		5.00		ug/L	1		6020B	Total Recoverable
Potassium	4590		1000		ug/L	1		6020B	Total Recoverable
Sodium	74400		500		ug/L	1		6020B	Total Recoverable
Zinc	68.5		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	18600		100		ug/L	1		6020B	Dissolved
Arsenic	11.6		3.00		ug/L	1		6020B	Dissolved
Barium	44.0		5.00		ug/L	1		6020B	Dissolved
Beryllium	11.7		0.500		ug/L	1		6020B	Dissolved
Cadmium	1.63		0.500		ug/L	1		6020B	Dissolved
Calcium	288000		500		ug/L	1		6020B	Dissolved
Cobalt	53.5		0.500		ug/L	1		6020B	Dissolved
Iron	197000		100		ug/L	1		6020B	Dissolved
Lead	6.40		2.50		ug/L	1		6020B	Dissolved
Magnesium	61500		250		ug/L	1		6020B	Dissolved
Manganese	480		5.00		ug/L	1		6020B	Dissolved
Nickel	35.9		5.00		ug/L	1		6020B	Dissolved
Potassium	5110		1000		ug/L	1		6020B	Dissolved
Selenium	2.65		2.50		ug/L	1		6020B	Dissolved
Sodium	82100		500		ug/L	1		6020B	Dissolved
Zinc	74.6		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54591

Lab Sample ID: 680-230663-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11900		100		ug/L	1		6020B	Total Recoverable
Barium	159		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	31.3		0.500		ug/L	1		6020B	Total Recoverable
Calcium	520000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	198		0.500		ug/L	1		6020B	Total Recoverable
Iron	71500		100		ug/L	1		6020B	Total Recoverable
Lead	11.8		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	19900		250		ug/L	1		6020B	Total Recoverable
Manganese	209		5.00		ug/L	1		6020B	Total Recoverable
Nickel	198		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1820		1000		ug/L	1		6020B	Total Recoverable
Sodium	121000		500		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54591 (Continued)

Lab Sample ID: 680-230663-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	1210		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	11600		100		ug/L	1		6020B	Dissolved
Barium	149		5.00		ug/L	1		6020B	Dissolved
Beryllium	29.9		0.500		ug/L	1		6020B	Dissolved
Cadmium	0.560		0.500		ug/L	1		6020B	Dissolved
Calcium	541000		5000		ug/L	10		6020B	Dissolved
Cobalt	193		0.500		ug/L	1		6020B	Dissolved
Iron	67900		100		ug/L	1		6020B	Dissolved
Lead	11.6		2.50		ug/L	1		6020B	Dissolved
Magnesium	18900		250		ug/L	1		6020B	Dissolved
Manganese	208		5.00		ug/L	1		6020B	Dissolved
Nickel	189		5.00		ug/L	1		6020B	Dissolved
Potassium	1800		1000		ug/L	1		6020B	Dissolved
Sodium	118000		500		ug/L	1		6020B	Dissolved
Zinc	1100		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54592

Lab Sample ID: 680-230663-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	33300		100		ug/L	1		6020B	Total Recoverable
Aluminum	34900		100		ug/L	1		6020B	Total Recoverable
Arsenic	14.2		3.00		ug/L	1		6020B	Total Recoverable
Arsenic	14.2		3.00		ug/L	1		6020B	Total Recoverable
Barium	28.3		5.00		ug/L	1		6020B	Total Recoverable
Barium	28.0		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	11.6		0.500		ug/L	1		6020B	Total Recoverable
Beryllium	11.7		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	1.49		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	2.45		0.500		ug/L	1		6020B	Total Recoverable
Calcium	420000		500		ug/L	1		6020B	Total Recoverable
Calcium	426000		500		ug/L	1		6020B	Total Recoverable
Cobalt	107		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	111		0.500		ug/L	1		6020B	Total Recoverable
Iron	203000		100		ug/L	1		6020B	Total Recoverable
Iron	216000		100		ug/L	1		6020B	Total Recoverable
Lead	37.8		2.50		ug/L	1		6020B	Total Recoverable
Lead	40.1		2.50		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54592 (Continued)

Lab Sample ID: 680-230663-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	71500		250		ug/L	1		6020B	Total Recoverable
Magnesium	74200		250		ug/L	1		6020B	Total Recoverable
Manganese	1580		5.00		ug/L	1		6020B	Total Recoverable
Manganese	1650		5.00		ug/L	1		6020B	Total Recoverable
Nickel	37.1		5.00		ug/L	1		6020B	Total Recoverable
Nickel	39.8		5.00		ug/L	1		6020B	Total Recoverable
Potassium	5020		1000		ug/L	1		6020B	Total Recoverable
Potassium	5110		1000		ug/L	1		6020B	Total Recoverable
Selenium	3.37		2.50		ug/L	1		6020B	Total Recoverable
Selenium	3.03		2.50		ug/L	1		6020B	Total Recoverable
Sodium	85600		500		ug/L	1		6020B	Total Recoverable
Sodium	85400		500		ug/L	1		6020B	Total Recoverable
Zinc	75.6		20.0		ug/L	1		6020B	Total Recoverable
Zinc	79.9		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	32500		100		ug/L	1		6020B	Dissolved
Arsenic	13.4		3.00		ug/L	1		6020B	Dissolved
Barium	30.8		5.00		ug/L	1		6020B	Dissolved
Beryllium	11.3		0.500		ug/L	1		6020B	Dissolved
Cadmium	1.31		0.500		ug/L	1		6020B	Dissolved
Calcium	407000		500		ug/L	1		6020B	Dissolved
Cobalt	105		0.500		ug/L	1		6020B	Dissolved
Iron	200000		100		ug/L	1		6020B	Dissolved
Lead	37.3		2.50		ug/L	1		6020B	Dissolved
Magnesium	70200		250		ug/L	1		6020B	Dissolved
Manganese	1540		5.00		ug/L	1		6020B	Dissolved
Nickel	37.4		5.00		ug/L	1		6020B	Dissolved
Potassium	4960		1000		ug/L	1		6020B	Dissolved
Selenium	3.43		2.50		ug/L	1		6020B	Dissolved
Sodium	84600		500		ug/L	1		6020B	Dissolved
Zinc	74.9		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54564

Lab Sample ID: 680-230663-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	50.8		5.00		ug/L	1		6020B	Total Recoverable
Calcium	962000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	35.3		0.500		ug/L	1		6020B	Total Recoverable
Iron	10900		100		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54564 (Continued)

Lab Sample ID: 680-230663-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	149000		250		ug/L	1		6020B	Total Recoverable
Manganese	5120		5.00		ug/L	1		6020B	Total Recoverable
Nickel	16.2		5.00		ug/L	1		6020B	Total Recoverable
Potassium	10200		1000		ug/L	1		6020B	Total Recoverable
Sodium	190000		500		ug/L	1		6020B	Total Recoverable
Barium	54.2		5.00		ug/L	1		6020B	Dissolved
Calcium	1040000		5000		ug/L	10		6020B	Dissolved
Cobalt	36.9		0.500		ug/L	1		6020B	Dissolved
Iron	10500		100		ug/L	1		6020B	Dissolved
Magnesium	154000		250		ug/L	1		6020B	Dissolved
Manganese	5340		5.00		ug/L	1		6020B	Dissolved
Nickel	16.2		5.00		ug/L	1		6020B	Dissolved
Potassium	10700		1000		ug/L	1		6020B	Dissolved
Sodium	195000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54565

Lab Sample ID: 680-230663-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	25200		100		ug/L	1		6020B	Total Recoverable
Arsenic	4.01		3.00		ug/L	1		6020B	Total Recoverable
Barium	39.5		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	22.3		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	1.13		0.500		ug/L	1		6020B	Total Recoverable
Calcium	576000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	46.6		0.500		ug/L	1		6020B	Total Recoverable
Iron	96400		100		ug/L	1		6020B	Total Recoverable
Lead	19.8		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	60700		250		ug/L	1		6020B	Total Recoverable
Manganese	1170		5.00		ug/L	1		6020B	Total Recoverable
Nickel	46.4		5.00		ug/L	1		6020B	Total Recoverable
Potassium	7580		1000		ug/L	1		6020B	Total Recoverable
Sodium	154000		500		ug/L	1		6020B	Total Recoverable
Zinc	141		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	24600		100		ug/L	1		6020B	Dissolved
Arsenic	3.73		3.00		ug/L	1		6020B	Dissolved
Barium	38.6		5.00		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54565 (Continued)

Lab Sample ID: 680-230663-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	21.8		0.500		ug/L	1		6020B	Dissolved
Cadmium	0.830		0.500		ug/L	1		6020B	Dissolved
Calcium	597000		5000		ug/L	10		6020B	Dissolved
Cobalt	45.7		0.500		ug/L	1		6020B	Dissolved
Iron	93500		100		ug/L	1		6020B	Dissolved
Lead	18.9		2.50		ug/L	1		6020B	Dissolved
Magnesium	61100		250		ug/L	1		6020B	Dissolved
Manganese	1150		5.00		ug/L	1		6020B	Dissolved
Nickel	44.6		5.00		ug/L	1		6020B	Dissolved
Potassium	7490		1000		ug/L	1		6020B	Dissolved
Sodium	152000		500		ug/L	1		6020B	Dissolved
Zinc	138		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54566

Lab Sample ID: 680-230663-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	24000		100		ug/L	1		6020B	Total Recoverable
Arsenic	3.72		3.00		ug/L	1		6020B	Total Recoverable
Barium	42.9		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	21.7		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.685		0.500		ug/L	1		6020B	Total Recoverable
Calcium	601000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	44.5		0.500		ug/L	1		6020B	Total Recoverable
Iron	95300		100		ug/L	1		6020B	Total Recoverable
Lead	17.8		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	58000		250		ug/L	1		6020B	Total Recoverable
Manganese	1090		5.00		ug/L	1		6020B	Total Recoverable
Nickel	44.3		5.00		ug/L	1		6020B	Total Recoverable
Potassium	7330		1000		ug/L	1		6020B	Total Recoverable
Sodium	146000		500		ug/L	1		6020B	Total Recoverable
Zinc	129		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	24700		100		ug/L	1		6020B	Dissolved
Arsenic	3.62		3.00		ug/L	1		6020B	Dissolved
Barium	43.7		5.00		ug/L	1		6020B	Dissolved
Beryllium	22.3		0.500		ug/L	1		6020B	Dissolved
Cadmium	0.820		0.500		ug/L	1		6020B	Dissolved
Calcium	598000		5000		ug/L	10		6020B	Dissolved
Cobalt	45.4		0.500		ug/L	1		6020B	Dissolved
Iron	98000		100		ug/L	1		6020B	Dissolved
Lead	18.1		2.50		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54566 (Continued)
Lab Sample ID: 680-230663-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	59200		250		ug/L	1		6020B	Dissolved
Manganese	1110		5.00		ug/L	1		6020B	Dissolved
Nickel	44.7		5.00		ug/L	1		6020B	Dissolved
Potassium	7500		1000		ug/L	1		6020B	Dissolved
Sodium	149000		500		ug/L	1		6020B	Dissolved
Zinc	134		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54567
Lab Sample ID: 680-230663-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	104		5.00		ug/L	1		6020B	Total Recoverable
Calcium	140000		500		ug/L	1		6020B	Total Recoverable
Iron	1800		100		ug/L	1		6020B	Total Recoverable
Magnesium	2750		250		ug/L	1		6020B	Total Recoverable
Manganese	79.3		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1150		1000		ug/L	1		6020B	Total Recoverable
Sodium	17400		500		ug/L	1		6020B	Total Recoverable
Barium	96.4		5.00		ug/L	1		6020B	Dissolved
Calcium	130000		500		ug/L	1		6020B	Dissolved
Iron	838		100		ug/L	1		6020B	Dissolved
Magnesium	2590		250		ug/L	1		6020B	Dissolved
Manganese	74.6		5.00		ug/L	1		6020B	Dissolved
Potassium	1100		1000		ug/L	1		6020B	Dissolved
Sodium	16200		500		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54593
Lab Sample ID: 680-230663-1
Date Collected: 01/26/23 09:38
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:07	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Barium	**127**		5.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:07	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:07	1
Calcium	**188000**		500		ug/L		02/17/23 09:09	02/17/23 23:07	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Cobalt	**1.98**		0.500		ug/L		02/17/23 09:09	02/17/23 23:07	1
Iron	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:07	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:07	1
Magnesium	**3050**		250		ug/L		02/17/23 09:09	02/17/23 23:07	1
Manganese	**77.8**		5.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 23:07	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:07	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Sodium	**23300**		500		ug/L		02/17/23 09:09	02/17/23 23:07	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:07	1
Zinc	**25.3**		20.0		ug/L		02/17/23 09:09	02/17/23 23:07	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:17	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Barium	**130**		5.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:17	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:17	1
Calcium	**180000**		500		ug/L		02/17/23 10:16	02/17/23 20:17	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Cobalt	**1.93**		0.500		ug/L		02/17/23 10:16	02/17/23 20:17	1
Iron	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:17	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:17	1
Magnesium	**3010**		250		ug/L		02/17/23 10:16	02/17/23 20:17	1
Manganese	**76.7**		5.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:17	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:17	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Sodium	**22800**		500		ug/L		02/17/23 10:16	02/17/23 20:17	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:17	1
Zinc	**25.7**		20.0		ug/L		02/17/23 10:16	02/17/23 20:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 13:15	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54593
Date Collected: 01/26/23 09:38
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-1
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:07	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54594
Date Collected: 01/26/23 09:43
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-2
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:28	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Barium	**135**		5.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:28	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:28	1
Calcium	**193000**		500		ug/L		02/17/23 09:14	02/17/23 15:28	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Cobalt	**2.25**		0.500		ug/L		02/17/23 09:14	02/17/23 15:28	1
Iron	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:28	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:28	1
Magnesium	**3250**		250		ug/L		02/17/23 09:14	02/17/23 15:28	1
Manganese	**91.1**		5.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 15:28	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:28	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Sodium	**26000**		500		ug/L		02/17/23 09:14	02/17/23 15:28	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:28	1
Zinc	**96.1**		20.0		ug/L		02/17/23 09:14	02/17/23 15:28	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:29	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Barium	**125**		5.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:29	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:29	1
Calcium	**178000**		500		ug/L		02/17/23 10:16	02/17/23 20:29	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Cobalt	**2.00**		0.500		ug/L		02/17/23 10:16	02/17/23 20:29	1
Iron	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:29	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:29	1
Magnesium	**2960**		250		ug/L		02/17/23 10:16	02/17/23 20:29	1
Manganese	**84.7**		5.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:29	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:29	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Sodium	**23700**		500		ug/L		02/17/23 10:16	02/17/23 20:29	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:29	1
Zinc	**61.4**		20.0		ug/L		02/17/23 10:16	02/17/23 20:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 16:53	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54594
Date Collected: 01/26/23 09:43
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-2
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:10	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54582

Date Collected: 01/26/23 11:19
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-3

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:56	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Barium	**151**		5.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:56	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:56	1
Calcium	**29000**		500		ug/L		02/17/23 10:39	02/17/23 18:56	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Cobalt	**7.28**		0.500		ug/L		02/17/23 10:39	02/17/23 18:56	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:56	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:56	1
Magnesium	**2410**		250		ug/L		02/17/23 10:39	02/17/23 18:56	1
Manganese	**301**		5.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Potassium	**1630**		1000		ug/L		02/17/23 10:39	02/17/23 18:56	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:56	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Sodium	**8780**		500		ug/L		02/17/23 10:39	02/17/23 18:56	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:56	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:56	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:38	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Barium	**155**		5.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:38	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:38	1
Calcium	**31300**		500		ug/L		02/17/23 10:39	02/17/23 17:38	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Cobalt	**7.73**		0.500		ug/L		02/17/23 10:39	02/17/23 17:38	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:38	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:38	1
Magnesium	**2540**		250		ug/L		02/17/23 10:39	02/17/23 17:38	1
Manganese	**312**		5.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Potassium	**1680**		1000		ug/L		02/17/23 10:39	02/17/23 17:38	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:38	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Sodium	**9490**		500		ug/L		02/17/23 10:39	02/17/23 17:38	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:38	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:38	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:10	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54582
Date Collected: 01/26/23 11:19
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:14	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54583
Date Collected: 01/26/23 13:00
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-4
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:23	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Barium	**38.5**		5.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:23	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:23	1
Calcium	**54200**		500		ug/L		02/17/23 09:09	02/17/23 22:23	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:23	1
Iron	**1640**		100		ug/L		02/17/23 09:09	02/17/23 22:23	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:23	1
Magnesium	**1280**		250		ug/L		02/17/23 09:09	02/17/23 22:23	1
Manganese	**70.1**		5.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Potassium	**1190**		1000		ug/L		02/17/23 09:09	02/17/23 22:23	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:23	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Sodium	**3860**		500		ug/L		02/17/23 09:09	02/17/23 22:23	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:23	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:23	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:03	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Barium	**41.2**		5.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:03	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:03	1
Calcium	**57200**		500		ug/L		02/17/23 10:39	02/17/23 18:03	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:03	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:03	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:03	1
Magnesium	**1390**		250		ug/L		02/17/23 10:39	02/17/23 18:03	1
Manganese	**66.7**		5.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Potassium	**1230**		1000		ug/L		02/17/23 10:39	02/17/23 18:03	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:03	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Sodium	**4330**		500		ug/L		02/17/23 10:39	02/17/23 18:03	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:03	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:03	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:13	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54583
Date Collected: 01/26/23 13:00
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-4
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:17	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54595
Lab Sample ID: 680-230663-5
Date Collected: 01/25/23 11:00
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:36	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Barium	**177**		5.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:36	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:36	1
Calcium	**147000**		500		ug/L		02/17/23 09:09	02/17/23 23:36	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Cobalt	**1.85**		0.500		ug/L		02/17/23 09:09	02/17/23 23:36	1
Iron	**165**		100		ug/L		02/17/23 09:09	02/17/23 23:36	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:36	1
Magnesium	**2250**		250		ug/L		02/17/23 09:09	02/17/23 23:36	1
Manganese	**85.5**		5.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 23:36	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:36	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Sodium	**10600**		500		ug/L		02/17/23 09:09	02/17/23 23:36	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:36	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 23:36	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:48	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Barium	**186**		5.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:48	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:48	1
Calcium	**156000**		500		ug/L		02/17/23 10:39	02/17/23 18:48	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Cobalt	**1.94**		0.500		ug/L		02/17/23 10:39	02/17/23 18:48	1
Iron	**105**		100		ug/L		02/17/23 10:39	02/17/23 18:48	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:48	1
Magnesium	**2450**		250		ug/L		02/17/23 10:39	02/17/23 18:48	1
Manganese	**89.3**		5.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Potassium	1000	U	1000		ug/L		02/17/23 10:39	02/17/23 18:48	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:48	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Sodium	**11800**		500		ug/L		02/17/23 10:39	02/17/23 18:48	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:48	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 12:40	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54595
Date Collected: 01/25/23 11:00
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-5
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:25	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54596
Lab Sample ID: 680-230663-6
Date Collected: 01/25/23 09:54
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:05	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Barium	**64.5**		5.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:05	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:05	1
Calcium	**208000**		500		ug/L		02/17/23 09:14	02/17/23 16:05	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Cobalt	**19.1**		0.500		ug/L		02/17/23 09:14	02/17/23 16:05	1
Iron	**2140**		100		ug/L		02/17/23 09:14	02/17/23 16:05	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:05	1
Magnesium	**5530**		250		ug/L		02/17/23 09:14	02/17/23 16:05	1
Manganese	**547**		5.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 16:05	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:05	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Sodium	**9880**		500		ug/L		02/17/23 09:14	02/17/23 16:05	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:05	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:05	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:58	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Barium	**67.3**		5.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:58	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:58	1
Calcium	**202000**		500		ug/L		02/17/23 10:16	02/17/23 20:58	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Cobalt	**17.6**		0.500		ug/L		02/17/23 10:16	02/17/23 20:58	1
Iron	**174**		100		ug/L		02/17/23 10:16	02/17/23 20:58	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:58	1
Magnesium	**5200**		250		ug/L		02/17/23 10:16	02/17/23 20:58	1
Manganese	**504**		5.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:58	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:58	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Sodium	**9020**		500		ug/L		02/17/23 10:16	02/17/23 20:58	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:58	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 12:43	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54596
Date Collected: 01/25/23 09:54
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-6
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:36	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54572
Date Collected: 01/24/23 11:46
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-7
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**752**		100		ug/L		02/17/23 06:34	02/17/23 13:59	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Barium	**42.5**		5.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:59	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:59	1
Calcium	**29300**		500		ug/L		02/17/23 06:34	02/17/23 13:59	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Cobalt	**0.760**		0.500		ug/L		02/17/23 06:34	02/17/23 13:59	1
Iron	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:59	1
Lead	**2.59**		2.50		ug/L		02/17/23 06:34	02/17/23 13:59	1
Magnesium	**2290**		250		ug/L		02/17/23 06:34	02/17/23 13:59	1
Manganese	**28.9**		5.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:59	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:59	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Sodium	**8620**		500		ug/L		02/17/23 06:34	02/17/23 13:59	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:59	1
Zinc	**241**		20.0		ug/L		02/17/23 06:34	02/17/23 13:59	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**645**		100		ug/L		02/17/23 06:34	02/17/23 13:47	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Barium	**42.6**		5.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:47	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:47	1
Calcium	**30600**		500		ug/L		02/17/23 06:34	02/17/23 13:47	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Cobalt	**0.765**		0.500		ug/L		02/17/23 06:34	02/17/23 13:47	1
Iron	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:47	1
Lead	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:47	1
Magnesium	**2280**		250		ug/L		02/17/23 06:34	02/17/23 13:47	1
Manganese	**28.6**		5.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:47	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:47	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Sodium	**8710**		500		ug/L		02/17/23 06:34	02/17/23 13:47	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:47	1
Zinc	**234**		20.0		ug/L		02/17/23 06:34	02/17/23 13:47	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 12:46	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54572
Date Collected: 01/24/23 11:46
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-7
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:39	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54597
Date Collected: 01/24/23 15:40
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-8
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:39	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Barium	**56.6**		5.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:39	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:39	1
Calcium	**133000**		500		ug/L		02/17/23 06:34	02/17/23 13:39	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:39	1
Iron	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:39	1
Lead	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:39	1
Magnesium	**3210**		250		ug/L		02/17/23 06:34	02/17/23 13:39	1
Manganese	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:39	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:39	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Sodium	**12600**		500		ug/L		02/17/23 06:34	02/17/23 13:39	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:39	1
Zinc	20.0	U	20.0		ug/L		02/17/23 06:34	02/17/23 13:39	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:31	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Barium	**57.5**		5.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:31	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:31	1
Calcium	**136000**		500		ug/L		02/17/23 06:34	02/17/23 13:31	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:31	1
Iron	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:31	1
Lead	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:31	1
Magnesium	**3300**		250		ug/L		02/17/23 06:34	02/17/23 13:31	1
Manganese	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:31	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:31	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Sodium	**12900**		500		ug/L		02/17/23 06:34	02/17/23 13:31	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:31	1
Zinc	20.0	U	20.0		ug/L		02/17/23 06:34	02/17/23 13:31	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 12:50	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54597
Date Collected: 01/24/23 15:40
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-8
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:49	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54598
Date Collected: 01/24/23 13:27
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-9
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:43	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Barium	**109**		5.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:43	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:43	1
Calcium	**289000**		500		ug/L		02/17/23 06:34	02/17/23 13:43	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Cobalt	**2.24**		0.500		ug/L		02/17/23 06:34	02/17/23 13:43	1
Iron	**928**		100		ug/L		02/17/23 06:34	02/17/23 13:43	1
Lead	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:43	1
Magnesium	**5010**		250		ug/L		02/17/23 06:34	02/17/23 13:43	1
Manganese	**169**		5.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:43	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:43	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Sodium	**21100**		500		ug/L		02/17/23 06:34	02/17/23 13:43	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:43	1
Zinc	20.0	U	20.0		ug/L		02/17/23 06:34	02/17/23 13:43	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:35	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Barium	**108**		5.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:35	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:35	1
Calcium	**283000**		500		ug/L		02/17/23 06:34	02/17/23 13:35	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Cobalt	**2.18**		0.500		ug/L		02/17/23 06:34	02/17/23 13:35	1
Iron	**617**		100		ug/L		02/17/23 06:34	02/17/23 13:35	1
Lead	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:35	1
Magnesium	**4990**		250		ug/L		02/17/23 06:34	02/17/23 13:35	1
Manganese	**164**		5.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:35	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:35	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Sodium	**21100**		500		ug/L		02/17/23 06:34	02/17/23 13:35	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:35	1
Zinc	20.0	U	20.0		ug/L		02/17/23 06:34	02/17/23 13:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 12:53	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54598
Date Collected: 01/24/23 13:27
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-9
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:53	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54600

Date Collected: 01/24/23 10:18
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-10

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:01	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Arsenic	**3.32**		3.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Barium	**80.8**		5.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:01	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:01	1
Calcium	**12600**		500		ug/L		02/17/23 09:14	02/17/23 16:01	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Cobalt	**1.36**		0.500		ug/L		02/17/23 09:14	02/17/23 16:01	1
Iron	**11100**		100		ug/L		02/17/23 09:14	02/17/23 16:01	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:01	1
Magnesium	**717**		250		ug/L		02/17/23 09:14	02/17/23 16:01	1
Manganese	**10.7**		5.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 16:01	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:01	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Sodium	**6540**		500		ug/L		02/17/23 09:14	02/17/23 16:01	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:01	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:01	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:25	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Barium	**76.3**		5.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:25	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:25	1
Calcium	**12300**		500		ug/L		02/17/23 10:16	02/17/23 20:25	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Cobalt	**1.18**		0.500		ug/L		02/17/23 10:16	02/17/23 20:25	1
Iron	**10100**		100		ug/L		02/17/23 10:16	02/17/23 20:25	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:25	1
Magnesium	**712**		250		ug/L		02/17/23 10:16	02/17/23 20:25	1
Manganese	**10.0**		5.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:25	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:25	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Sodium	**6260**		500		ug/L		02/17/23 10:16	02/17/23 20:25	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:25	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 13:08	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54600
Date Collected: 01/24/23 10:18
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-10
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:56	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54570
Date Collected: 01/31/23 12:49
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-11
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:03	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Barium	**199**		5.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:03	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:03	1
Calcium	**55900**		500		ug/L		02/17/23 09:09	02/17/23 23:03	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:03	1
Iron	**9860**		100		ug/L		02/17/23 09:09	02/17/23 23:03	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:03	1
Magnesium	**2550**		250		ug/L		02/17/23 09:09	02/17/23 23:03	1
Manganese	**65.9**		5.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Potassium	**1690**		1000		ug/L		02/17/23 09:09	02/17/23 23:03	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:03	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Sodium	**6170**		500		ug/L		02/17/23 09:09	02/17/23 23:03	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:03	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 23:03	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 19:36	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Barium	**197**		5.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:36	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:36	1
Calcium	**54500**		500		ug/L		02/17/23 10:16	02/17/23 19:36	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:36	1
Iron	**6990**		100		ug/L		02/17/23 10:16	02/17/23 19:36	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:36	1
Magnesium	**2520**		250		ug/L		02/17/23 10:16	02/17/23 19:36	1
Manganese	**64.3**		5.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Potassium	**1670**		1000		ug/L		02/17/23 10:16	02/17/23 19:36	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:36	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Sodium	**6070**		500		ug/L		02/17/23 10:16	02/17/23 19:36	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:36	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:36	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:01	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54570
Date Collected: 01/31/23 12:49
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-11
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:21	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54601

Date Collected: 01/31/23 11:17
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-12

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:32	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Barium	**96.3**		5.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:32	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:32	1
Calcium	**193000**		500		ug/L		02/17/23 09:09	02/17/23 23:32	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Cobalt	**0.865**		0.500		ug/L		02/17/23 09:09	02/17/23 23:32	1
Iron	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:32	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:32	1
Magnesium	**8500**		250		ug/L		02/17/23 09:09	02/17/23 23:32	1
Manganese	**23.0**		5.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 23:32	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:32	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Sodium	**49900**		500		ug/L		02/17/23 09:09	02/17/23 23:32	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:32	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 23:32	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:50	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Barium	**103**		5.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:50	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:50	1
Calcium	**206000**		500		ug/L		02/17/23 10:16	02/17/23 20:50	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Cobalt	**0.990**		0.500		ug/L		02/17/23 10:16	02/17/23 20:50	1
Iron	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:50	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:50	1
Magnesium	**9490**		250		ug/L		02/17/23 10:16	02/17/23 20:50	1
Manganese	**38.1**		5.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:50	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:50	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Sodium	**54000**		500		ug/L		02/17/23 10:16	02/17/23 20:50	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:50	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:50	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:36	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54601
Date Collected: 01/31/23 11:17
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-12
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:31	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54605
Date Collected: 01/31/23 09:40
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-13
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:21	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Barium	**95.1**		5.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Beryllium	**0.735**		0.500		ug/L		02/17/23 09:14	02/17/23 16:21	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:21	1
Calcium	**7570**		500		ug/L		02/17/23 09:14	02/17/23 16:21	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Cobalt	**1.40**		0.500		ug/L		02/17/23 09:14	02/17/23 16:21	1
Iron	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:21	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:21	1
Magnesium	**732**		250		ug/L		02/17/23 09:14	02/17/23 16:21	1
Manganese	**11.5**		5.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Potassium	**2150**		1000		ug/L		02/17/23 09:14	02/17/23 16:21	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:21	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Sodium	**7380**		500		ug/L		02/17/23 09:14	02/17/23 16:21	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:21	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:21	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:31	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Barium	**99.2**		5.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Beryllium	**0.835**		0.500		ug/L		02/17/23 10:39	02/17/23 18:31	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:31	1
Calcium	**7850**		500		ug/L		02/17/23 10:39	02/17/23 18:31	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Cobalt	**1.18**		0.500		ug/L		02/17/23 10:39	02/17/23 18:31	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:31	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:31	1
Magnesium	**755**		250		ug/L		02/17/23 10:39	02/17/23 18:31	1
Manganese	**8.08**		5.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Potassium	**2230**		1000		ug/L		02/17/23 10:39	02/17/23 18:31	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:31	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Sodium	**7610**		500		ug/L		02/17/23 10:39	02/17/23 18:31	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:31	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:31	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:16	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54605
Date Collected: 01/31/23 09:40
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-13
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:34	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54606
Date Collected: 01/31/23 09:45
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-14
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:37	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Barium	**106**		5.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Beryllium	**0.755**		0.500		ug/L		02/17/23 09:14	02/17/23 16:37	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:37	1
Calcium	**9840**		500		ug/L		02/17/23 09:14	02/17/23 16:37	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Cobalt	**1.22**		0.500		ug/L		02/17/23 09:14	02/17/23 16:37	1
Iron	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:37	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:37	1
Magnesium	**857**		250		ug/L		02/17/23 09:14	02/17/23 16:37	1
Manganese	**9.62**		5.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Potassium	**2240**		1000		ug/L		02/17/23 09:14	02/17/23 16:37	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:37	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Sodium	**7810**		500		ug/L		02/17/23 09:14	02/17/23 16:37	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:37	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:37	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 19:57	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Barium	**105**		5.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Beryllium	**0.775**		0.500		ug/L		02/17/23 10:16	02/17/23 19:57	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:57	1
Calcium	**11200**		500		ug/L		02/17/23 10:16	02/17/23 19:57	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Cobalt	**1.14**		0.500		ug/L		02/17/23 10:16	02/17/23 19:57	1
Iron	100	U	100		ug/L		02/17/23 10:16	02/17/23 19:57	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:57	1
Magnesium	**900**		250		ug/L		02/17/23 10:16	02/17/23 19:57	1
Manganese	**8.35**		5.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Potassium	**2180**		1000		ug/L		02/17/23 10:16	02/17/23 19:57	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:57	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Sodium	**7790**		500		ug/L		02/17/23 10:16	02/17/23 19:57	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:57	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:57	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:15	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54606
Date Collected: 01/31/23 09:45
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-14
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:38	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54559
Date Collected: 02/01/23 09:34
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-15
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:52	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Barium	**45.4**		5.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:52	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:52	1
Calcium	**652000**		5000		ug/L		02/17/23 10:39	02/20/23 19:23	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Cobalt	**32.7**		0.500		ug/L		02/17/23 10:39	02/17/23 18:52	1
Iron	**2520**		100		ug/L		02/17/23 10:39	02/17/23 18:52	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:52	1
Magnesium	**67400**		250		ug/L		02/17/23 10:39	02/17/23 18:52	1
Manganese	**4580**		5.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Nickel	**12.7**		5.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Potassium	**4500**		1000		ug/L		02/17/23 10:39	02/17/23 18:52	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:52	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Sodium	**96200**		500		ug/L		02/17/23 10:39	02/17/23 18:52	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:52	1
Zinc	**37.8**		20.0		ug/L		02/17/23 10:39	02/17/23 18:52	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:54	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Barium	**52.7**		5.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:54	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:54	1
Calcium	**711000**		5000		ug/L		02/17/23 10:16	02/20/23 19:55	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Cobalt	**36.0**		0.500		ug/L		02/17/23 10:16	02/17/23 20:54	1
Iron	**3900**		100		ug/L		02/17/23 10:16	02/17/23 20:54	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:54	1
Magnesium	**75400**		250		ug/L		02/17/23 10:16	02/17/23 20:54	1
Manganese	**5080**		5.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Nickel	**15.1**		5.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Potassium	**5120**		1000		ug/L		02/17/23 10:16	02/17/23 20:54	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:54	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Sodium	**107000**		500		ug/L		02/17/23 10:16	02/17/23 20:54	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:54	1
Zinc	**32.1**		20.0		ug/L		02/17/23 10:16	02/17/23 20:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:19	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54559
Date Collected: 02/01/23 09:34
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-15
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:41	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54560
Lab Sample ID: 680-230663-16
Date Collected: 02/01/23 11:13
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:09	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Barium	**125**		5.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:09	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:09	1
Calcium	**709000**		5000		ug/L		02/17/23 09:14	02/20/23 18:30	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:09	1
Iron	**12800**		100		ug/L		02/17/23 09:14	02/17/23 16:09	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:09	1
Magnesium	**76200**		250		ug/L		02/17/23 09:14	02/17/23 16:09	1
Manganese	**623**		5.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Potassium	**8410**		1000		ug/L		02/17/23 09:14	02/17/23 16:09	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:09	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Sodium	**129000**		500		ug/L		02/17/23 09:14	02/17/23 16:09	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:09	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:09	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:07	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Barium	**121**		5.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:07	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:07	1
Calcium	**723000**		5000		ug/L		02/17/23 10:39	02/20/23 19:03	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:07	1
Iron	**11900**		100		ug/L		02/17/23 10:39	02/17/23 18:07	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:07	1
Magnesium	**75200**		250		ug/L		02/17/23 10:39	02/17/23 18:07	1
Manganese	**622**		5.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Potassium	**8290**		1000		ug/L		02/17/23 10:39	02/17/23 18:07	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:07	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Sodium	**128000**		500		ug/L		02/17/23 10:39	02/17/23 18:07	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:07	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:54	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54560
Date Collected: 02/01/23 11:13
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-16
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:45	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54561
Date Collected: 02/01/23 12:32
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-17
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6150**		100		ug/L		02/17/23 09:14	02/17/23 16:46	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Barium	**1580**		5.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Beryllium	**5.53**		0.500		ug/L		02/17/23 09:14	02/17/23 16:46	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:46	1
Calcium	**167000**		500		ug/L		02/17/23 09:14	02/17/23 16:46	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Cobalt	**17.1**		0.500		ug/L		02/17/23 09:14	02/17/23 16:46	1
Iron	**140000**		100		ug/L		02/17/23 09:14	02/17/23 16:46	1
Lead	**7.05**		2.50		ug/L		02/17/23 09:14	02/17/23 16:46	1
Magnesium	**4490**		250		ug/L		02/17/23 09:14	02/17/23 16:46	1
Manganese	**80.4**		5.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Nickel	**24.7**		5.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 16:46	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:46	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Sodium	**88600**		500		ug/L		02/17/23 09:14	02/17/23 16:46	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:46	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:46	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5830**		100		ug/L		02/17/23 10:39	02/17/23 17:34	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Barium	**1500**		5.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Beryllium	**5.20**		0.500		ug/L		02/17/23 10:39	02/17/23 17:34	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:34	1
Calcium	**163000**		500		ug/L		02/17/23 10:39	02/17/23 17:34	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Cobalt	**16.5**		0.500		ug/L		02/17/23 10:39	02/17/23 17:34	1
Iron	**137000**		100		ug/L		02/17/23 10:39	02/17/23 17:34	1
Lead	**6.33**		2.50		ug/L		02/17/23 10:39	02/17/23 17:34	1
Magnesium	**4330**		250		ug/L		02/17/23 10:39	02/17/23 17:34	1
Manganese	**75.2**		5.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Nickel	**23.4**		5.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Potassium	**1010**		1000		ug/L		02/17/23 10:39	02/17/23 17:34	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:34	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Sodium	**84900**		500		ug/L		02/17/23 10:39	02/17/23 17:34	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:34	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:34	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:17	02/22/23 08:18	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54561
Date Collected: 02/01/23 12:32
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-17
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:48	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54562
Lab Sample ID: 680-230663-18
Date Collected: 02/01/23 13:44
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:41	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Barium	**298**		5.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:41	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:41	1
Calcium	**488000**		5000		ug/L		02/17/23 09:14	02/20/23 18:42	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:41	1
Iron	**15200**		100		ug/L		02/17/23 09:14	02/17/23 16:41	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:41	1
Magnesium	**14300**		250		ug/L		02/17/23 09:14	02/17/23 16:41	1
Manganese	**373**		5.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Potassium	**1510**		1000		ug/L		02/17/23 09:14	02/17/23 16:41	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:41	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Sodium	**73400**		500		ug/L		02/17/23 09:14	02/17/23 16:41	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:41	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:41	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:15	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Barium	**290**		5.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:15	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:15	1
Calcium	**485000**		5000		ug/L		02/17/23 10:39	02/20/23 19:11	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:15	1
Iron	**14100**		100		ug/L		02/17/23 10:39	02/17/23 18:15	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:15	1
Magnesium	**14500**		250		ug/L		02/17/23 10:39	02/17/23 18:15	1
Manganese	**355**		5.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Potassium	**1530**		1000		ug/L		02/17/23 10:39	02/17/23 18:15	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:15	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Sodium	**71900**		500		ug/L		02/17/23 10:39	02/17/23 18:15	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:15	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:15	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:05	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54562
Date Collected: 02/01/23 13:44
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-18
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:52	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54563
Date Collected: 02/01/23 14:52
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-19
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**191**		100		ug/L		02/17/23 09:14	02/17/23 15:20	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Arsenic	**3.35**		3.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Barium	**49.7**		5.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:20	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:20	1
Calcium	**1180000**		5000		ug/L		02/17/23 09:14	02/20/23 18:22	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Cobalt	**10.4**		0.500		ug/L		02/17/23 09:14	02/17/23 15:20	1
Iron	**245000**		100		ug/L		02/17/23 09:14	02/17/23 15:20	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:20	1
Magnesium	**364000**		250		ug/L		02/17/23 09:14	02/17/23 15:20	1
Manganese	**10100**		5.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Potassium	**19400**		1000		ug/L		02/17/23 09:14	02/17/23 15:20	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:20	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Sodium	**202000**		500		ug/L		02/17/23 09:14	02/17/23 15:20	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:20	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:20	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**170**		100		ug/L		02/17/23 10:16	02/17/23 19:16	1
Aluminum	**175**		100		ug/L		02/23/23 10:43	02/24/23 13:30	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Antimony	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Arsenic	3.00	U	3.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Barium	**56.0**		5.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Barium	**57.1**		5.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:16	1
Beryllium	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:30	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:16	1
Cadmium	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:30	1
Calcium	**1200000**		5000		ug/L		02/17/23 10:16	02/20/23 19:27	10
Calcium	**1110000**		5000		ug/L		02/23/23 10:43	02/24/23 13:58	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Chromium	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Cobalt	**9.88**		0.500		ug/L		02/17/23 10:16	02/17/23 19:16	1
Cobalt	**10.6**		0.500		ug/L		02/23/23 10:43	02/24/23 13:30	1
Iron	**234000**		100		ug/L		02/17/23 10:16	02/17/23 19:16	1
Iron	**233000**		100		ug/L		02/23/23 10:43	02/24/23 13:30	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:16	1
Lead	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:30	1
Magnesium	**335000**		250		ug/L		02/17/23 10:16	02/17/23 19:16	1
Magnesium	**354000**		250		ug/L		02/23/23 10:43	02/24/23 13:30	1
Manganese	**9280**		5.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Manganese	**9800**		5.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:16	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54563
Date Collected: 02/01/23 14:52
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-19
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**5.40**		5.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Potassium	**18000**		1000		ug/L		02/17/23 10:16	02/17/23 19:16	1
Potassium	**18500**		1000		ug/L		02/23/23 10:43	02/24/23 13:30	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:16	1
Selenium	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:30	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Silver	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Sodium	**186000**		500		ug/L		02/17/23 10:16	02/17/23 19:16	1
Sodium	**185000**		500		ug/L		02/23/23 10:43	02/24/23 13:30	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:16	1
Thallium	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:30	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:16	1
Zinc	20.0	U	20.0		ug/L		02/23/23 10:43	02/24/23 13:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:31	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 08:56	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54603
Lab Sample ID: 680-230663-20
Date Collected: 01/30/23 13:08
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:59	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Barium	**63.6**		5.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:59	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:59	1
Calcium	**783000**		5000		ug/L		02/17/23 09:09	02/20/23 20:07	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Cobalt	**9.40**		0.500		ug/L		02/17/23 09:09	02/17/23 22:59	1
Iron	**10600**		100		ug/L		02/17/23 09:09	02/17/23 22:59	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:59	1
Magnesium	**12400**		250		ug/L		02/17/23 09:09	02/17/23 22:59	1
Manganese	**2100**		5.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Potassium	**1570**		1000		ug/L		02/17/23 09:09	02/17/23 22:59	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:59	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Sodium	**102000**		500		ug/L		02/17/23 09:09	02/17/23 22:59	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:59	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:59	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:31	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Barium	**68.7**		5.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:31	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:31	1
Calcium	**789000**		5000		ug/L		02/17/23 09:09	02/20/23 20:03	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Cobalt	**9.98**		0.500		ug/L		02/17/23 09:09	02/17/23 22:31	1
Iron	**10300**		100		ug/L		02/17/23 09:09	02/17/23 22:31	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:31	1
Magnesium	**13300**		250		ug/L		02/17/23 09:09	02/17/23 22:31	1
Manganese	**2220**		5.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Potassium	**1720**		1000		ug/L		02/17/23 09:09	02/17/23 22:31	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:31	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Sodium	**108000**		500		ug/L		02/17/23 09:09	02/17/23 22:31	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:31	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:31	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:17	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54603
Date Collected: 01/30/23 13:08
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-20
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:25	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54558
Lab Sample ID: 680-230663-21
Date Collected: 01/31/23 15:41
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:20	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Barium	**42.0**		5.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:20	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:20	1
Calcium	**797000**		5000		ug/L		02/17/23 09:09	02/20/23 20:16	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Cobalt	**10.1**		0.500		ug/L		02/17/23 09:09	02/17/23 23:20	1
Iron	**2400**		100		ug/L		02/17/23 09:09	02/17/23 23:20	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:20	1
Magnesium	**65700**		250		ug/L		02/17/23 09:09	02/17/23 23:20	1
Manganese	**2200**		5.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Nickel	**10.3**		5.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Potassium	**5190**		1000		ug/L		02/17/23 09:09	02/17/23 23:20	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:20	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Sodium	**122000**		500		ug/L		02/17/23 09:09	02/17/23 23:20	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:20	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 23:20	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:11	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Barium	**44.7**		5.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:11	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:11	1
Calcium	**772000**		5000		ug/L		02/17/23 10:39	02/20/23 19:07	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Cobalt	**10.8**		0.500		ug/L		02/17/23 10:39	02/17/23 18:11	1
Iron	**2230**		100		ug/L		02/17/23 10:39	02/17/23 18:11	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:11	1
Magnesium	**72300**		250		ug/L		02/17/23 10:39	02/17/23 18:11	1
Manganese	**2450**		5.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Nickel	**11.7**		5.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Potassium	**5520**		1000		ug/L		02/17/23 10:39	02/17/23 18:11	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:11	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Sodium	**131000**		500		ug/L		02/17/23 10:39	02/17/23 18:11	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:11	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:11	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:58	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54558
Date Collected: 01/31/23 15:41
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-21
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 08:46	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54571
Lab Sample ID: 680-230663-22
Date Collected: 01/31/23 14:05
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:19	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Barium	**63.7**		5.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:19	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:19	1
Calcium	**99900**		500		ug/L		02/17/23 09:09	02/17/23 22:19	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:19	1
Iron	**1350**		100		ug/L		02/17/23 09:09	02/17/23 22:19	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:19	1
Magnesium	**1560**		250		ug/L		02/17/23 09:09	02/17/23 22:19	1
Manganese	**56.0**		5.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 22:19	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:19	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Sodium	**7720**		500		ug/L		02/17/23 09:09	02/17/23 22:19	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:19	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:19	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:55	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Barium	**63.0**		5.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:55	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:55	1
Calcium	**101000**		500		ug/L		02/17/23 10:39	02/17/23 17:55	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:55	1
Iron	**526**		100		ug/L		02/17/23 10:39	02/17/23 17:55	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:55	1
Magnesium	**1570**		250		ug/L		02/17/23 10:39	02/17/23 17:55	1
Manganese	**56.9**		5.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Potassium	1000	U	1000		ug/L		02/17/23 10:39	02/17/23 17:55	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:55	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Sodium	**7800**		500		ug/L		02/17/23 10:39	02/17/23 17:55	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:55	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:55	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:02	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54571
Date Collected: 01/31/23 14:05
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-22
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 08:53	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54599
Date Collected: 01/24/23 14:38
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-23
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:53	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Barium	**18.7**		5.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:53	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:53	1
Calcium	**66600**		500		ug/L		02/17/23 09:14	02/17/23 15:53	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:53	1
Iron	**247**		100		ug/L		02/17/23 09:14	02/17/23 15:53	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:53	1
Magnesium	**3080**		250		ug/L		02/17/23 09:14	02/17/23 15:53	1
Manganese	**52.4**		5.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Potassium	**3800**		1000		ug/L		02/17/23 09:14	02/17/23 15:53	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:53	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Sodium	**6210**		500		ug/L		02/17/23 09:14	02/17/23 15:53	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:53	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:53	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:43	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Barium	**21.6**		5.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:43	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:43	1
Calcium	**66900**		500		ug/L		02/17/23 10:39	02/17/23 17:43	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:43	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:43	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:43	1
Magnesium	**2980**		250		ug/L		02/17/23 10:39	02/17/23 17:43	1
Manganese	**50.2**		5.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Potassium	**3600**		1000		ug/L		02/17/23 10:39	02/17/23 17:43	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:43	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Sodium	**6040**		500		ug/L		02/17/23 10:39	02/17/23 17:43	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:43	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 13:11	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54599
Date Collected: 01/24/23 14:38
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-23
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:00	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54557
Date Collected: 02/06/23 11:39
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-24
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8320**		100		ug/L		02/17/23 09:09	02/17/23 22:55	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Arsenic	**3.12**		3.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Barium	**32.5**		5.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Beryllium	**11.6**		0.500		ug/L		02/17/23 09:09	02/17/23 22:55	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:55	1
Calcium	**298000**		500		ug/L		02/17/23 09:09	02/17/23 22:55	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Cobalt	**28.7**		0.500		ug/L		02/17/23 09:09	02/17/23 22:55	1
Iron	**67400**		100		ug/L		02/17/23 09:09	02/17/23 22:55	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:55	1
Magnesium	**9270**		250		ug/L		02/17/23 09:09	02/17/23 22:55	1
Manganese	**147**		5.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Nickel	**20.9**		5.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 22:55	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:55	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Sodium	**71100**		500		ug/L		02/17/23 09:09	02/17/23 22:55	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:55	1
Zinc	**28.4**		20.0		ug/L		02/17/23 09:09	02/17/23 22:55	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7570**		100		ug/L		02/17/23 10:16	02/17/23 20:05	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Arsenic	**3.05**		3.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Barium	**32.3**		5.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Beryllium	**11.6**		0.500		ug/L		02/17/23 10:16	02/17/23 20:05	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:05	1
Calcium	**292000**		500		ug/L		02/17/23 10:16	02/17/23 20:05	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Cobalt	**28.1**		0.500		ug/L		02/17/23 10:16	02/17/23 20:05	1
Iron	**65800**		100		ug/L		02/17/23 10:16	02/17/23 20:05	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:05	1
Magnesium	**9170**		250		ug/L		02/17/23 10:16	02/17/23 20:05	1
Manganese	**143**		5.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Nickel	**21.2**		5.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:05	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:05	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Sodium	**68800**		500		ug/L		02/17/23 10:16	02/17/23 20:05	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:05	1
Zinc	**29.8**		20.0		ug/L		02/17/23 10:16	02/17/23 20:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:53	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54557
Date Collected: 02/06/23 11:39
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-24
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:17	02/22/23 08:21	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54586
Date Collected: 02/06/23 14:02
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-25
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**24100**		100		ug/L		02/17/23 09:14	02/17/23 15:24	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Arsenic	**9.22**		3.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Barium	**17.1**		5.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Beryllium	**4.24**		0.500		ug/L		02/17/23 09:14	02/17/23 15:24	1
Cadmium	**1.01**		0.500		ug/L		02/17/23 09:14	02/17/23 15:24	1
Calcium	**301000**		500		ug/L		02/17/23 09:14	02/17/23 15:24	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Cobalt	**22.7**		0.500		ug/L		02/17/23 09:14	02/17/23 15:24	1
Iron	**81000**		100		ug/L		02/17/23 09:14	02/17/23 15:24	1
Lead	**23.4**		2.50		ug/L		02/17/23 09:14	02/17/23 15:24	1
Magnesium	**25100**		250		ug/L		02/17/23 09:14	02/17/23 15:24	1
Manganese	**351**		5.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Nickel	**12.1**		5.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Potassium	**2780**		1000		ug/L		02/17/23 09:14	02/17/23 15:24	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:24	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Sodium	**10400**		500		ug/L		02/17/23 09:14	02/17/23 15:24	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:24	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:24	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**21800**		100		ug/L		02/17/23 10:39	02/17/23 17:14	1
Aluminum	**21000**		100		ug/L		02/23/23 10:43	02/24/23 13:34	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Antimony	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Arsenic	**8.49**		3.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Arsenic	**8.08**		3.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Barium	**15.9**		5.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Barium	**14.7**		5.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Beryllium	**3.84**		0.500		ug/L		02/17/23 10:39	02/17/23 17:14	1
Beryllium	**3.60**		0.500		ug/L		02/23/23 10:43	02/24/23 13:34	1
Cadmium	**0.885**		0.500		ug/L		02/17/23 10:39	02/17/23 17:14	1
Cadmium	**1.59**		0.500		ug/L		02/23/23 10:43	02/24/23 13:34	1
Calcium	**279000**		500		ug/L		02/17/23 10:39	02/17/23 17:14	1
Calcium	**258000**		500		ug/L		02/23/23 10:43	02/24/23 13:34	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Chromium	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Cobalt	**20.7**		0.500		ug/L		02/17/23 10:39	02/17/23 17:14	1
Cobalt	**19.2**		0.500		ug/L		02/23/23 10:43	02/24/23 13:34	1
Iron	**74400**		100		ug/L		02/17/23 10:39	02/17/23 17:14	1
Iron	**69600**		100		ug/L		02/23/23 10:43	02/24/23 13:34	1
Lead	**21.2**		2.50		ug/L		02/17/23 10:39	02/17/23 17:14	1
Lead	**20.0**		2.50		ug/L		02/23/23 10:43	02/24/23 13:34	1
Magnesium	**22500**		250		ug/L		02/17/23 10:39	02/17/23 17:14	1
Magnesium	**21500**		250		ug/L		02/23/23 10:43	02/24/23 13:34	1
Manganese	**314**		5.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Manganese	**312**		5.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Nickel	**10.7**		5.00		ug/L		02/17/23 10:39	02/17/23 17:14	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54586
Date Collected: 02/06/23 14:02
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-25
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**10.2**		5.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Potassium	**2520**		1000		ug/L		02/17/23 10:39	02/17/23 17:14	1
Potassium	**2340**		1000		ug/L		02/23/23 10:43	02/24/23 13:34	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:14	1
Selenium	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:34	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Silver	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Sodium	**9110**		500		ug/L		02/17/23 10:39	02/17/23 17:14	1
Sodium	**8310**		500		ug/L		02/23/23 10:43	02/24/23 13:34	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:14	1
Thallium	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:34	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:14	1
Zinc	20.0	U	20.0		ug/L		02/23/23 10:43	02/24/23 13:34	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:57	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:10	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54587

Date Collected: 02/06/23 14:07
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-26

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**23100**		100		ug/L		02/17/23 09:14	02/17/23 15:32	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Arsenic	**9.22**		3.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Barium	**16.6**		5.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Beryllium	**3.96**		0.500		ug/L		02/17/23 09:14	02/17/23 15:32	1
Cadmium	**0.895**		0.500		ug/L		02/17/23 09:14	02/17/23 15:32	1
Calcium	**292000**		500		ug/L		02/17/23 09:14	02/17/23 15:32	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Cobalt	**22.3**		0.500		ug/L		02/17/23 09:14	02/17/23 15:32	1
Iron	**77700**		100		ug/L		02/17/23 09:14	02/17/23 15:32	1
Lead	**22.7**		2.50		ug/L		02/17/23 09:14	02/17/23 15:32	1
Magnesium	**24500**		250		ug/L		02/17/23 09:14	02/17/23 15:32	1
Manganese	**343**		5.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Nickel	**12.1**		5.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Potassium	**2690**		1000		ug/L		02/17/23 09:14	02/17/23 15:32	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:32	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Sodium	**10500**		500		ug/L		02/17/23 09:14	02/17/23 15:32	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:32	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:32	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**20700**		100		ug/L		02/17/23 10:16	02/17/23 19:40	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Arsenic	**8.02**		3.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Barium	**15.7**		5.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Beryllium	**3.87**		0.500		ug/L		02/17/23 10:16	02/17/23 19:40	1
Cadmium	**0.935**		0.500		ug/L		02/17/23 10:16	02/17/23 19:40	1
Calcium	**263000**		500		ug/L		02/17/23 10:16	02/17/23 19:40	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Cobalt	**19.9**		0.500		ug/L		02/17/23 10:16	02/17/23 19:40	1
Iron	**69000**		100		ug/L		02/17/23 10:16	02/17/23 19:40	1
Lead	**20.0**		2.50		ug/L		02/17/23 10:16	02/17/23 19:40	1
Magnesium	**22300**		250		ug/L		02/17/23 10:16	02/17/23 19:40	1
Manganese	**305**		5.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Nickel	**10.8**		5.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Potassium	**2400**		1000		ug/L		02/17/23 10:16	02/17/23 19:40	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:40	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Sodium	**9160**		500		ug/L		02/17/23 10:16	02/17/23 19:40	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:40	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:18	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54587
Date Collected: 02/06/23 14:07
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-26
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:14	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54588
Date Collected: 02/06/23 12:55
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-27
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**53500**		100		ug/L		02/17/23 09:09	02/17/23 23:11	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Arsenic	**7.95**		3.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Barium	**34.0**		5.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Beryllium	**49.7**		0.500		ug/L		02/17/23 09:09	02/17/23 23:11	1
Cadmium	**1.47**		0.500		ug/L		02/17/23 09:09	02/17/23 23:11	1
Calcium	**737000**		5000		ug/L		02/17/23 09:09	02/20/23 20:12	10
Chromium	**7.26**		5.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Cobalt	**141**		0.500		ug/L		02/17/23 09:09	02/17/23 23:11	1
Iron	**157000**		100		ug/L		02/17/23 09:09	02/17/23 23:11	1
Lead	**32.8**		2.50		ug/L		02/17/23 09:09	02/17/23 23:11	1
Magnesium	**34100**		250		ug/L		02/17/23 09:09	02/17/23 23:11	1
Manganese	**629**		5.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Nickel	**127**		5.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Potassium	**2920**		1000		ug/L		02/17/23 09:09	02/17/23 23:11	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:11	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Sodium	**118000**		500		ug/L		02/17/23 09:09	02/17/23 23:11	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:11	1
Zinc	**237**		20.0		ug/L		02/17/23 09:09	02/17/23 23:11	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**52500**		100		ug/L		02/17/23 10:39	02/17/23 17:30	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Arsenic	**8.64**		3.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Barium	**34.1**		5.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Beryllium	**48.6**		0.500		ug/L		02/17/23 10:39	02/17/23 17:30	1
Cadmium	**1.41**		0.500		ug/L		02/17/23 10:39	02/17/23 17:30	1
Calcium	**707000**		5000		ug/L		02/17/23 10:39	02/20/23 18:59	10
Chromium	**7.38**		5.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Cobalt	**140**		0.500		ug/L		02/17/23 10:39	02/17/23 17:30	1
Iron	**153000**		100		ug/L		02/17/23 10:39	02/17/23 17:30	1
Lead	**32.6**		2.50		ug/L		02/17/23 10:39	02/17/23 17:30	1
Magnesium	**34000**		250		ug/L		02/17/23 10:39	02/17/23 17:30	1
Manganese	**624**		5.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Nickel	**126**		5.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Potassium	**2970**		1000		ug/L		02/17/23 10:39	02/17/23 17:30	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:30	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Sodium	**118000**		500		ug/L		02/17/23 10:39	02/17/23 17:30	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:30	1
Zinc	**236**		20.0		ug/L		02/17/23 10:39	02/17/23 17:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 08:32	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54588
Date Collected: 02/06/23 12:55
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-27
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 08:49	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54589
Lab Sample ID: 680-230663-28
Date Collected: 02/06/23 15:32
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16600**		100		ug/L		02/17/23 09:09	02/17/23 22:51	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Arsenic	**4.62**		3.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Barium	**28.6**		5.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Beryllium	**16.2**		0.500		ug/L		02/17/23 09:09	02/17/23 22:51	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:51	1
Calcium	**266000**		500		ug/L		02/17/23 09:09	02/17/23 22:51	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Cobalt	**39.9**		0.500		ug/L		02/17/23 09:09	02/17/23 22:51	1
Iron	**95600**		100		ug/L		02/17/23 09:09	02/17/23 22:51	1
Lead	**9.27**		2.50		ug/L		02/17/23 09:09	02/17/23 22:51	1
Magnesium	**13400**		250		ug/L		02/17/23 09:09	02/17/23 22:51	1
Manganese	**296**		5.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Nickel	**40.0**		5.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Potassium	**2580**		1000		ug/L		02/17/23 09:09	02/17/23 22:51	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:51	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Sodium	**77300**		500		ug/L		02/17/23 09:09	02/17/23 22:51	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:51	1
Zinc	**69.7**		20.0		ug/L		02/17/23 09:09	02/17/23 22:51	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16300**		100		ug/L		02/17/23 10:16	02/17/23 20:45	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Arsenic	**4.55**		3.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Barium	**30.0**		5.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Beryllium	**15.5**		0.500		ug/L		02/17/23 10:16	02/17/23 20:45	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:45	1
Calcium	**255000**		500		ug/L		02/17/23 10:16	02/17/23 20:45	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Cobalt	**40.1**		0.500		ug/L		02/17/23 10:16	02/17/23 20:45	1
Iron	**90600**		100		ug/L		02/17/23 10:16	02/17/23 20:45	1
Lead	**9.00**		2.50		ug/L		02/17/23 10:16	02/17/23 20:45	1
Magnesium	**13200**		250		ug/L		02/17/23 10:16	02/17/23 20:45	1
Manganese	**292**		5.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Nickel	**40.2**		5.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Potassium	**2520**		1000		ug/L		02/17/23 10:16	02/17/23 20:45	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:45	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Sodium	**76000**		500		ug/L		02/17/23 10:16	02/17/23 20:45	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:45	1
Zinc	**68.0**		20.0		ug/L		02/17/23 10:16	02/17/23 20:45	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:39	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54589
Date Collected: 02/06/23 15:32
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-28
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:24	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54568
Date Collected: 02/06/23 09:17
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-29
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**195**		100		ug/L		02/17/23 09:09	02/17/23 23:15	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Barium	**126**		5.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Beryllium	**1.43**		0.500		ug/L		02/17/23 09:09	02/17/23 23:15	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:15	1
Calcium	**19100**		500		ug/L		02/17/23 09:09	02/17/23 23:15	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Cobalt	**7.33**		0.500		ug/L		02/17/23 09:09	02/17/23 23:15	1
Iron	**184**		100		ug/L		02/17/23 09:09	02/17/23 23:15	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:15	1
Magnesium	**878**		250		ug/L		02/17/23 09:09	02/17/23 23:15	1
Manganese	**8.85**		5.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Nickel	**6.59**		5.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 23:15	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:15	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Sodium	**51000**		500		ug/L		02/17/23 09:09	02/17/23 23:15	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:15	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 23:15	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**200**		100		ug/L		02/17/23 10:16	02/17/23 20:33	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Barium	**131**		5.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Beryllium	**1.35**		0.500		ug/L		02/17/23 10:16	02/17/23 20:33	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:33	1
Calcium	**20000**		500		ug/L		02/17/23 10:16	02/17/23 20:33	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Cobalt	**7.36**		0.500		ug/L		02/17/23 10:16	02/17/23 20:33	1
Iron	**158**		100		ug/L		02/17/23 10:16	02/17/23 20:33	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:33	1
Magnesium	**901**		250		ug/L		02/17/23 10:16	02/17/23 20:33	1
Manganese	**9.79**		5.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Nickel	**6.37**		5.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 20:33	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:33	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Sodium	**50600**		500		ug/L		02/17/23 10:16	02/17/23 20:33	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:33	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:09	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54568
Date Collected: 02/06/23 09:17
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-29
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:07	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54569
Date Collected: 02/06/23 10:19
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-30
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**165**		100		ug/L		02/17/23 09:09	02/17/23 22:47	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Barium	**208**		5.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:47	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:47	1
Calcium	**263000**		500		ug/L		02/17/23 09:09	02/17/23 22:47	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:47	1
Iron	**3040**		100		ug/L		02/17/23 09:09	02/17/23 22:47	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:47	1
Magnesium	**4710**		250		ug/L		02/17/23 09:09	02/17/23 22:47	1
Manganese	**232**		5.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Potassium	**2040**		1000		ug/L		02/17/23 09:09	02/17/23 22:47	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:47	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Sodium	**20000**		500		ug/L		02/17/23 09:09	02/17/23 22:47	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:47	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:47	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**383**		100		ug/L		02/17/23 10:16	02/17/23 20:13	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Barium	**179**		5.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:13	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:13	1
Calcium	**239000**		500		ug/L		02/17/23 10:16	02/17/23 20:13	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Cobalt	**1.23**		0.500		ug/L		02/17/23 10:16	02/17/23 20:13	1
Iron	**2960**		100		ug/L		02/17/23 10:16	02/17/23 20:13	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:13	1
Magnesium	**4310**		250		ug/L		02/17/23 10:16	02/17/23 20:13	1
Manganese	**206**		5.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Potassium	**1780**		1000		ug/L		02/17/23 10:16	02/17/23 20:13	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:13	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Sodium	**18200**		500		ug/L		02/17/23 10:16	02/17/23 20:13	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:13	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:48	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54569
Date Collected: 02/06/23 10:19
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-30
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 08:42	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54602
Date Collected: 01/30/23 11:26
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-31
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:27	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Barium	**132**		5.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:27	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:27	1
Calcium	**277000**		500		ug/L		02/17/23 09:09	02/17/23 22:27	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Cobalt	**32.1**		0.500		ug/L		02/17/23 09:09	02/17/23 22:27	1
Iron	**135**		100		ug/L		02/17/23 09:09	02/17/23 22:27	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:27	1
Magnesium	**4190**		250		ug/L		02/17/23 09:09	02/17/23 22:27	1
Manganese	**950**		5.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Nickel	**6.66**		5.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Potassium	**2010**		1000		ug/L		02/17/23 09:09	02/17/23 22:27	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:27	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Sodium	**65700**		500		ug/L		02/17/23 09:09	02/17/23 22:27	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:27	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:27	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:01	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Barium	**131**		5.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:01	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:01	1
Calcium	**282000**		500		ug/L		02/17/23 10:16	02/17/23 20:01	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Cobalt	**31.4**		0.500		ug/L		02/17/23 10:16	02/17/23 20:01	1
Iron	**809**		100		ug/L		02/17/23 10:16	02/17/23 20:01	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:01	1
Magnesium	**4230**		250		ug/L		02/17/23 10:16	02/17/23 20:01	1
Manganese	**955**		5.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Nickel	**7.11**		5.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Potassium	**2030**		1000		ug/L		02/17/23 10:16	02/17/23 20:01	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:01	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Sodium	**65100**		500		ug/L		02/17/23 10:16	02/17/23 20:01	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:01	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:20	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54602
Date Collected: 01/30/23 11:26
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-31
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:28	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54604
Lab Sample ID: 680-230663-32
Date Collected: 01/30/23 09:37
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**758**		100		ug/L		02/17/23 09:14	02/17/23 15:08	1
Aluminum	**627**		100		ug/L		02/23/23 10:43	02/24/23 13:22	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Antimony	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Arsenic	3.00	U	3.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Barium	**78.1**		5.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Barium	**79.4**		5.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:08	1
Beryllium	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:22	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:08	1
Cadmium	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:22	1
Calcium	**459000**		5000		ug/L		02/17/23 09:14	02/20/23 18:10	10
Calcium	**417000**		5000		ug/L		02/23/23 10:43	02/24/23 13:54	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Chromium	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Cobalt	**3.01**		0.500		ug/L		02/17/23 09:14	02/17/23 15:08	1
Cobalt	**3.50**		0.500		ug/L		02/23/23 10:43	02/24/23 13:22	1
Iron	**15200**		100		ug/L		02/17/23 09:14	02/17/23 15:08	1
Iron	**15300**		100		ug/L		02/23/23 10:43	02/24/23 13:22	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:08	1
Lead	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:22	1
Magnesium	**8430**		250		ug/L		02/17/23 09:14	02/17/23 15:08	1
Magnesium	**8680**		250		ug/L		02/23/23 10:43	02/24/23 13:22	1
Manganese	**619**		5.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Manganese	**650**		5.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Nickel	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Potassium	**1580**		1000		ug/L		02/17/23 09:14	02/17/23 15:08	1
Potassium	**1570**		1000		ug/L		02/23/23 10:43	02/24/23 13:22	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:08	1
Selenium	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:22	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Silver	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Sodium	**65700**		500		ug/L		02/17/23 09:14	02/17/23 15:08	1
Sodium	**63700**		500		ug/L		02/23/23 10:43	02/24/23 13:22	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:08	1
Thallium	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:22	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:08	1
Zinc	20.0	U	20.0		ug/L		02/23/23 10:43	02/24/23 13:22	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 19:28	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Barium	**74.6**		5.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:28	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:28	1
Calcium	**448000**		500		ug/L		02/17/23 10:16	02/17/23 19:28	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54604
Date Collected: 01/30/23 09:37
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-32
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Cobalt	**2.17**		0.500		ug/L		02/17/23 10:16	02/17/23 19:28	1
Iron	**13000**		100		ug/L		02/17/23 10:16	02/17/23 19:28	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:28	1
Magnesium	**7830**		250		ug/L		02/17/23 10:16	02/17/23 19:28	1
Manganese	**571**		5.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Potassium	**1460**		1000		ug/L		02/17/23 10:16	02/17/23 19:28	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:28	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Sodium	**61700**		500		ug/L		02/17/23 10:16	02/17/23 19:28	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:28	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:24	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:32	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54607

Date Collected: 01/30/23 14:10
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-33

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:57	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Barium	**520**		5.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:57	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:57	1
Calcium	**631000**		5000		ug/L		02/17/23 09:14	02/20/23 18:26	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:57	1
Iron	**16600**		100		ug/L		02/17/23 09:14	02/17/23 15:57	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:57	1
Magnesium	**14700**		250		ug/L		02/17/23 09:14	02/17/23 15:57	1
Manganese	**1150**		5.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Potassium	**4950**		1000		ug/L		02/17/23 09:14	02/17/23 15:57	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:57	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Sodium	**102000**		500		ug/L		02/17/23 09:14	02/17/23 15:57	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:57	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:57	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:19	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Barium	**513**		5.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:19	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:19	1
Calcium	**639000**		5000		ug/L		02/17/23 10:39	02/20/23 19:15	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:19	1
Iron	**16300**		100		ug/L		02/17/23 10:39	02/17/23 18:19	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:19	1
Magnesium	**14400**		250		ug/L		02/17/23 10:39	02/17/23 18:19	1
Manganese	**1140**		5.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Potassium	**4860**		1000		ug/L		02/17/23 10:39	02/17/23 18:19	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:19	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Sodium	**100000**		500		ug/L		02/17/23 10:39	02/17/23 18:19	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:19	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:27	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54607
Date Collected: 01/30/23 14:10
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-33
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:35	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54574

Date Collected: 02/07/23 14:17
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-34

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**166**		100		ug/L		02/17/23 09:14	02/17/23 15:37	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Barium	**19.1**		5.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:37	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:37	1
Calcium	**4940**		500		ug/L		02/17/23 09:14	02/17/23 15:37	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Cobalt	**1.57**		0.500		ug/L		02/17/23 09:14	02/17/23 15:37	1
Iron	**499**		100		ug/L		02/17/23 09:14	02/17/23 15:37	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:37	1
Magnesium	**665**		250		ug/L		02/17/23 09:14	02/17/23 15:37	1
Manganese	**16.6**		5.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 15:37	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:37	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Sodium	**6540**		500		ug/L		02/17/23 09:14	02/17/23 15:37	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:37	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:37	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**172**		100		ug/L		02/17/23 10:16	02/17/23 19:44	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Barium	**22.0**		5.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:44	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:44	1
Calcium	**8080**		500		ug/L		02/17/23 10:16	02/17/23 19:44	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Cobalt	**2.55**		0.500		ug/L		02/17/23 10:16	02/17/23 19:44	1
Iron	**861**		100		ug/L		02/17/23 10:16	02/17/23 19:44	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:44	1
Magnesium	**720**		250		ug/L		02/17/23 10:16	02/17/23 19:44	1
Manganese	**16.0**		5.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 19:44	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:44	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Sodium	**6450**		500		ug/L		02/17/23 10:16	02/17/23 19:44	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:44	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:38	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54574
Lab Sample ID: 680-230663-34
Date Collected: 02/07/23 14:17
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 20:00	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54580
Date Collected: 02/07/23 13:08
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-35
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:17	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Barium	**37.3**		5.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:17	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:17	1
Calcium	**12400**		500		ug/L		02/17/23 09:14	02/17/23 16:17	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Cobalt	**8.47**		0.500		ug/L		02/17/23 09:14	02/17/23 16:17	1
Iron	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:17	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:17	1
Magnesium	**596**		250		ug/L		02/17/23 09:14	02/17/23 16:17	1
Manganese	**457**		5.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 16:17	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:17	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Sodium	**7010**		500		ug/L		02/17/23 09:14	02/17/23 16:17	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:17	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:17	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:43	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Barium	**36.2**		5.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:43	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 22:43	1
Calcium	**12300**		500		ug/L		02/17/23 09:09	02/17/23 22:43	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Cobalt	**7.49**		0.500		ug/L		02/17/23 09:09	02/17/23 22:43	1
Iron	100	U	100		ug/L		02/17/23 09:09	02/17/23 22:43	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:43	1
Magnesium	**623**		250		ug/L		02/17/23 09:09	02/17/23 22:43	1
Manganese	**433**		5.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 22:43	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:43	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Sodium	**6840**		500		ug/L		02/17/23 09:09	02/17/23 22:43	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:43	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 22:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:11	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54580
Date Collected: 02/07/23 13:08
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-35
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:17	02/22/23 08:28	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54584
Lab Sample ID: 680-230663-36
Date Collected: 02/07/23 15:22
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:50	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Barium	**25.8**		5.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:50	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:50	1
Calcium	**5070**		500		ug/L		02/17/23 09:14	02/17/23 16:50	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:50	1
Iron	100	U	100		ug/L		02/17/23 09:14	02/17/23 16:50	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:50	1
Magnesium	**250**		250		ug/L		02/17/23 09:14	02/17/23 16:50	1
Manganese	**64.0**		5.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 16:50	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:50	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Sodium	**4850**		500		ug/L		02/17/23 09:14	02/17/23 16:50	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:50	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 16:50	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:23	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Barium	**36.6**		5.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:23	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:23	1
Calcium	**5000**		500		ug/L		02/17/23 10:39	02/17/23 18:23	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 18:23	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 18:23	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:23	1
Magnesium	**251**		250		ug/L		02/17/23 10:39	02/17/23 18:23	1
Manganese	**63.4**		5.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Potassium	1000	U	1000		ug/L		02/17/23 10:39	02/17/23 18:23	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:23	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Sodium	**4760**		500		ug/L		02/17/23 10:39	02/17/23 18:23	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:23	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 18:23	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:51	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54584
Date Collected: 02/07/23 15:22
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-36
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:00	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54585

Date Collected: 02/07/23 10:24
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-37

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**17000**		100		ug/L		02/17/23 09:09	02/17/23 23:40	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Arsenic	**9.56**		3.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Barium	**39.1**		5.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Beryllium	**11.0**		0.500		ug/L		02/17/23 09:09	02/17/23 23:40	1
Cadmium	**1.28**		0.500		ug/L		02/17/23 09:09	02/17/23 23:40	1
Calcium	**264000**		500		ug/L		02/17/23 09:09	02/17/23 23:40	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Cobalt	**48.0**		0.500		ug/L		02/17/23 09:09	02/17/23 23:40	1
Iron	**179000**		100		ug/L		02/17/23 09:09	02/17/23 23:40	1
Lead	**6.25**		2.50		ug/L		02/17/23 09:09	02/17/23 23:40	1
Magnesium	**55400**		250		ug/L		02/17/23 09:09	02/17/23 23:40	1
Manganese	**437**		5.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Nickel	**32.8**		5.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Potassium	**4590**		1000		ug/L		02/17/23 09:09	02/17/23 23:40	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:40	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Sodium	**74400**		500		ug/L		02/17/23 09:09	02/17/23 23:40	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:40	1
Zinc	**68.5**		20.0		ug/L		02/17/23 09:09	02/17/23 23:40	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**18600**		100		ug/L		02/17/23 10:39	02/17/23 18:43	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Arsenic	**11.6**		3.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Barium	**44.0**		5.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Beryllium	**11.7**		0.500		ug/L		02/17/23 10:39	02/17/23 18:43	1
Cadmium	**1.63**		0.500		ug/L		02/17/23 10:39	02/17/23 18:43	1
Calcium	**288000**		500		ug/L		02/17/23 10:39	02/17/23 18:43	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Cobalt	**53.5**		0.500		ug/L		02/17/23 10:39	02/17/23 18:43	1
Iron	**197000**		100		ug/L		02/17/23 10:39	02/17/23 18:43	1
Lead	**6.40**		2.50		ug/L		02/17/23 10:39	02/17/23 18:43	1
Magnesium	**61500**		250		ug/L		02/17/23 10:39	02/17/23 18:43	1
Manganese	**480**		5.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Nickel	**35.9**		5.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Potassium	**5110**		1000		ug/L		02/17/23 10:39	02/17/23 18:43	1
Selenium	**2.65**		2.50		ug/L		02/17/23 10:39	02/17/23 18:43	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Sodium	**82100**		500		ug/L		02/17/23 10:39	02/17/23 18:43	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:43	1
Zinc	**74.6**		20.0		ug/L		02/17/23 10:39	02/17/23 18:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:34	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54585
Date Collected: 02/07/23 10:24
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-37
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:03	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54591
Date Collected: 02/07/23 11:40
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-38
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11900**		100		ug/L		02/17/23 09:14	02/17/23 16:13	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Barium	**159**		5.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Beryllium	**31.3**		0.500		ug/L		02/17/23 09:14	02/17/23 16:13	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 16:13	1
Calcium	**520000**		5000		ug/L		02/17/23 09:14	02/20/23 18:34	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Cobalt	**198**		0.500		ug/L		02/17/23 09:14	02/17/23 16:13	1
Iron	**71500**		100		ug/L		02/17/23 09:14	02/17/23 16:13	1
Lead	**11.8**		2.50		ug/L		02/17/23 09:14	02/17/23 16:13	1
Magnesium	**19900**		250		ug/L		02/17/23 09:14	02/17/23 16:13	1
Manganese	**209**		5.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Nickel	**198**		5.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Potassium	**1820**		1000		ug/L		02/17/23 09:14	02/17/23 16:13	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:13	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Sodium	**121000**		500		ug/L		02/17/23 09:14	02/17/23 16:13	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:13	1
Zinc	**1210**		20.0		ug/L		02/17/23 09:14	02/17/23 16:13	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11600**		100		ug/L		02/17/23 10:39	02/17/23 17:26	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Barium	**149**		5.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Beryllium	**29.9**		0.500		ug/L		02/17/23 10:39	02/17/23 17:26	1
Cadmium	**0.560**		0.500		ug/L		02/17/23 10:39	02/17/23 17:26	1
Calcium	**541000**		5000		ug/L		02/17/23 10:39	02/20/23 18:46	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Cobalt	**193**		0.500		ug/L		02/17/23 10:39	02/17/23 17:26	1
Iron	**67900**		100		ug/L		02/17/23 10:39	02/17/23 17:26	1
Lead	**11.6**		2.50		ug/L		02/17/23 10:39	02/17/23 17:26	1
Magnesium	**18900**		250		ug/L		02/17/23 10:39	02/17/23 17:26	1
Manganese	**208**		5.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Nickel	**189**		5.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Potassium	**1800**		1000		ug/L		02/17/23 10:39	02/17/23 17:26	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:26	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Sodium	**118000**		500		ug/L		02/17/23 10:39	02/17/23 17:26	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:26	1
Zinc	**1100**		20.0		ug/L		02/17/23 10:39	02/17/23 17:26	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:17	02/22/23 08:25	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54591
Date Collected: 02/07/23 11:40
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-38
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:56	1

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54592
Lab Sample ID: 680-230663-39
Date Collected: 02/07/23 09:14
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**33300**		100		ug/L		02/17/23 09:09	02/17/23 22:03	1
Aluminum	**34900**		100		ug/L		02/23/23 10:43	02/24/23 13:26	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Antimony	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Arsenic	**14.2**		3.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Arsenic	**14.2**		3.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Barium	**28.3**		5.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Barium	**28.0**		5.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Beryllium	**11.6**		0.500		ug/L		02/17/23 09:09	02/17/23 22:03	1
Beryllium	**11.7**		0.500		ug/L		02/23/23 10:43	02/24/23 13:26	1
Cadmium	**1.49**		0.500		ug/L		02/17/23 09:09	02/17/23 22:03	1
Cadmium	**2.45**		0.500		ug/L		02/23/23 10:43	02/24/23 13:26	1
Calcium	**420000**		500		ug/L		02/17/23 09:09	02/17/23 22:03	1
Calcium	**426000**		500		ug/L		02/23/23 10:43	02/24/23 13:26	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Chromium	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Cobalt	**107**		0.500		ug/L		02/17/23 09:09	02/17/23 22:03	1
Cobalt	**111**		0.500		ug/L		02/23/23 10:43	02/24/23 13:26	1
Iron	**203000**		100		ug/L		02/17/23 09:09	02/17/23 22:03	1
Iron	**216000**		100		ug/L		02/23/23 10:43	02/24/23 13:26	1
Lead	**37.8**		2.50		ug/L		02/17/23 09:09	02/17/23 22:03	1
Lead	**40.1**		2.50		ug/L		02/23/23 10:43	02/24/23 13:26	1
Magnesium	**71500**		250		ug/L		02/17/23 09:09	02/17/23 22:03	1
Magnesium	**74200**		250		ug/L		02/23/23 10:43	02/24/23 13:26	1
Manganese	**1580**		5.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Manganese	**1650**		5.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Nickel	**37.1**		5.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Nickel	**39.8**		5.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Potassium	**5020**		1000		ug/L		02/17/23 09:09	02/17/23 22:03	1
Potassium	**5110**		1000		ug/L		02/23/23 10:43	02/24/23 13:26	1
Selenium	**3.37**		2.50		ug/L		02/17/23 09:09	02/17/23 22:03	1
Selenium	**3.03**		2.50		ug/L		02/23/23 10:43	02/24/23 13:26	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Silver	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Sodium	**85600**		500		ug/L		02/17/23 09:09	02/17/23 22:03	1
Sodium	**85400**		500		ug/L		02/23/23 10:43	02/24/23 13:26	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:03	1
Thallium	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:26	1
Zinc	**75.6**		20.0		ug/L		02/17/23 09:09	02/17/23 22:03	1
Zinc	**79.9**		20.0		ug/L		02/23/23 10:43	02/24/23 13:26	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**32500**		100		ug/L		02/17/23 10:16	02/17/23 20:21	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Arsenic	**13.4**		3.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Barium	**30.8**		5.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Beryllium	**11.3**		0.500		ug/L		02/17/23 10:16	02/17/23 20:21	1
Cadmium	**1.31**		0.500		ug/L		02/17/23 10:16	02/17/23 20:21	1
Calcium	**407000**		500		ug/L		02/17/23 10:16	02/17/23 20:21	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54592
Date Collected: 02/07/23 09:14
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-39
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Cobalt	**105**		0.500		ug/L		02/17/23 10:16	02/17/23 20:21	1
Iron	**200000**		100		ug/L		02/17/23 10:16	02/17/23 20:21	1
Lead	**37.3**		2.50		ug/L		02/17/23 10:16	02/17/23 20:21	1
Magnesium	**70200**		250		ug/L		02/17/23 10:16	02/17/23 20:21	1
Manganese	**1540**		5.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Nickel	**37.4**		5.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Potassium	**4960**		1000		ug/L		02/17/23 10:16	02/17/23 20:21	1
Selenium	**3.43**		2.50		ug/L		02/17/23 10:16	02/17/23 20:21	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Sodium	**84600**		500		ug/L		02/17/23 10:16	02/17/23 20:21	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:21	1
Zinc	**74.9**		20.0		ug/L		02/17/23 10:16	02/17/23 20:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 17:55	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:18	02/22/23 09:27	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54564
Date Collected: 02/02/23 09:42
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-40
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 23:44	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Barium	**50.8**		5.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:44	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 23:44	1
Calcium	**962000**		5000		ug/L		02/17/23 09:09	02/20/23 20:20	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Cobalt	**35.3**		0.500		ug/L		02/17/23 09:09	02/17/23 23:44	1
Iron	**10900**		100		ug/L		02/17/23 09:09	02/17/23 23:44	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:44	1
Magnesium	**149000**		250		ug/L		02/17/23 09:09	02/17/23 23:44	1
Manganese	**5120**		5.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Nickel	**16.2**		5.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Potassium	**10200**		1000		ug/L		02/17/23 09:09	02/17/23 23:44	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 23:44	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Sodium	**190000**		500		ug/L		02/17/23 09:09	02/17/23 23:44	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 23:44	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 23:44	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 20:09	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Barium	**54.2**		5.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:09	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 20:09	1
Calcium	**1040000**		5000		ug/L		02/17/23 10:16	02/20/23 19:51	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Cobalt	**36.9**		0.500		ug/L		02/17/23 10:16	02/17/23 20:09	1
Iron	**10500**		100		ug/L		02/17/23 10:16	02/17/23 20:09	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:09	1
Magnesium	**154000**		250		ug/L		02/17/23 10:16	02/17/23 20:09	1
Manganese	**5340**		5.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Nickel	**16.2**		5.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Potassium	**10700**		1000		ug/L		02/17/23 10:16	02/17/23 20:09	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 20:09	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Sodium	**195000**		500		ug/L		02/17/23 10:16	02/17/23 20:09	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 20:09	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 20:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:12	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54564
Date Collected: 02/02/23 09:42
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-40
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:47	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54565

Date Collected: 02/02/23 11:13
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-41

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**25200**		100		ug/L		02/17/23 09:14	02/17/23 16:25	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Arsenic	**4.01**		3.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Barium	**39.5**		5.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Beryllium	**22.3**		0.500		ug/L		02/17/23 09:14	02/17/23 16:25	1
Cadmium	**1.13**		0.500		ug/L		02/17/23 09:14	02/17/23 16:25	1
Calcium	**576000**		5000		ug/L		02/17/23 09:14	02/20/23 18:38	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Cobalt	**46.6**		0.500		ug/L		02/17/23 09:14	02/17/23 16:25	1
Iron	**96400**		100		ug/L		02/17/23 09:14	02/17/23 16:25	1
Lead	**19.8**		2.50		ug/L		02/17/23 09:14	02/17/23 16:25	1
Magnesium	**60700**		250		ug/L		02/17/23 09:14	02/17/23 16:25	1
Manganese	**1170**		5.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Nickel	**46.4**		5.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Potassium	**7580**		1000		ug/L		02/17/23 09:14	02/17/23 16:25	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 16:25	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Sodium	**154000**		500		ug/L		02/17/23 09:14	02/17/23 16:25	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 16:25	1
Zinc	**141**		20.0		ug/L		02/17/23 09:14	02/17/23 16:25	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**24600**		100		ug/L		02/17/23 10:39	02/17/23 18:27	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Arsenic	**3.73**		3.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Barium	**38.6**		5.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Beryllium	**21.8**		0.500		ug/L		02/17/23 10:39	02/17/23 18:27	1
Cadmium	**0.830**		0.500		ug/L		02/17/23 10:39	02/17/23 18:27	1
Calcium	**597000**		5000		ug/L		02/17/23 10:39	02/20/23 19:19	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Cobalt	**45.7**		0.500		ug/L		02/17/23 10:39	02/17/23 18:27	1
Iron	**93500**		100		ug/L		02/17/23 10:39	02/17/23 18:27	1
Lead	**18.9**		2.50		ug/L		02/17/23 10:39	02/17/23 18:27	1
Magnesium	**61100**		250		ug/L		02/17/23 10:39	02/17/23 18:27	1
Manganese	**1150**		5.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Nickel	**44.6**		5.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Potassium	**7490**		1000		ug/L		02/17/23 10:39	02/17/23 18:27	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 18:27	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Sodium	**152000**		500		ug/L		02/17/23 10:39	02/17/23 18:27	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 18:27	1
Zinc	**138**		20.0		ug/L		02/17/23 10:39	02/17/23 18:27	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U F1	0.200		ug/L		02/21/23 11:17	02/22/23 08:08	1
Mercury	0.200	U	0.200		ug/L		02/23/23 10:48	02/23/23 17:57	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54565
Date Collected: 02/02/23 11:13
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-41
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 14:03	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54566
Date Collected: 02/02/23 11:18
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-42
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**24000**		100		ug/L		02/17/23 09:09	02/17/23 22:15	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Arsenic	**3.72**		3.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Barium	**42.9**		5.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Beryllium	**21.7**		0.500		ug/L		02/17/23 09:09	02/17/23 22:15	1
Cadmium	**0.685**		0.500		ug/L		02/17/23 09:09	02/17/23 22:15	1
Calcium	**601000**		5000		ug/L		02/17/23 09:09	02/20/23 19:59	10
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Cobalt	**44.5**		0.500		ug/L		02/17/23 09:09	02/17/23 22:15	1
Iron	**95300**		100		ug/L		02/17/23 09:09	02/17/23 22:15	1
Lead	**17.8**		2.50		ug/L		02/17/23 09:09	02/17/23 22:15	1
Magnesium	**58000**		250		ug/L		02/17/23 09:09	02/17/23 22:15	1
Manganese	**1090**		5.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Nickel	**44.3**		5.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Potassium	**7330**		1000		ug/L		02/17/23 09:09	02/17/23 22:15	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 22:15	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Sodium	**146000**		500		ug/L		02/17/23 09:09	02/17/23 22:15	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 22:15	1
Zinc	**129**		20.0		ug/L		02/17/23 09:09	02/17/23 22:15	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**24700**		100		ug/L		02/17/23 10:16	02/17/23 19:32	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Arsenic	**3.62**		3.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Barium	**43.7**		5.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Beryllium	**22.3**		0.500		ug/L		02/17/23 10:16	02/17/23 19:32	1
Cadmium	**0.820**		0.500		ug/L		02/17/23 10:16	02/17/23 19:32	1
Calcium	**598000**		5000		ug/L		02/17/23 10:16	02/20/23 19:47	10
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Cobalt	**45.4**		0.500		ug/L		02/17/23 10:16	02/17/23 19:32	1
Iron	**98000**		100		ug/L		02/17/23 10:16	02/17/23 19:32	1
Lead	**18.1**		2.50		ug/L		02/17/23 10:16	02/17/23 19:32	1
Magnesium	**59200**		250		ug/L		02/17/23 10:16	02/17/23 19:32	1
Manganese	**1110**		5.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Nickel	**44.7**		5.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Potassium	**7500**		1000		ug/L		02/17/23 10:16	02/17/23 19:32	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:32	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Sodium	**149000**		500		ug/L		02/17/23 10:16	02/17/23 19:32	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:32	1
Zinc	**134**		20.0		ug/L		02/17/23 10:16	02/17/23 19:32	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:50	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54566
Date Collected: 02/02/23 11:18
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-42
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 20:03	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54567
Date Collected: 02/02/23 13:21
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-43
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:49	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Barium	**104**		5.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:49	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:49	1
Calcium	**140000**		500		ug/L		02/17/23 09:14	02/17/23 15:49	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:49	1
Iron	**1800**		100		ug/L		02/17/23 09:14	02/17/23 15:49	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:49	1
Magnesium	**2750**		250		ug/L		02/17/23 09:14	02/17/23 15:49	1
Manganese	**79.3**		5.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Potassium	**1150**		1000		ug/L		02/17/23 09:14	02/17/23 15:49	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:49	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Sodium	**17400**		500		ug/L		02/17/23 09:14	02/17/23 15:49	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:49	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:49	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:59	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Barium	**96.4**		5.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:59	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:59	1
Calcium	**130000**		500		ug/L		02/17/23 10:39	02/17/23 17:59	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:59	1
Iron	**838**		100		ug/L		02/17/23 10:39	02/17/23 17:59	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:59	1
Magnesium	**2590**		250		ug/L		02/17/23 10:39	02/17/23 17:59	1
Manganese	**74.6**		5.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Potassium	**1100**		1000		ug/L		02/17/23 10:39	02/17/23 17:59	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:59	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Sodium	**16200**		500		ug/L		02/17/23 10:39	02/17/23 17:59	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:59	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:59	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:21	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Client Sample ID: AF54567
Date Collected: 02/02/23 13:21
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230663-43
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 19:42	1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-763814/1-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 763814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:10	1
Antimony	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Barium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:10	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:10	1
Calcium	500	U	500		ug/L		02/17/23 06:34	02/17/23 13:10	1
Chromium	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 06:34	02/17/23 13:10	1
Iron	100	U	100		ug/L		02/17/23 06:34	02/17/23 13:10	1
Lead	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:10	1
Magnesium	250	U	250		ug/L		02/17/23 06:34	02/17/23 13:10	1
Manganese	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Nickel	5.00	U	5.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Potassium	1000	U	1000		ug/L		02/17/23 06:34	02/17/23 13:10	1
Selenium	2.50	U	2.50		ug/L		02/17/23 06:34	02/17/23 13:10	1
Silver	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Sodium	500	U	500		ug/L		02/17/23 06:34	02/17/23 13:10	1
Thallium	1.00	U	1.00		ug/L		02/17/23 06:34	02/17/23 13:10	1
Zinc	20.0	U	20.0		ug/L		02/17/23 06:34	02/17/23 13:10	1

Lab Sample ID: LCS 680-763814/2-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 763814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	4944		ug/L		99	80 - 120
Antimony	50.0	50.11		ug/L		100	80 - 120
Arsenic	100	104.3		ug/L		104	80 - 120
Barium	100	96.82		ug/L		97	80 - 120
Beryllium	50.0	50.00		ug/L		100	80 - 120
Cadmium	50.0	49.00		ug/L		98	80 - 120
Calcium	5000	5263		ug/L		105	80 - 120
Chromium	100	106.2		ug/L		106	80 - 120
Cobalt	50.0	51.56		ug/L		103	80 - 120
Iron	5000	5271		ug/L		105	80 - 120
Lead	505	505.9		ug/L		100	80 - 120
Magnesium	5010	4939		ug/L		99	80 - 120
Manganese	400	384.3		ug/L		96	80 - 120
Nickel	100	104.2		ug/L		104	80 - 120
Potassium	6970	7073		ug/L		101	80 - 120
Selenium	100	107.5		ug/L		107	80 - 120
Silver	50.0	50.45		ug/L		101	80 - 120
Sodium	5050	5345		ug/L		106	80 - 120
Thallium	50.0	47.64		ug/L		95	80 - 120
Zinc	100	102.8		ug/L		103	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-763855/1-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 763855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:09	02/17/23 21:54	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Barium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 21:54	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 21:54	1
Calcium	500	U	500		ug/L		02/17/23 09:09	02/17/23 21:54	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:09	02/17/23 21:54	1
Iron	100	U	100		ug/L		02/17/23 09:09	02/17/23 21:54	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 21:54	1
Magnesium	250	U	250		ug/L		02/17/23 09:09	02/17/23 21:54	1
Manganese	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Potassium	1000	U	1000		ug/L		02/17/23 09:09	02/17/23 21:54	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:09	02/17/23 21:54	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Sodium	500	U	500		ug/L		02/17/23 09:09	02/17/23 21:54	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:09	02/17/23 21:54	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:09	02/17/23 21:54	1

Lab Sample ID: LCS 680-763855/2-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 763855

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	4791		ug/L		96	80 - 120
Antimony	50.0	48.59		ug/L		97	80 - 120
Arsenic	100	100.6		ug/L		101	80 - 120
Barium	100	97.75		ug/L		98	80 - 120
Beryllium	50.0	49.25		ug/L		98	80 - 120
Cadmium	50.0	46.68		ug/L		93	80 - 120
Calcium	5000	5218		ug/L		104	80 - 120
Chromium	100	100.0		ug/L		100	80 - 120
Cobalt	50.0	48.70		ug/L		97	80 - 120
Iron	5000	5001		ug/L		100	80 - 120
Lead	505	488.7		ug/L		97	80 - 120
Magnesium	5010	4722		ug/L		94	80 - 120
Manganese	400	370.4		ug/L		93	80 - 120
Nickel	100	97.05		ug/L		97	80 - 120
Potassium	6970	6726		ug/L		96	80 - 120
Selenium	100	97.99		ug/L		98	80 - 120
Silver	50.0	46.95		ug/L		94	80 - 120
Sodium	5050	4965		ug/L		98	80 - 120
Thallium	50.0	46.16		ug/L		92	80 - 120
Zinc	100	95.35		ug/L		95	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-39 MS
Matrix: Water
Analysis Batch: 764050

Client Sample ID: AF54592
Prep Type: Total Recoverable
Prep Batch: 763855

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	33300		5000	37310	4	ug/L		80	75 - 125
Antimony	5.00	U	50.0	54.71		ug/L		109	75 - 125
Arsenic	14.2		100	123.9		ug/L		110	75 - 125
Barium	28.3		100	132.4		ug/L		104	75 - 125
Beryllium	11.6		50.0	62.84		ug/L		103	75 - 125
Cadmium	1.49		50.0	53.26		ug/L		104	75 - 125
Calcium	420000		5000	416200	4	ug/L		-82	75 - 125
Chromium	5.00	U	100	112.6		ug/L		110	75 - 125
Cobalt	107		50.0	158.4		ug/L		104	75 - 125
Iron	203000		5000	207500	4	ug/L		95	75 - 125
Lead	37.8		505	583.0		ug/L		108	75 - 125
Magnesium	71500		5010	73780	4	ug/L		45	75 - 125
Manganese	1580		400	1969		ug/L		98	75 - 125
Nickel	37.1		100	141.1		ug/L		104	75 - 125
Potassium	5020		6970	12070		ug/L		101	75 - 125
Selenium	3.37		100	112.8		ug/L		109	75 - 125
Silver	1.00	U	50.0	51.32		ug/L		103	75 - 125
Sodium	85600		5050	88120	4	ug/L		50	75 - 125
Thallium	1.00	U	50.0	52.61		ug/L		105	75 - 125
Zinc	75.6		100	179.5		ug/L		104	75 - 125

Lab Sample ID: 680-230663-39 MSD
Matrix: Water
Analysis Batch: 764050

Client Sample ID: AF54592
Prep Type: Total Recoverable
Prep Batch: 763855

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	33300		5000	37740	4	ug/L		88	75 - 125	1	20
Antimony	5.00	U	50.0	56.04		ug/L		112	75 - 125	2	20
Arsenic	14.2		100	125.7		ug/L		112	75 - 125	1	20
Barium	28.3		100	134.1		ug/L		106	75 - 125	1	20
Beryllium	11.6		50.0	64.83		ug/L		107	75 - 125	3	20
Cadmium	1.49		50.0	54.70		ug/L		106	75 - 125	3	20
Calcium	420000		5000	422400	4	ug/L		42	75 - 125	1	20
Chromium	5.00	U	100	114.8		ug/L		112	75 - 125	2	20
Cobalt	107		50.0	159.8		ug/L		107	75 - 125	1	20
Iron	203000		5000	208100	4	ug/L		107	75 - 125	0	20
Lead	37.8		505	582.5		ug/L		108	75 - 125	0	20
Magnesium	71500		5010	74360	4	ug/L		57	75 - 125	1	20
Manganese	1580		400	1969		ug/L		98	75 - 125	0	20
Nickel	37.1		100	143.1		ug/L		106	75 - 125	1	20
Potassium	5020		6970	12250		ug/L		104	75 - 125	1	20
Selenium	3.37		100	116.8		ug/L		113	75 - 125	3	20
Silver	1.00	U	50.0	51.85		ug/L		104	75 - 125	1	20
Sodium	85600		5050	88430	4	ug/L		56	75 - 125	0	20
Thallium	1.00	U	50.0	53.49		ug/L		106	75 - 125	2	20
Zinc	75.6		100	178.5		ug/L		103	75 - 125	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-763857/1-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 763857

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:00	1
Antimony	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Barium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:00	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:00	1
Calcium	500	U	500		ug/L		02/17/23 09:14	02/17/23 15:00	1
Chromium	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 09:14	02/17/23 15:00	1
Iron	100	U	100		ug/L		02/17/23 09:14	02/17/23 15:00	1
Lead	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:00	1
Magnesium	250	U	250		ug/L		02/17/23 09:14	02/17/23 15:00	1
Manganese	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Nickel	5.00	U	5.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Potassium	1000	U	1000		ug/L		02/17/23 09:14	02/17/23 15:00	1
Selenium	2.50	U	2.50		ug/L		02/17/23 09:14	02/17/23 15:00	1
Silver	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Sodium	500	U	500		ug/L		02/17/23 09:14	02/17/23 15:00	1
Thallium	1.00	U	1.00		ug/L		02/17/23 09:14	02/17/23 15:00	1
Zinc	20.0	U	20.0		ug/L		02/17/23 09:14	02/17/23 15:00	1

Lab Sample ID: LCS 680-763857/2-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 763857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5308		ug/L		106	80 - 120
Antimony	50.0	53.52		ug/L		107	80 - 120
Arsenic	100	111.0		ug/L		111	80 - 120
Barium	100	104.2		ug/L		104	80 - 120
Beryllium	50.0	51.07		ug/L		102	80 - 120
Cadmium	50.0	52.28		ug/L		105	80 - 120
Calcium	5000	5522		ug/L		110	80 - 120
Chromium	100	113.6		ug/L		114	80 - 120
Cobalt	50.0	55.33		ug/L		111	80 - 120
Iron	5000	5477		ug/L		110	80 - 120
Lead	505	540.9		ug/L		107	80 - 120
Magnesium	5010	5310		ug/L		106	80 - 120
Manganese	400	409.8		ug/L		102	80 - 120
Nickel	100	110.6		ug/L		111	80 - 120
Potassium	6970	7386		ug/L		106	80 - 120
Selenium	100	109.2		ug/L		109	80 - 120
Silver	50.0	52.59		ug/L		105	80 - 120
Sodium	5050	5650		ug/L		112	80 - 120
Thallium	50.0	51.27		ug/L		103	80 - 120
Zinc	100	108.7		ug/L		109	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-32 MS
Matrix: Water
Analysis Batch: 764050

Client Sample ID: AF54604
Prep Type: Total Recoverable
Prep Batch: 763857

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	758		5000	6365		ug/L		112	75 - 125
Antimony	5.00	U	50.0	55.90		ug/L		112	75 - 125
Arsenic	3.00	U	100	119.8		ug/L		118	75 - 125
Barium	78.1		100	186.3		ug/L		108	75 - 125
Beryllium	0.500	U	50.0	54.78		ug/L		109	75 - 125
Cadmium	0.500	U	50.0	54.70		ug/L		109	75 - 125
Chromium	5.00	U	100	121.0		ug/L		119	75 - 125
Cobalt	3.01		50.0	60.88		ug/L		116	75 - 125
Iron	15200		5000	20450		ug/L		106	75 - 125
Lead	2.50	U	505	579.4		ug/L		115	75 - 125
Magnesium	8430		5010	13980		ug/L		111	75 - 125
Manganese	619		400	1052		ug/L		108	75 - 125
Nickel	5.00	U	100	116.2		ug/L		114	75 - 125
Potassium	1580		6970	9290		ug/L		111	75 - 125
Selenium	2.50	U	100	121.1		ug/L		121	75 - 125
Silver	1.00	U	50.0	53.63		ug/L		107	75 - 125
Sodium	65700		5050	71200	4	ug/L		108	75 - 125
Thallium	1.00	U	50.0	54.97		ug/L		110	75 - 125
Zinc	20.0	U	100	118.6		ug/L		110	75 - 125

Lab Sample ID: 680-230663-32 MS
Matrix: Water
Analysis Batch: 764211

Client Sample ID: AF54604
Prep Type: Total Recoverable
Prep Batch: 763857

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	459000		5000	433300	4	ug/L		-518	75 - 125

Lab Sample ID: 680-230663-32 MSD
Matrix: Water
Analysis Batch: 764050

Client Sample ID: AF54604
Prep Type: Total Recoverable
Prep Batch: 763857

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	758		5000	6273		ug/L		110	75 - 125	1	20
Antimony	5.00	U	50.0	54.03		ug/L		108	75 - 125	3	20
Arsenic	3.00	U	100	118.9		ug/L		118	75 - 125	1	20
Barium	78.1		100	183.5		ug/L		105	75 - 125	2	20
Beryllium	0.500	U	50.0	53.85		ug/L		107	75 - 125	2	20
Cadmium	0.500	U	50.0	54.93		ug/L		109	75 - 125	0	20
Chromium	5.00	U	100	116.3		ug/L		114	75 - 125	4	20
Cobalt	3.01		50.0	59.28		ug/L		113	75 - 125	3	20
Iron	15200		5000	20210		ug/L		101	75 - 125	1	20
Lead	2.50	U	505	548.6		ug/L		109	75 - 125	5	20
Magnesium	8430		5010	13730		ug/L		106	75 - 125	2	20
Manganese	619		400	1024		ug/L		101	75 - 125	3	20
Nickel	5.00	U	100	114.1		ug/L		112	75 - 125	2	20
Potassium	1580		6970	8999		ug/L		106	75 - 125	3	20
Selenium	2.50	U	100	112.7		ug/L		113	75 - 125	7	20
Silver	1.00	U	50.0	52.31		ug/L		105	75 - 125	2	20
Sodium	65700		5050	70890	4	ug/L		102	75 - 125	0	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-32 MSD
Client Sample ID: AF54604
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764050
Prep Batch: 763857

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	1.00	U	50.0	53.08		ug/L		106	75 - 125	3	20
Zinc	20.0	U	100	115.2		ug/L		106	75 - 125	3	20

Lab Sample ID: 680-230663-32 MSD
Client Sample ID: AF54604
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764211
Prep Batch: 763857

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	459000		5000	473100	4	ug/L		278	75 - 125	9	20

Lab Sample ID: MB 680-763871/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764050
Prep Batch: 763871

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:16	02/17/23 19:08	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Barium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:08	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:08	1
Calcium	500	U	500		ug/L		02/17/23 10:16	02/17/23 19:08	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:16	02/17/23 19:08	1
Iron	100	U	100		ug/L		02/17/23 10:16	02/17/23 19:08	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:08	1
Magnesium	250	U	250		ug/L		02/17/23 10:16	02/17/23 19:08	1
Manganese	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Potassium	1000	U	1000		ug/L		02/17/23 10:16	02/17/23 19:08	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:16	02/17/23 19:08	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Sodium	500	U	500		ug/L		02/17/23 10:16	02/17/23 19:08	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:16	02/17/23 19:08	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:16	02/17/23 19:08	1

Lab Sample ID: LCS 680-763871/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764050
Prep Batch: 763871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5400		ug/L		108	80 - 120
Antimony	50.0	54.26		ug/L		109	80 - 120
Arsenic	100	112.6		ug/L		113	80 - 120
Barium	100	106.4		ug/L		106	80 - 120
Beryllium	50.0	53.26		ug/L		107	80 - 120
Cadmium	50.0	52.74		ug/L		105	80 - 120
Calcium	5000	5672		ug/L		113	80 - 120
Chromium	100	115.1		ug/L		115	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-763871/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764050
Prep Batch: 763871

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	50.0	55.73		ug/L		111	80 - 120
Iron	5000	5555		ug/L		111	80 - 120
Lead	505	546.2		ug/L		108	80 - 120
Magnesium	5010	5358		ug/L		107	80 - 120
Manganese	400	410.7		ug/L		103	80 - 120
Nickel	100	109.5		ug/L		110	80 - 120
Potassium	6970	7519		ug/L		108	80 - 120
Selenium	100	115.0		ug/L		115	80 - 120
Silver	50.0	52.31		ug/L		105	80 - 120
Sodium	5050	5659		ug/L		112	80 - 120
Thallium	50.0	51.57		ug/L		103	80 - 120
Zinc	100	108.3		ug/L		108	80 - 120

Lab Sample ID: MB 680-763876/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764050
Prep Batch: 763876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:06	1
Antimony	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Arsenic	3.00	U	3.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Barium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Beryllium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:06	1
Cadmium	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:06	1
Calcium	500	U	500		ug/L		02/17/23 10:39	02/17/23 17:06	1
Chromium	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Cobalt	0.500	U	0.500		ug/L		02/17/23 10:39	02/17/23 17:06	1
Iron	100	U	100		ug/L		02/17/23 10:39	02/17/23 17:06	1
Lead	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:06	1
Magnesium	250	U	250		ug/L		02/17/23 10:39	02/17/23 17:06	1
Manganese	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Nickel	5.00	U	5.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Potassium	1000	U	1000		ug/L		02/17/23 10:39	02/17/23 17:06	1
Selenium	2.50	U	2.50		ug/L		02/17/23 10:39	02/17/23 17:06	1
Silver	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Sodium	500	U	500		ug/L		02/17/23 10:39	02/17/23 17:06	1
Thallium	1.00	U	1.00		ug/L		02/17/23 10:39	02/17/23 17:06	1
Zinc	20.0	U	20.0		ug/L		02/17/23 10:39	02/17/23 17:06	1

Lab Sample ID: LCS 680-763876/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 764050
Prep Batch: 763876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5096		ug/L		102	80 - 120
Antimony	50.0	50.87		ug/L		102	80 - 120
Arsenic	100	107.3		ug/L		107	80 - 120
Barium	100	99.35		ug/L		99	80 - 120
Beryllium	50.0	49.81		ug/L		100	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-763876/2-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 763876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	50.0	49.66		ug/L		99	80 - 120
Calcium	5000	5054		ug/L		101	80 - 120
Chromium	100	109.2		ug/L		109	80 - 120
Cobalt	50.0	53.67		ug/L		107	80 - 120
Iron	5000	5078		ug/L		102	80 - 120
Lead	505	518.8		ug/L		103	80 - 120
Magnesium	5010	5077		ug/L		101	80 - 120
Manganese	400	393.5		ug/L		98	80 - 120
Nickel	100	104.4		ug/L		104	80 - 120
Potassium	6970	7063		ug/L		101	80 - 120
Selenium	100	108.3		ug/L		108	80 - 120
Silver	50.0	49.70		ug/L		99	80 - 120
Sodium	5050	5390		ug/L		107	80 - 120
Thallium	50.0	48.94		ug/L		98	80 - 120
Zinc	100	102.4		ug/L		102	80 - 120

Lab Sample ID: MB 680-764648/1-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 764648

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/23/23 10:43	02/24/23 13:09	1
Antimony	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Arsenic	3.00	U	3.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Barium	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Beryllium	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:09	1
Cadmium	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:09	1
Calcium	500	U	500		ug/L		02/23/23 10:43	02/24/23 13:09	1
Chromium	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Cobalt	0.500	U	0.500		ug/L		02/23/23 10:43	02/24/23 13:09	1
Iron	100	U	100		ug/L		02/23/23 10:43	02/24/23 13:09	1
Lead	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:09	1
Magnesium	250	U	250		ug/L		02/23/23 10:43	02/24/23 13:09	1
Manganese	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Nickel	5.00	U	5.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Potassium	1000	U	1000		ug/L		02/23/23 10:43	02/24/23 13:09	1
Selenium	2.50	U	2.50		ug/L		02/23/23 10:43	02/24/23 13:09	1
Silver	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Sodium	500	U	500		ug/L		02/23/23 10:43	02/24/23 13:09	1
Thallium	1.00	U	1.00		ug/L		02/23/23 10:43	02/24/23 13:09	1
Zinc	20.0	U	20.0		ug/L		02/23/23 10:43	02/24/23 13:09	1

Lab Sample ID: LCS 680-764648/2-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764648

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5278		ug/L		106	80 - 120
Antimony	50.0	52.40		ug/L		105	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-764648/2-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764648

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	100	105.3		ug/L		105	80 - 120
Barium	100	102.2		ug/L		102	80 - 120
Beryllium	50.0	48.65		ug/L		97	80 - 120
Cadmium	50.0	51.84		ug/L		104	80 - 120
Calcium	5000	5254		ug/L		105	80 - 120
Chromium	100	100.9		ug/L		101	80 - 120
Cobalt	50.0	53.28		ug/L		107	80 - 120
Iron	5000	5270		ug/L		105	80 - 120
Lead	505	514.1		ug/L		102	80 - 120
Magnesium	5010	5176		ug/L		103	80 - 120
Manganese	400	416.7		ug/L		104	80 - 120
Nickel	100	105.4		ug/L		105	80 - 120
Potassium	6970	7095		ug/L		102	80 - 120
Selenium	100	106.4		ug/L		106	80 - 120
Silver	50.0	51.05		ug/L		102	80 - 120
Sodium	5050	5130		ug/L		102	80 - 120
Thallium	50.0	49.58		ug/L		99	80 - 120
Zinc	100	105.3		ug/L		105	80 - 120

Lab Sample ID: LCSD 680-764648/3-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 764648

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	5000	5293		ug/L		106	80 - 120	0	20
Antimony	50.0	52.78		ug/L		106	80 - 120	1	20
Arsenic	100	106.7		ug/L		107	80 - 120	1	20
Barium	100	102.6		ug/L		103	80 - 120	0	20
Beryllium	50.0	50.72		ug/L		101	80 - 120	4	20
Cadmium	50.0	51.83		ug/L		104	80 - 120	0	20
Calcium	5000	5194		ug/L		104	80 - 120	1	20
Chromium	100	101.7		ug/L		102	80 - 120	1	20
Cobalt	50.0	53.60		ug/L		107	80 - 120	1	20
Iron	5000	5225		ug/L		105	80 - 120	1	20
Lead	505	533.5		ug/L		106	80 - 120	4	20
Magnesium	5010	5264		ug/L		105	80 - 120	2	20
Manganese	400	424.1		ug/L		106	80 - 120	2	20
Nickel	100	106.3		ug/L		106	80 - 120	1	20
Potassium	6970	7164		ug/L		103	80 - 120	1	20
Selenium	100	105.3		ug/L		105	80 - 120	1	20
Silver	50.0	50.92		ug/L		102	80 - 120	0	20
Sodium	5050	5184		ug/L		103	80 - 120	1	20
Thallium	50.0	50.87		ug/L		102	80 - 120	3	20
Zinc	100	104.6		ug/L		105	80 - 120	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-19 MS
Matrix: Water
Analysis Batch: 764050

Client Sample ID: AF54563
Prep Type: Dissolved
Prep Batch: 763871

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	170		5000	5180		ug/L		100	75 - 125
Antimony	5.00	U	50.0	54.60		ug/L		109	75 - 125
Arsenic	3.00	U	100	111.4		ug/L		109	75 - 125
Barium	56.0		100	155.7		ug/L		100	75 - 125
Beryllium	0.500	U	50.0	51.06		ug/L		102	75 - 125
Cadmium	0.500	U	50.0	50.04		ug/L		100	75 - 125
Chromium	5.00	U	100	107.8		ug/L		108	75 - 125
Cobalt	9.88		50.0	61.01		ug/L		102	75 - 125
Iron	234000		5000	228400	4	ug/L		-117	75 - 125
Lead	2.50	U	505	518.0		ug/L		103	75 - 125
Magnesium	335000		5010	340600	4	ug/L		118	75 - 125
Manganese	9280		400	9576	4	ug/L		75	75 - 125
Nickel	5.00	U	100	103.8		ug/L		99	75 - 125
Potassium	18000		6970	25960		ug/L		114	75 - 125
Selenium	2.50	U	100	107.2		ug/L		106	75 - 125
Silver	1.00	U	50.0	49.32		ug/L		99	75 - 125
Sodium	186000		5050	190300	4	ug/L		82	75 - 125
Thallium	1.00	U	50.0	49.88		ug/L		100	75 - 125
Zinc	20.0	U	100	103.8		ug/L		97	75 - 125

Lab Sample ID: 680-230663-19 MS
Matrix: Water
Analysis Batch: 764211

Client Sample ID: AF54563
Prep Type: Dissolved
Prep Batch: 763871

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	1200000		5000	1150000	4	ug/L		-1074	75 - 125

Lab Sample ID: 680-230663-19 MSD
Matrix: Water
Analysis Batch: 764050

Client Sample ID: AF54563
Prep Type: Dissolved
Prep Batch: 763871

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	170		5000	5115		ug/L		99	75 - 125	1	20
Antimony	5.00	U	50.0	52.28		ug/L		105	75 - 125	4	20
Arsenic	3.00	U	100	110.3		ug/L		107	75 - 125	1	20
Barium	56.0		100	154.6		ug/L		99	75 - 125	1	20
Beryllium	0.500	U	50.0	50.09		ug/L		100	75 - 125	2	20
Cadmium	0.500	U	50.0	50.17		ug/L		100	75 - 125	0	20
Chromium	5.00	U	100	105.5		ug/L		106	75 - 125	2	20
Cobalt	9.88		50.0	59.84		ug/L		100	75 - 125	2	20
Iron	234000		5000	221700	4	ug/L		-252	75 - 125	3	20
Lead	2.50	U	505	510.2		ug/L		101	75 - 125	2	20
Magnesium	335000		5010	327800	4	ug/L		-137	75 - 125	4	20
Manganese	9280		400	9455	4	ug/L		45	75 - 125	1	20
Nickel	5.00	U	100	105.6		ug/L		101	75 - 125	2	20
Potassium	18000		6970	25470		ug/L		107	75 - 125	2	20
Selenium	2.50	U	100	104.0		ug/L		103	75 - 125	3	20
Silver	1.00	U	50.0	48.26		ug/L		97	75 - 125	2	20
Sodium	186000		5050	184400	4	ug/L		-36	75 - 125	3	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-19 MSD — **Client Sample ID: AF54563**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 764050 — **Prep Batch: 763871**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	1.00	U	50.0	49.47		ug/L		99	75 - 125	1	20
Zinc	20.0	U	100	101.3		ug/L		95	75 - 125	2	20

Lab Sample ID: 680-230663-19 MSD — **Client Sample ID: AF54563**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 764211 — **Prep Batch: 763871**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	1200000		5000	1157000	4	ug/L		-937	75 - 125	1	20

Lab Sample ID: 680-230663-25 MS — **Client Sample ID: AF54586**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 764050 — **Prep Batch: 763876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	21800		5000	25810	4	ug/L		80	75 - 125
Antimony	5.00	U	50.0	55.34		ug/L		111	75 - 125
Arsenic	8.49		100	116.6		ug/L		108	75 - 125
Barium	15.9		100	119.2		ug/L		103	75 - 125
Beryllium	3.84		50.0	55.54		ug/L		103	75 - 125
Cadmium	0.885		50.0	56.40		ug/L		111	75 - 125
Calcium	279000		5000	270900	4	ug/L		-162	75 - 125
Chromium	5.00	U	100	112.2		ug/L		111	75 - 125
Cobalt	20.7		50.0	73.19		ug/L		105	75 - 125
Iron	74400		5000	76670	4	ug/L		45	75 - 125
Lead	21.2		505	557.7		ug/L		106	75 - 125
Magnesium	22500		5010	26270	4	ug/L		75	75 - 125
Manganese	314		400	711.7		ug/L		100	75 - 125
Nickel	10.7		100	118.1		ug/L		107	75 - 125
Potassium	2520		6970	9554		ug/L		101	75 - 125
Selenium	2.50	U	100	113.0		ug/L		111	75 - 125
Silver	1.00	U	50.0	52.83		ug/L		106	75 - 125
Sodium	9110		5050	14080		ug/L		99	75 - 125
Thallium	1.00	U	50.0	53.04		ug/L		106	75 - 125
Zinc	20.0	U	100	115.7		ug/L		104	75 - 125

Lab Sample ID: 680-230663-25 MSD — **Client Sample ID: AF54586**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 764050 — **Prep Batch: 763876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	21800		5000	26150	4	ug/L		87	75 - 125	1	20
Antimony	5.00	U	50.0	55.05		ug/L		110	75 - 125	1	20
Arsenic	8.49		100	117.7		ug/L		109	75 - 125	1	20
Barium	15.9		100	118.4		ug/L		103	75 - 125	1	20
Beryllium	3.84		50.0	55.08		ug/L		102	75 - 125	1	20
Cadmium	0.885		50.0	54.91		ug/L		108	75 - 125	3	20
Calcium	279000		5000	265600	4	ug/L		-268	75 - 125	2	20
Chromium	5.00	U	100	111.6		ug/L		110	75 - 125	1	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-25 MSD — **Client Sample ID: AF54586**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 764050 — **Prep Batch: 763876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	20.7		50.0	74.26		ug/L		107	75 - 125	1	20
Iron	74400		5000	74740	4	ug/L		6	75 - 125	3	20
Lead	21.2		505	556.5		ug/L		106	75 - 125	0	20
Magnesium	22500		5010	27900	4	ug/L		107	75 - 125	6	20
Manganese	314		400	722.1		ug/L		102	75 - 125	1	20
Nickel	10.7		100	118.2		ug/L		108	75 - 125	0	20
Potassium	2520		6970	9551		ug/L		101	75 - 125	0	20
Selenium	2.50	U	100	114.7		ug/L		113	75 - 125	1	20
Silver	1.00	U	50.0	51.97		ug/L		104	75 - 125	2	20
Sodium	9110		5050	14560		ug/L		108	75 - 125	3	20
Thallium	1.00	U	50.0	52.71		ug/L		105	75 - 125	1	20
Zinc	20.0	U	100	117.1		ug/L		105	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-764131/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 764337 — **Prep Batch: 764131**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:19	02/21/23 11:17	1

Lab Sample ID: LCS 680-764131/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 764337 — **Prep Batch: 764131**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.431		ug/L		97	80 - 120

Lab Sample ID: MB 680-764146/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 764393 — **Prep Batch: 764146**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/23 13:43	02/21/23 13:18	1

Lab Sample ID: LCS 680-764146/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 764393 — **Prep Batch: 764146**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.394		ug/L		96	80 - 120

Lab Sample ID: MB 680-764263/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 764393 — **Prep Batch: 764263**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 16:46	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 680-764263/2-A
Matrix: Water
Analysis Batch: 764393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 764263

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.598		ug/L		104	80 - 120		

Lab Sample ID: 680-230663-2 MS
Matrix: Water
Analysis Batch: 764393

Client Sample ID: AF54594
Prep Type: Total/NA
Prep Batch: 764263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	0.8410		ug/L		84	80 - 120		

Lab Sample ID: 680-230663-2 MSD
Matrix: Water
Analysis Batch: 764393

Client Sample ID: AF54594
Prep Type: Total/NA
Prep Batch: 764263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	0.8775		ug/L		88	80 - 120	4	20

Lab Sample ID: MB 680-764264/1-A
Matrix: Water
Analysis Batch: 764393

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 764264

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 18:30	1

Lab Sample ID: LCS 680-764264/2-A
Matrix: Water
Analysis Batch: 764393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 764264

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.287		ug/L		91	80 - 120		

Lab Sample ID: 680-230663-12 MS
Matrix: Water
Analysis Batch: 764393

Client Sample ID: AF54601
Prep Type: Total/NA
Prep Batch: 764264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	0.8528		ug/L		85	80 - 120		

Lab Sample ID: 680-230663-12 MSD
Matrix: Water
Analysis Batch: 764393

Client Sample ID: AF54601
Prep Type: Total/NA
Prep Batch: 764264

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	0.8449		ug/L		84	80 - 120	1	20

Lab Sample ID: MB 680-764295/1-A
Matrix: Water
Analysis Batch: 764458

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 764295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/21/23 11:17	02/22/23 08:01	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 680-764295/2-A
Matrix: Water
Analysis Batch: 764458

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 764295

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.299		ug/L		92	80 - 120		

Lab Sample ID: 680-230663-41 MS
Matrix: Water
Analysis Batch: 764458

Client Sample ID: AF54565
Prep Type: Total/NA
Prep Batch: 764295

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U F1	1.00	0.3613	F1	ug/L		36	80 - 120		

Lab Sample ID: 680-230663-41 MSD
Matrix: Water
Analysis Batch: 764458

Client Sample ID: AF54565
Prep Type: Total/NA
Prep Batch: 764295

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U F1	1.00	0.3744	F1	ug/L		37	80 - 120	4	20

Lab Sample ID: MB 680-764655/1-A
Matrix: Water
Analysis Batch: 764851

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 764655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/23/23 10:48	02/23/23 16:56	1

Lab Sample ID: LCS 680-764655/2-A
Matrix: Water
Analysis Batch: 764851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 764655

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.417		ug/L		97	80 - 120		

Lab Sample ID: 680-230663-5 MS
Matrix: Water
Analysis Batch: 764393

Client Sample ID: AF54595
Prep Type: Dissolved
Prep Batch: 764146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	0.9829		ug/L		98	80 - 120		

Lab Sample ID: 680-230663-5 MSD
Matrix: Water
Analysis Batch: 764393

Client Sample ID: AF54595
Prep Type: Dissolved
Prep Batch: 764146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	0.9367		ug/L		94	80 - 120	5	20

Metals

Prep Batch: 763814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-7	AF54572	Dissolved	Water	3005A	
680-230663-7	AF54572	Total Recoverable	Water	3005A	
680-230663-8	AF54597	Dissolved	Water	3005A	
680-230663-8	AF54597	Total Recoverable	Water	3005A	
680-230663-9	AF54598	Dissolved	Water	3005A	
680-230663-9	AF54598	Total Recoverable	Water	3005A	
MB 680-763814/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-763814/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 763855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Total Recoverable	Water	3005A	
680-230663-4	AF54583	Total Recoverable	Water	3005A	
680-230663-5	AF54595	Total Recoverable	Water	3005A	
680-230663-11	AF54570	Total Recoverable	Water	3005A	
680-230663-12	AF54601	Total Recoverable	Water	3005A	
680-230663-20	AF54603	Dissolved	Water	3005A	
680-230663-20	AF54603	Total Recoverable	Water	3005A	
680-230663-21	AF54558	Total Recoverable	Water	3005A	
680-230663-22	AF54571	Total Recoverable	Water	3005A	
680-230663-24	AF54557	Total Recoverable	Water	3005A	
680-230663-27	AF54588	Total Recoverable	Water	3005A	
680-230663-28	AF54589	Total Recoverable	Water	3005A	
680-230663-29	AF54568	Total Recoverable	Water	3005A	
680-230663-30	AF54569	Total Recoverable	Water	3005A	
680-230663-31	AF54602	Total Recoverable	Water	3005A	
680-230663-35	AF54580	Dissolved	Water	3005A	
680-230663-37	AF54585	Total Recoverable	Water	3005A	
680-230663-39	AF54592	Total Recoverable	Water	3005A	
680-230663-40	AF54564	Total Recoverable	Water	3005A	
680-230663-42	AF54566	Total Recoverable	Water	3005A	
MB 680-763855/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-763855/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-230663-39 MS	AF54592	Total Recoverable	Water	3005A	
680-230663-39 MSD	AF54592	Total Recoverable	Water	3005A	

Prep Batch: 763857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-2	AF54594	Total Recoverable	Water	3005A	
680-230663-6	AF54596	Total Recoverable	Water	3005A	
680-230663-10	AF54600	Total Recoverable	Water	3005A	
680-230663-13	AF54605	Total Recoverable	Water	3005A	
680-230663-14	AF54606	Total Recoverable	Water	3005A	
680-230663-16	AF54560	Total Recoverable	Water	3005A	
680-230663-17	AF54561	Total Recoverable	Water	3005A	
680-230663-18	AF54562	Total Recoverable	Water	3005A	
680-230663-19	AF54563	Total Recoverable	Water	3005A	
680-230663-23	AF54599	Total Recoverable	Water	3005A	
680-230663-25	AF54586	Total Recoverable	Water	3005A	
680-230663-26	AF54587	Total Recoverable	Water	3005A	
680-230663-32	AF54604	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 763857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-33	AF54607	Total Recoverable	Water	3005A	
680-230663-34	AF54574	Total Recoverable	Water	3005A	
680-230663-35	AF54580	Total Recoverable	Water	3005A	
680-230663-36	AF54584	Total Recoverable	Water	3005A	
680-230663-38	AF54591	Total Recoverable	Water	3005A	
680-230663-41	AF54565	Total Recoverable	Water	3005A	
680-230663-43	AF54567	Total Recoverable	Water	3005A	
MB 680-763857/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-763857/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-230663-32 MS	AF54604	Total Recoverable	Water	3005A	
680-230663-32 MSD	AF54604	Total Recoverable	Water	3005A	

Prep Batch: 763871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Dissolved	Water	3005A	
680-230663-2	AF54594	Dissolved	Water	3005A	
680-230663-6	AF54596	Dissolved	Water	3005A	
680-230663-10	AF54600	Dissolved	Water	3005A	
680-230663-11	AF54570	Dissolved	Water	3005A	
680-230663-12	AF54601	Dissolved	Water	3005A	
680-230663-14	AF54606	Dissolved	Water	3005A	
680-230663-15	AF54559	Dissolved	Water	3005A	
680-230663-19	AF54563	Dissolved	Water	3005A	
680-230663-24	AF54557	Dissolved	Water	3005A	
680-230663-26	AF54587	Dissolved	Water	3005A	
680-230663-28	AF54589	Dissolved	Water	3005A	
680-230663-29	AF54568	Dissolved	Water	3005A	
680-230663-30	AF54569	Dissolved	Water	3005A	
680-230663-31	AF54602	Dissolved	Water	3005A	
680-230663-32	AF54604	Dissolved	Water	3005A	
680-230663-34	AF54574	Dissolved	Water	3005A	
680-230663-39	AF54592	Dissolved	Water	3005A	
680-230663-40	AF54564	Dissolved	Water	3005A	
680-230663-42	AF54566	Dissolved	Water	3005A	
MB 680-763871/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-763871/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-230663-19 MS	AF54563	Dissolved	Water	3005A	
680-230663-19 MSD	AF54563	Dissolved	Water	3005A	

Prep Batch: 763876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-3	AF54582	Dissolved	Water	3005A	
680-230663-3	AF54582	Total Recoverable	Water	3005A	
680-230663-4	AF54583	Dissolved	Water	3005A	
680-230663-5	AF54595	Dissolved	Water	3005A	
680-230663-13	AF54605	Dissolved	Water	3005A	
680-230663-15	AF54559	Total Recoverable	Water	3005A	
680-230663-16	AF54560	Dissolved	Water	3005A	
680-230663-17	AF54561	Dissolved	Water	3005A	
680-230663-18	AF54562	Dissolved	Water	3005A	
680-230663-21	AF54558	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 763876 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-22	AF54571	Dissolved	Water	3005A	
680-230663-23	AF54599	Dissolved	Water	3005A	
680-230663-25	AF54586	Dissolved	Water	3005A	
680-230663-27	AF54588	Dissolved	Water	3005A	
680-230663-33	AF54607	Dissolved	Water	3005A	
680-230663-36	AF54584	Dissolved	Water	3005A	
680-230663-37	AF54585	Dissolved	Water	3005A	
680-230663-38	AF54591	Dissolved	Water	3005A	
680-230663-41	AF54565	Dissolved	Water	3005A	
680-230663-43	AF54567	Dissolved	Water	3005A	
MB 680-763876/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-763876/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-230663-25 MS	AF54586	Dissolved	Water	3005A	
680-230663-25 MSD	AF54586	Dissolved	Water	3005A	

Analysis Batch: 764050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Dissolved	Water	6020B	763871
680-230663-1	AF54593	Total Recoverable	Water	6020B	763855
680-230663-2	AF54594	Dissolved	Water	6020B	763871
680-230663-2	AF54594	Total Recoverable	Water	6020B	763857
680-230663-3	AF54582	Dissolved	Water	6020B	763876
680-230663-3	AF54582	Total Recoverable	Water	6020B	763876
680-230663-4	AF54583	Dissolved	Water	6020B	763876
680-230663-4	AF54583	Total Recoverable	Water	6020B	763855
680-230663-5	AF54595	Dissolved	Water	6020B	763876
680-230663-5	AF54595	Total Recoverable	Water	6020B	763855
680-230663-6	AF54596	Dissolved	Water	6020B	763871
680-230663-6	AF54596	Total Recoverable	Water	6020B	763857
680-230663-7	AF54572	Dissolved	Water	6020B	763814
680-230663-7	AF54572	Total Recoverable	Water	6020B	763814
680-230663-8	AF54597	Dissolved	Water	6020B	763814
680-230663-8	AF54597	Total Recoverable	Water	6020B	763814
680-230663-9	AF54598	Dissolved	Water	6020B	763814
680-230663-9	AF54598	Total Recoverable	Water	6020B	763814
680-230663-10	AF54600	Dissolved	Water	6020B	763871
680-230663-10	AF54600	Total Recoverable	Water	6020B	763857
680-230663-11	AF54570	Dissolved	Water	6020B	763871
680-230663-11	AF54570	Total Recoverable	Water	6020B	763855
680-230663-12	AF54601	Dissolved	Water	6020B	763871
680-230663-12	AF54601	Total Recoverable	Water	6020B	763855
680-230663-13	AF54605	Dissolved	Water	6020B	763876
680-230663-13	AF54605	Total Recoverable	Water	6020B	763857
680-230663-14	AF54606	Dissolved	Water	6020B	763871
680-230663-14	AF54606	Total Recoverable	Water	6020B	763857
680-230663-15	AF54559	Dissolved	Water	6020B	763871
680-230663-15	AF54559	Total Recoverable	Water	6020B	763876
680-230663-16	AF54560	Dissolved	Water	6020B	763876
680-230663-16	AF54560	Total Recoverable	Water	6020B	763857
680-230663-17	AF54561	Dissolved	Water	6020B	763876
680-230663-17	AF54561	Total Recoverable	Water	6020B	763857

Metals (Continued)

Analysis Batch: 764050 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-18	AF54562	Dissolved	Water	6020B	763876
680-230663-18	AF54562	Total Recoverable	Water	6020B	763857
680-230663-19	AF54563	Dissolved	Water	6020B	763871
680-230663-19	AF54563	Total Recoverable	Water	6020B	763857
680-230663-20	AF54603	Dissolved	Water	6020B	763855
680-230663-20	AF54603	Total Recoverable	Water	6020B	763855
680-230663-21	AF54558	Dissolved	Water	6020B	763876
680-230663-21	AF54558	Total Recoverable	Water	6020B	763855
680-230663-22	AF54571	Dissolved	Water	6020B	763876
680-230663-22	AF54571	Total Recoverable	Water	6020B	763855
680-230663-23	AF54599	Dissolved	Water	6020B	763876
680-230663-23	AF54599	Total Recoverable	Water	6020B	763857
680-230663-24	AF54557	Dissolved	Water	6020B	763871
680-230663-24	AF54557	Total Recoverable	Water	6020B	763855
680-230663-25	AF54586	Dissolved	Water	6020B	763876
680-230663-25	AF54586	Total Recoverable	Water	6020B	763857
680-230663-26	AF54587	Dissolved	Water	6020B	763871
680-230663-26	AF54587	Total Recoverable	Water	6020B	763857
680-230663-27	AF54588	Dissolved	Water	6020B	763876
680-230663-27	AF54588	Total Recoverable	Water	6020B	763855
680-230663-28	AF54589	Dissolved	Water	6020B	763871
680-230663-28	AF54589	Total Recoverable	Water	6020B	763855
680-230663-29	AF54568	Dissolved	Water	6020B	763871
680-230663-29	AF54568	Total Recoverable	Water	6020B	763855
680-230663-30	AF54569	Dissolved	Water	6020B	763871
680-230663-30	AF54569	Total Recoverable	Water	6020B	763855
680-230663-31	AF54602	Dissolved	Water	6020B	763871
680-230663-31	AF54602	Total Recoverable	Water	6020B	763855
680-230663-32	AF54604	Dissolved	Water	6020B	763871
680-230663-32	AF54604	Total Recoverable	Water	6020B	763857
680-230663-33	AF54607	Dissolved	Water	6020B	763876
680-230663-33	AF54607	Total Recoverable	Water	6020B	763857
680-230663-34	AF54574	Dissolved	Water	6020B	763871
680-230663-34	AF54574	Total Recoverable	Water	6020B	763857
680-230663-35	AF54580	Dissolved	Water	6020B	763855
680-230663-35	AF54580	Total Recoverable	Water	6020B	763857
680-230663-36	AF54584	Dissolved	Water	6020B	763876
680-230663-36	AF54584	Total Recoverable	Water	6020B	763857
680-230663-37	AF54585	Dissolved	Water	6020B	763876
680-230663-37	AF54585	Total Recoverable	Water	6020B	763855
680-230663-38	AF54591	Dissolved	Water	6020B	763876
680-230663-38	AF54591	Total Recoverable	Water	6020B	763857
680-230663-39	AF54592	Dissolved	Water	6020B	763871
680-230663-39	AF54592	Total Recoverable	Water	6020B	763855
680-230663-40	AF54564	Dissolved	Water	6020B	763871
680-230663-40	AF54564	Total Recoverable	Water	6020B	763855
680-230663-41	AF54565	Dissolved	Water	6020B	763876
680-230663-41	AF54565	Total Recoverable	Water	6020B	763857
680-230663-42	AF54566	Dissolved	Water	6020B	763871
680-230663-42	AF54566	Total Recoverable	Water	6020B	763855
680-230663-43	AF54567	Dissolved	Water	6020B	763876

Metals (Continued)

Analysis Batch: 764050 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-43	AF54567	Total Recoverable	Water	6020B	763857
MB 680-763814/1-A	Method Blank	Total Recoverable	Water	6020B	763814
MB 680-763855/1-A	Method Blank	Total Recoverable	Water	6020B	763855
MB 680-763857/1-A	Method Blank	Total Recoverable	Water	6020B	763857
MB 680-763871/1-A	Method Blank	Total Recoverable	Water	6020B	763871
MB 680-763876/1-A	Method Blank	Total Recoverable	Water	6020B	763876
LCS 680-763814/2-A	Lab Control Sample	Total Recoverable	Water	6020B	763814
LCS 680-763855/2-A	Lab Control Sample	Total Recoverable	Water	6020B	763855
LCS 680-763857/2-A	Lab Control Sample	Total Recoverable	Water	6020B	763857
LCS 680-763871/2-A	Lab Control Sample	Total Recoverable	Water	6020B	763871
LCS 680-763876/2-A	Lab Control Sample	Total Recoverable	Water	6020B	763876
680-230663-19 MS	AF54563	Dissolved	Water	6020B	763871
680-230663-19 MSD	AF54563	Dissolved	Water	6020B	763871
680-230663-25 MS	AF54586	Dissolved	Water	6020B	763876
680-230663-25 MSD	AF54586	Dissolved	Water	6020B	763876
680-230663-32 MS	AF54604	Total Recoverable	Water	6020B	763857
680-230663-32 MSD	AF54604	Total Recoverable	Water	6020B	763857
680-230663-39 MS	AF54592	Total Recoverable	Water	6020B	763855
680-230663-39 MSD	AF54592	Total Recoverable	Water	6020B	763855

Prep Batch: 764131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Total/NA	Water	7470A	
680-230663-5	AF54595	Total/NA	Water	7470A	
680-230663-6	AF54596	Total/NA	Water	7470A	
680-230663-7	AF54572	Total/NA	Water	7470A	
680-230663-8	AF54597	Total/NA	Water	7470A	
680-230663-9	AF54598	Total/NA	Water	7470A	
680-230663-10	AF54600	Total/NA	Water	7470A	
680-230663-23	AF54599	Total/NA	Water	7470A	
MB 680-764131/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764131/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 764146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Dissolved	Water	7470A	
680-230663-2	AF54594	Dissolved	Water	7470A	
680-230663-3	AF54582	Dissolved	Water	7470A	
680-230663-4	AF54583	Dissolved	Water	7470A	
680-230663-5	AF54595	Dissolved	Water	7470A	
680-230663-6	AF54596	Dissolved	Water	7470A	
680-230663-7	AF54572	Dissolved	Water	7470A	
680-230663-8	AF54597	Dissolved	Water	7470A	
680-230663-9	AF54598	Dissolved	Water	7470A	
680-230663-10	AF54600	Dissolved	Water	7470A	
680-230663-11	AF54570	Dissolved	Water	7470A	
680-230663-12	AF54601	Dissolved	Water	7470A	
680-230663-13	AF54605	Dissolved	Water	7470A	
680-230663-14	AF54606	Dissolved	Water	7470A	
680-230663-15	AF54559	Dissolved	Water	7470A	
680-230663-16	AF54560	Dissolved	Water	7470A	

Metals (Continued)

Prep Batch: 764146 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-17	AF54561	Dissolved	Water	7470A	
680-230663-18	AF54562	Dissolved	Water	7470A	
680-230663-23	AF54599	Dissolved	Water	7470A	
680-230663-41	AF54565	Dissolved	Water	7470A	
MB 680-764146/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764146/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-230663-5 MS	AF54595	Dissolved	Water	7470A	
680-230663-5 MSD	AF54595	Dissolved	Water	7470A	

Analysis Batch: 764211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-15	AF54559	Dissolved	Water	6020B	763871
680-230663-15	AF54559	Total Recoverable	Water	6020B	763876
680-230663-16	AF54560	Dissolved	Water	6020B	763876
680-230663-16	AF54560	Total Recoverable	Water	6020B	763857
680-230663-18	AF54562	Dissolved	Water	6020B	763876
680-230663-18	AF54562	Total Recoverable	Water	6020B	763857
680-230663-19	AF54563	Dissolved	Water	6020B	763871
680-230663-19	AF54563	Total Recoverable	Water	6020B	763857
680-230663-20	AF54603	Dissolved	Water	6020B	763855
680-230663-20	AF54603	Total Recoverable	Water	6020B	763855
680-230663-21	AF54558	Dissolved	Water	6020B	763876
680-230663-21	AF54558	Total Recoverable	Water	6020B	763855
680-230663-27	AF54588	Dissolved	Water	6020B	763876
680-230663-27	AF54588	Total Recoverable	Water	6020B	763855
680-230663-32	AF54604	Total Recoverable	Water	6020B	763857
680-230663-33	AF54607	Dissolved	Water	6020B	763876
680-230663-33	AF54607	Total Recoverable	Water	6020B	763857
680-230663-38	AF54591	Dissolved	Water	6020B	763876
680-230663-38	AF54591	Total Recoverable	Water	6020B	763857
680-230663-40	AF54564	Dissolved	Water	6020B	763871
680-230663-40	AF54564	Total Recoverable	Water	6020B	763855
680-230663-41	AF54565	Dissolved	Water	6020B	763876
680-230663-41	AF54565	Total Recoverable	Water	6020B	763857
680-230663-42	AF54566	Dissolved	Water	6020B	763871
680-230663-42	AF54566	Total Recoverable	Water	6020B	763855
680-230663-19 MS	AF54563	Dissolved	Water	6020B	763871
680-230663-19 MSD	AF54563	Dissolved	Water	6020B	763871
680-230663-32 MS	AF54604	Total Recoverable	Water	6020B	763857
680-230663-32 MSD	AF54604	Total Recoverable	Water	6020B	763857

Prep Batch: 764263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-2	AF54594	Total/NA	Water	7470A	
680-230663-3	AF54582	Total/NA	Water	7470A	
680-230663-4	AF54583	Total/NA	Water	7470A	
680-230663-13	AF54605	Total/NA	Water	7470A	
680-230663-15	AF54559	Total/NA	Water	7470A	
680-230663-18	AF54562	Total/NA	Water	7470A	
680-230663-19	AF54563	Total/NA	Water	7470A	
680-230663-20	AF54603	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 764263 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-21	AF54558	Total/NA	Water	7470A	
680-230663-22	AF54571	Total/NA	Water	7470A	
680-230663-29	AF54568	Total/NA	Water	7470A	
680-230663-30	AF54569	Total/NA	Water	7470A	
680-230663-31	AF54602	Total/NA	Water	7470A	
680-230663-32	AF54604	Total/NA	Water	7470A	
680-230663-33	AF54607	Total/NA	Water	7470A	
680-230663-34	AF54574	Total/NA	Water	7470A	
680-230663-36	AF54584	Total/NA	Water	7470A	
680-230663-37	AF54585	Total/NA	Water	7470A	
680-230663-39	AF54592	Total/NA	Water	7470A	
680-230663-40	AF54564	Total/NA	Water	7470A	
MB 680-764263/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764263/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-230663-2 MS	AF54594	Total/NA	Water	7470A	
680-230663-2 MSD	AF54594	Total/NA	Water	7470A	

Prep Batch: 764264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-11	AF54570	Total/NA	Water	7470A	
680-230663-12	AF54601	Total/NA	Water	7470A	
680-230663-14	AF54606	Total/NA	Water	7470A	
680-230663-16	AF54560	Total/NA	Water	7470A	
680-230663-20	AF54603	Dissolved	Water	7470A	
680-230663-24	AF54557	Total/NA	Water	7470A	
680-230663-25	AF54586	Total/NA	Water	7470A	
680-230663-26	AF54587	Total/NA	Water	7470A	
680-230663-28	AF54589	Total/NA	Water	7470A	
680-230663-31	AF54602	Dissolved	Water	7470A	
680-230663-32	AF54604	Dissolved	Water	7470A	
680-230663-33	AF54607	Dissolved	Water	7470A	
680-230663-34	AF54574	Dissolved	Water	7470A	
680-230663-35	AF54580	Total/NA	Water	7470A	
680-230663-38	AF54591	Dissolved	Water	7470A	
680-230663-40	AF54564	Dissolved	Water	7470A	
680-230663-42	AF54566	Dissolved	Water	7470A	
680-230663-42	AF54566	Total/NA	Water	7470A	
680-230663-43	AF54567	Dissolved	Water	7470A	
680-230663-43	AF54567	Total/NA	Water	7470A	
MB 680-764264/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764264/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-230663-12 MS	AF54601	Total/NA	Water	7470A	
680-230663-12 MSD	AF54601	Total/NA	Water	7470A	

Prep Batch: 764295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-17	AF54561	Total/NA	Water	7470A	
680-230663-19	AF54563	Dissolved	Water	7470A	
680-230663-21	AF54558	Dissolved	Water	7470A	
680-230663-22	AF54571	Dissolved	Water	7470A	
680-230663-24	AF54557	Dissolved	Water	7470A	

Metals (Continued)

Prep Batch: 764295 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-25	AF54586	Dissolved	Water	7470A	
680-230663-26	AF54587	Dissolved	Water	7470A	
680-230663-27	AF54588	Dissolved	Water	7470A	
680-230663-27	AF54588	Total/NA	Water	7470A	
680-230663-28	AF54589	Dissolved	Water	7470A	
680-230663-29	AF54568	Dissolved	Water	7470A	
680-230663-30	AF54569	Dissolved	Water	7470A	
680-230663-35	AF54580	Dissolved	Water	7470A	
680-230663-36	AF54584	Dissolved	Water	7470A	
680-230663-37	AF54585	Dissolved	Water	7470A	
680-230663-38	AF54591	Total/NA	Water	7470A	
680-230663-39	AF54592	Dissolved	Water	7470A	
680-230663-41	AF54565	Total/NA	Water	7470A	
MB 680-764295/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764295/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-230663-41 MS	AF54565	Total/NA	Water	7470A	
680-230663-41 MSD	AF54565	Total/NA	Water	7470A	

Analysis Batch: 764337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Total/NA	Water	7470A	764131
680-230663-5	AF54595	Total/NA	Water	7470A	764131
680-230663-6	AF54596	Total/NA	Water	7470A	764131
680-230663-7	AF54572	Total/NA	Water	7470A	764131
680-230663-8	AF54597	Total/NA	Water	7470A	764131
680-230663-9	AF54598	Total/NA	Water	7470A	764131
680-230663-10	AF54600	Total/NA	Water	7470A	764131
680-230663-23	AF54599	Total/NA	Water	7470A	764131
MB 680-764131/1-A	Method Blank	Total/NA	Water	7470A	764131
LCS 680-764131/2-A	Lab Control Sample	Total/NA	Water	7470A	764131

Analysis Batch: 764393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-1	AF54593	Dissolved	Water	7470A	764146
680-230663-2	AF54594	Dissolved	Water	7470A	764146
680-230663-2	AF54594	Total/NA	Water	7470A	764263
680-230663-3	AF54582	Dissolved	Water	7470A	764146
680-230663-3	AF54582	Total/NA	Water	7470A	764263
680-230663-4	AF54583	Dissolved	Water	7470A	764146
680-230663-4	AF54583	Total/NA	Water	7470A	764263
680-230663-5	AF54595	Dissolved	Water	7470A	764146
680-230663-6	AF54596	Dissolved	Water	7470A	764146
680-230663-7	AF54572	Dissolved	Water	7470A	764146
680-230663-8	AF54597	Dissolved	Water	7470A	764146
680-230663-9	AF54598	Dissolved	Water	7470A	764146
680-230663-10	AF54600	Dissolved	Water	7470A	764146
680-230663-11	AF54570	Dissolved	Water	7470A	764146
680-230663-11	AF54570	Total/NA	Water	7470A	764264
680-230663-12	AF54601	Dissolved	Water	7470A	764146
680-230663-12	AF54601	Total/NA	Water	7470A	764264
680-230663-13	AF54605	Dissolved	Water	7470A	764146

Metals (Continued)

Analysis Batch: 764393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-13	AF54605	Total/NA	Water	7470A	764263
680-230663-14	AF54606	Dissolved	Water	7470A	764146
680-230663-14	AF54606	Total/NA	Water	7470A	764264
680-230663-15	AF54559	Dissolved	Water	7470A	764146
680-230663-15	AF54559	Total/NA	Water	7470A	764263
680-230663-16	AF54560	Dissolved	Water	7470A	764146
680-230663-16	AF54560	Total/NA	Water	7470A	764264
680-230663-17	AF54561	Dissolved	Water	7470A	764146
680-230663-18	AF54562	Dissolved	Water	7470A	764146
680-230663-18	AF54562	Total/NA	Water	7470A	764263
680-230663-19	AF54563	Total/NA	Water	7470A	764263
680-230663-20	AF54603	Dissolved	Water	7470A	764264
680-230663-20	AF54603	Total/NA	Water	7470A	764263
680-230663-21	AF54558	Total/NA	Water	7470A	764263
680-230663-22	AF54571	Total/NA	Water	7470A	764263
680-230663-23	AF54599	Dissolved	Water	7470A	764146
680-230663-24	AF54557	Total/NA	Water	7470A	764264
680-230663-25	AF54586	Total/NA	Water	7470A	764264
680-230663-26	AF54587	Total/NA	Water	7470A	764264
680-230663-28	AF54589	Total/NA	Water	7470A	764264
680-230663-29	AF54568	Total/NA	Water	7470A	764263
680-230663-30	AF54569	Total/NA	Water	7470A	764263
680-230663-31	AF54602	Dissolved	Water	7470A	764264
680-230663-31	AF54602	Total/NA	Water	7470A	764263
680-230663-32	AF54604	Dissolved	Water	7470A	764264
680-230663-32	AF54604	Total/NA	Water	7470A	764263
680-230663-33	AF54607	Dissolved	Water	7470A	764264
680-230663-33	AF54607	Total/NA	Water	7470A	764263
680-230663-34	AF54574	Dissolved	Water	7470A	764264
680-230663-34	AF54574	Total/NA	Water	7470A	764263
680-230663-35	AF54580	Total/NA	Water	7470A	764264
680-230663-36	AF54584	Total/NA	Water	7470A	764263
680-230663-37	AF54585	Total/NA	Water	7470A	764263
680-230663-38	AF54591	Dissolved	Water	7470A	764264
680-230663-39	AF54592	Total/NA	Water	7470A	764263
680-230663-40	AF54564	Dissolved	Water	7470A	764264
680-230663-40	AF54564	Total/NA	Water	7470A	764263
680-230663-41	AF54565	Dissolved	Water	7470A	764146
680-230663-42	AF54566	Dissolved	Water	7470A	764264
680-230663-42	AF54566	Total/NA	Water	7470A	764264
680-230663-43	AF54567	Dissolved	Water	7470A	764264
680-230663-43	AF54567	Total/NA	Water	7470A	764264
MB 680-764146/1-A	Method Blank	Total/NA	Water	7470A	764146
MB 680-764263/1-A	Method Blank	Total/NA	Water	7470A	764263
MB 680-764264/1-A	Method Blank	Total/NA	Water	7470A	764264
LCS 680-764146/2-A	Lab Control Sample	Total/NA	Water	7470A	764146
LCS 680-764263/2-A	Lab Control Sample	Total/NA	Water	7470A	764263
LCS 680-764264/2-A	Lab Control Sample	Total/NA	Water	7470A	764264
680-230663-2 MS	AF54594	Total/NA	Water	7470A	764263
680-230663-2 MSD	AF54594	Total/NA	Water	7470A	764263
680-230663-5 MS	AF54595	Dissolved	Water	7470A	764146

Metals (Continued)

Analysis Batch: 764393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-5 MSD	AF54595	Dissolved	Water	7470A	764146
680-230663-12 MS	AF54601	Total/NA	Water	7470A	764264
680-230663-12 MSD	AF54601	Total/NA	Water	7470A	764264

Analysis Batch: 764458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-17	AF54561	Total/NA	Water	7470A	764295
680-230663-19	AF54563	Dissolved	Water	7470A	764295
680-230663-21	AF54558	Dissolved	Water	7470A	764295
680-230663-22	AF54571	Dissolved	Water	7470A	764295
680-230663-24	AF54557	Dissolved	Water	7470A	764295
680-230663-25	AF54586	Dissolved	Water	7470A	764295
680-230663-26	AF54587	Dissolved	Water	7470A	764295
680-230663-27	AF54588	Dissolved	Water	7470A	764295
680-230663-27	AF54588	Total/NA	Water	7470A	764295
680-230663-28	AF54589	Dissolved	Water	7470A	764295
680-230663-29	AF54568	Dissolved	Water	7470A	764295
680-230663-30	AF54569	Dissolved	Water	7470A	764295
680-230663-35	AF54580	Dissolved	Water	7470A	764295
680-230663-36	AF54584	Dissolved	Water	7470A	764295
680-230663-37	AF54585	Dissolved	Water	7470A	764295
680-230663-38	AF54591	Total/NA	Water	7470A	764295
680-230663-39	AF54592	Dissolved	Water	7470A	764295
680-230663-41	AF54565	Total/NA	Water	7470A	764295
MB 680-764295/1-A	Method Blank	Total/NA	Water	7470A	764295
LCS 680-764295/2-A	Lab Control Sample	Total/NA	Water	7470A	764295
680-230663-41 MS	AF54565	Total/NA	Water	7470A	764295
680-230663-41 MSD	AF54565	Total/NA	Water	7470A	764295

Prep Batch: 764648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-19	AF54563	Dissolved	Water	3005A	
680-230663-25	AF54586	Dissolved	Water	3005A	
680-230663-32	AF54604	Total Recoverable	Water	3005A	
680-230663-39	AF54592	Total Recoverable	Water	3005A	
MB 680-764648/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-764648/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 680-764648/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 764655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-41	AF54565	Total/NA	Water	7470A	
MB 680-764655/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764655/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 764851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-41	AF54565	Total/NA	Water	7470A	764655
MB 680-764655/1-A	Method Blank	Total/NA	Water	7470A	764655
LCS 680-764655/2-A	Lab Control Sample	Total/NA	Water	7470A	764655

Client: South Carolina Public Service Authority
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Project/Site: 125915/JM02.09 G01.1/36500

Metals

Analysis Batch: 764981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230663-19	AF54563	Dissolved	Water	6020B	764648
680-230663-19	AF54563	Dissolved	Water	6020B	764648
680-230663-25	AF54586	Dissolved	Water	6020B	764648
680-230663-32	AF54604	Total Recoverable	Water	6020B	764648
680-230663-32	AF54604	Total Recoverable	Water	6020B	764648
680-230663-39	AF54592	Total Recoverable	Water	6020B	764648
MB 680-764648/1-A	Method Blank	Total Recoverable	Water	6020B	764648
LCS 680-764648/2-A	Lab Control Sample	Total Recoverable	Water	6020B	764648
LCSD 680-764648/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	764648

Client Sample ID: AF54593
Lab Sample ID: 680-230663-1

Date Collected: 01/26/23 09:38
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:17
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:07
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:07
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 13:15

Client Sample ID: AF54594
Lab Sample ID: 680-230663-2

Date Collected: 01/26/23 09:43
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:29
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:28
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:10
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 16:53

Client Sample ID: AF54582
Lab Sample ID: 680-230663-3

Date Collected: 01/26/23 11:19
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:38
Total Recoverable	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:56
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:14
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:10

Client Sample ID: AF54583
Lab Sample ID: 680-230663-4

Date Collected: 01/26/23 13:00
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:03

Client Sample ID: AF54583
Lab Sample ID: 680-230663-4

Date Collected: 01/26/23 13:00
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:23
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:17
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:13

Client Sample ID: AF54595
Lab Sample ID: 680-230663-5

Date Collected: 01/25/23 11:00
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:48
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:36
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 13:25
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 12:40

Client Sample ID: AF54596
Lab Sample ID: 680-230663-6

Date Collected: 01/25/23 09:54
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:58
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:05
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 13:36
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 12:43

Client Sample ID: AF54572
Lab Sample ID: 680-230663-7

Date Collected: 01/24/23 11:46
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763814	RR	EET SAV	02/17/23 06:34
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 13:47
Total Recoverable	Prep	3005A			763814	RR	EET SAV	02/17/23 06:34
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 13:59

Client Sample ID: AF54572
Lab Sample ID: 680-230663-7

Date Collected: 01/24/23 11:46
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 13:39
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 12:46

Client Sample ID: AF54597
Lab Sample ID: 680-230663-8

Date Collected: 01/24/23 15:40
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763814	RR	EET SAV	02/17/23 06:34
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 13:31
Total Recoverable	Prep	3005A			763814	RR	EET SAV	02/17/23 06:34
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 13:39
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 13:49
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 12:50

Client Sample ID: AF54598
Lab Sample ID: 680-230663-9

Date Collected: 01/24/23 13:27
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763814	RR	EET SAV	02/17/23 06:34
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 13:35
Total Recoverable	Prep	3005A			763814	RR	EET SAV	02/17/23 06:34
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 13:43
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 13:53
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 12:53

Client Sample ID: AF54600
Lab Sample ID: 680-230663-10

Date Collected: 01/24/23 10:18
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:25
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:01
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 13:56

Client Sample ID: AF54600
Lab Sample ID: 680-230663-10

Date Collected: 01/24/23 10:18
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 13:08

Client Sample ID: AF54570
Lab Sample ID: 680-230663-11

Date Collected: 01/31/23 12:49
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:36
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:03
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:21
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:01

Client Sample ID: AF54601
Lab Sample ID: 680-230663-12

Date Collected: 01/31/23 11:17
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:50
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:32
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:31
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:36

Client Sample ID: AF54605
Lab Sample ID: 680-230663-13

Date Collected: 01/31/23 09:40
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:31
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:21
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:34
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:16

Client Sample ID: AF54606
Lab Sample ID: 680-230663-14

Date Collected: 01/31/23 09:45
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:57
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:37
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:38
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:15

Client Sample ID: AF54559
Lab Sample ID: 680-230663-15

Date Collected: 02/01/23 09:34
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:54
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:55
Total Recoverable	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:52
Total Recoverable	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:23
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:41
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:19

Client Sample ID: AF54560
Lab Sample ID: 680-230663-16

Date Collected: 02/01/23 11:13
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:07
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:03
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:09
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:30
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:45
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:54

Client Sample ID: AF54561
Lab Sample ID: 680-230663-17

Date Collected: 02/01/23 12:32
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:34
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:46
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:48
Total/NA	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:17
Total/NA	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:18

Client Sample ID: AF54562
Lab Sample ID: 680-230663-18

Date Collected: 02/01/23 13:44
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:15
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:11
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:41
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:42
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:52
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:05

Client Sample ID: AF54563
Lab Sample ID: 680-230663-19

Date Collected: 02/01/23 14:52
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:16
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:27
Dissolved	Prep	3005A			764648	RR	EET SAV	02/23/23 10:43
Dissolved	Analysis	6020B		1	764981	BWR	EET SAV	02/24/23 13:30
Dissolved	Prep	3005A			764648	RR	EET SAV	02/23/23 10:43
Dissolved	Analysis	6020B		10	764981	BWR	EET SAV	02/24/23 13:58
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:20
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:22

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54563
Lab Sample ID: 680-230663-19

Date Collected: 02/01/23 14:52
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:56
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:31

Client Sample ID: AF54603
Lab Sample ID: 680-230663-20

Date Collected: 01/30/23 13:08
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:31
Dissolved	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 20:03
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:59
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 20:07
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:25
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:17

Client Sample ID: AF54558
Lab Sample ID: 680-230663-21

Date Collected: 01/31/23 15:41
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:11
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:07
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:20
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 20:16
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:46
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:58

Client Sample ID: AF54571
Lab Sample ID: 680-230663-22

Date Collected: 01/31/23 14:05
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:55
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:19
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:53
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:02

Client Sample ID: AF54599
Lab Sample ID: 680-230663-23

Date Collected: 01/24/23 14:38
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:43
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:53
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:00
Total/NA	Prep	7470A			764131	JKL	EET SAV	02/20/23 13:19
Total/NA	Analysis	7470A		1	764337	BJB	EET SAV	02/21/23 13:11

Client Sample ID: AF54557
Lab Sample ID: 680-230663-24

Date Collected: 02/06/23 11:39
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:05
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:55
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:17
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:21
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:53

Client Sample ID: AF54586
Lab Sample ID: 680-230663-25

Date Collected: 02/06/23 14:02
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:14

Client Sample ID: AF54586

Lab Sample ID: 680-230663-25

Date Collected: 02/06/23 14:02

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764648	RR	EET SAV	02/23/23 10:43
Dissolved	Analysis	6020B		1	764981	BWR	EET SAV	02/24/23 13:34
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:24
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:10
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:57

Client Sample ID: AF54587

Lab Sample ID: 680-230663-26

Date Collected: 02/06/23 14:07

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:40
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:32
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:14
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:18

Client Sample ID: AF54588

Lab Sample ID: 680-230663-27

Date Collected: 02/06/23 12:55

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:30
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:59
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:11
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 20:12
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:49
Total/NA	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Total/NA	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:32

Client Sample ID: AF54589
Lab Sample ID: 680-230663-28

Date Collected: 02/06/23 15:32
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:45
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:51
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:24
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:39

Client Sample ID: AF54568
Lab Sample ID: 680-230663-29

Date Collected: 02/06/23 09:17
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:33
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:15
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:07
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:09

Client Sample ID: AF54569
Lab Sample ID: 680-230663-30

Date Collected: 02/06/23 10:19
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:13
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:47
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:42
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:48

Client Sample ID: AF54602
Lab Sample ID: 680-230663-31

Date Collected: 01/30/23 11:26
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:01

Client Sample ID: AF54602
Lab Sample ID: 680-230663-31

Date Collected: 01/30/23 11:26
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:27
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:28
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:20

Client Sample ID: AF54604
Lab Sample ID: 680-230663-32

Date Collected: 01/30/23 09:37
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:28
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:08
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:10
Total Recoverable	Prep	3005A			764648	RR	EET SAV	02/23/23 10:43
Total Recoverable	Analysis	6020B		1	764981	BWR	EET SAV	02/24/23 13:22
Total Recoverable	Prep	3005A			764648	RR	EET SAV	02/23/23 10:43
Total Recoverable	Analysis	6020B		10	764981	BWR	EET SAV	02/24/23 13:54
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:32
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:24

Client Sample ID: AF54607
Lab Sample ID: 680-230663-33

Date Collected: 01/30/23 14:10
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:19
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:15
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:57
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:26
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:35
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:27

Client Sample ID: AF54574
Lab Sample ID: 680-230663-34

Date Collected: 02/07/23 14:17
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:44
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:37
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 20:00
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:38

Client Sample ID: AF54580
Lab Sample ID: 680-230663-35

Date Collected: 02/07/23 13:08
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:43
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:17
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:17
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:28
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:11

Client Sample ID: AF54584
Lab Sample ID: 680-230663-36

Date Collected: 02/07/23 15:22
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:23
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:50
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:00
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:51

Client Sample ID: AF54585
Lab Sample ID: 680-230663-37

Date Collected: 02/07/23 10:24
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:43

Client Sample ID: AF54585
Lab Sample ID: 680-230663-37

Date Collected: 02/07/23 10:24
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:40
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:03
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:34

Client Sample ID: AF54591
Lab Sample ID: 680-230663-38

Date Collected: 02/07/23 11:40
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:26
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:46
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:13
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:34
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:56
Total/NA	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:17
Total/NA	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:25

Client Sample ID: AF54592
Lab Sample ID: 680-230663-39

Date Collected: 02/07/23 09:14
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:21
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:03
Total Recoverable	Prep	3005A			764648	RR	EET SAV	02/23/23 10:43
Total Recoverable	Analysis	6020B		1	764981	BWR	EET SAV	02/24/23 13:26
Dissolved	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:18
Dissolved	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 09:27
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 17:55

Client Sample ID: AF54564
Lab Sample ID: 680-230663-40

Date Collected: 02/02/23 09:42
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 20:09
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:51
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 23:44
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 20:20
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:47
Total/NA	Prep	7470A			764263	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:12

Client Sample ID: AF54565
Lab Sample ID: 680-230663-41

Date Collected: 02/02/23 11:13
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 18:27
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:19
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 16:25
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 18:38
Dissolved	Prep	7470A			764146	JKL	EET SAV	02/20/23 13:43
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 14:03
Total/NA	Prep	7470A			764295	BCB	EET SAV	02/21/23 11:17
Total/NA	Analysis	7470A		1	764458	BJB	EET SAV	02/22/23 08:08
Total/NA	Prep	7470A			764655	JKL	EET SAV	02/23/23 10:48
Total/NA	Analysis	7470A		1	764851	JKL	EET SAV	02/23/23 17:57

Client Sample ID: AF54566
Lab Sample ID: 680-230663-42

Date Collected: 02/02/23 11:18
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 19:32
Dissolved	Prep	3005A			763871	RR	EET SAV	02/17/23 10:16
Dissolved	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:47
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 22:15

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Client Sample ID: AF54566
Lab Sample ID: 680-230663-42

Date Collected: 02/02/23 11:18
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			763855	RR	EET SAV	02/17/23 09:09
Total Recoverable	Analysis	6020B		10	764211	BWR	EET SAV	02/20/23 19:59
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 20:03
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 18:50

Client Sample ID: AF54567
Lab Sample ID: 680-230663-43

Date Collected: 02/02/23 13:21
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			763876	RR	EET SAV	02/17/23 10:39
Dissolved	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 17:59
Total Recoverable	Prep	3005A			763857	RR	EET SAV	02/17/23 09:14
Total Recoverable	Analysis	6020B		1	764050	BWR	EET SAV	02/17/23 15:49
Dissolved	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Dissolved	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:42
Total/NA	Prep	7470A			764264	BCB	EET SAV	02/21/23 09:23
Total/NA	Analysis	7470A		1	764393	BJB	EET SAV	02/21/23 19:21

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info. TA-SAV Contract Lab Due Date (Lab Only). 2 / 28 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone (843)761-8000 Ext. 5148
Fax. (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.GW1.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS -SEE BELOW	DISSOLVED METALS	Si	DISSOLVED Si
AF54593	CLF1B-1	1/26/23	0938	ZDM BSB	2	P	G	GW	2	Si - 6010	X	X		
94	CLF1B-1 DUP		0943							ALL OTHERS - 6020				
82	CCMLF-1		1119							Hg-7470				
83	CCMLF-1D		1300											
AF54595	CLF1B-2	1/25/23	1100	ZDM MDG						*SEE SHEET FOR RLS				
96	CLF1B-3		0954							WHERE APPLICABLE				
AF54572	CBW-1	1/24/23	1146	MDG CDM									X	X
97	CLF1B-4		1540											
98	CLF1B-5		1327											
600	PM-1		1018										X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
JGMoran	35594	2/15/23	1430	DM	TM	2/16/23	1100
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 18.1 / 18.1 Initial:
Correct pH: Yes No
Preservative Lot#:

680-230663 Chain of Custody

☐ **METALS (all)**

☒ Ag	☐ Cu	☒ Sb
☒ Al	☒ Fe	☒ Se
☒ As	☒ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☒ Mg	☐ Ti
☒ Be	☒ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☒ Na	☒ Zn
☒ Co	☒ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

C
☐ Ultima
☐ % M
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info. TA - SAV Contract Lab Due Date (Lab Only). 2 / 28 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner SC 29461
Phone (843)761-8000 Ext. 5148
Fax. (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09 G01 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS -SEE BELOW	DISSOLVED	Si	DISSOLVED Si
AF54570	CAP-13	1/31/23	1249	ZDM BSB	2	P	G	GW	2	Si - 6010	X	X		
601	POZ-3		1117							Hg - 7470				
605	POZ-7		0940							ALL OTHERS 6020				
606	POZ-7 DUP		0945											
AF54559	CAP-3	2/1/23	0934							* SEE SHEET FOR RLS				
60	CAP-4		1113							WHERE APPLICABLE				
61	CAP-5		1232										X	X
62	CAP-6		1344											
63	CAP-7		1452											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/15/23	1430	OL	JM	2/16/23	1100
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☒ Ag	☐ Cu	☒ Sb
☒ Al	☒ Fe	☒ Se
☒ As	☒ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☒ Mg	☐ Ti
☒ Be	☒ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☒ Na	☒ Zn
☒ Co	☒ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info. TA SAV Contract Lab Due Date (Lab Only). 2 / 28 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner SC 29461
Phone (843)761-8000 Ext. 5148
Fax. (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G01 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS SEE BELOW	DISSOLVED METALS		
AF54603	POZ-5D	1/30/23	1308	ZDM BSB	2	P	G	GW	2	SI-6010	X	X		
AF54558	CAP-2	1/31/23	1541	"	"	"	"	"	"	Hg-7470	"	"		
AF54571	CAP-14	"	1405	"	"	"	"	"	"	ALL OTHERS 6020	"	"		
AF54599	CLF1B-5D	1/24/23	1438	BSB CDM	"	"	"	"	"		"	"		
										* SEE SHEET FOR RLS				

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/15/23	1450		TM	2-16-23	1100
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☒ Ag	☐ Cu	☒ Sb
☒ Al	☒ Fe	☒ Se
☒ As	☒ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☒ Mg	☐ Ti
☒ Be	☒ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☒ Na	☒ Zn
☒ Co	☒ Ni	☒ Hg
☒ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum *(all below)*
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info. TA SAV Contract Lab Due Date (Lab Only). 2 / 28 / 23 Send report to lcwillia@santeecooper.com & slbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner SC 29461
Phone (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09 GØ1.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS -SEE BELOW	DISSOLVED	Si	DISSOLVED Si
AF54557	CAP-1	2/6/23	1139	ZDM BSB	2	P	G	GW	2	Si-6010	X	X	X	X
86	CGYP-2		1402							Hg-7470		X		
87	CGYP-2D		1407							ALL OTHERS 6020				
88	CGYP-3		1255										X	X
89	CGYP 4		1532							* SEE SHEET FOR RLS			X	X
AF54568	CAP-11	2/6/23	0917											
69	CAP-12		1019											
AF54602	POZ-4	1/30/23	1126										X	X
04	POZ-6		0937											
07	POZ-8		1416											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
BJBrown	35594	2/15/23	1430		TR	2-16-23	1100
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☒ Ag	☐ Cu	☒ Sb
☒ Al	☒ Fe	☒ Se
☒ As	☒ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☒ Mg	☐ Ti
☒ Be	☒ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☒ Na	☒ Zn
☒ Co	☒ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info. TA-SAV Contract Lab Due Date (Lab Only) 2 / 28 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LCWILLIA @santeecooper.com	__/__/__	125915 / JM02.09 G01.1 / 36500	(Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS SEE BELOW	DISSOLVED METALS	Si TOTAL	Si DISSOLVED
AF54574	CCMAP-2	2/7/23	1417	ZDM BSB	2	P	G	GW	2	Si - 6010	X	X		
80	CCMAP-7		1308							Hg-7470				
84	CCMLF-2		1522							ALL OTHERS - 6020				
85	CGYP-1		1024											
91	CGYP-6		1140							*SEE SHEET FOR RLS			X	X
92	CGYP-7		0914											
AF54564	CAP-8	2/2/23	0942											
65	CAP-9		1113										X	X
66	CAP-9D		1118											
67	CAP-10		1321											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/15/23	1430	[signature]	[signature]	2-16-23	1100
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☒ Ag	☐ Cu	☒ Sb
☒ Al	☒ Fe	☒ Se
☒ As	☒ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☒ Mg	☐ Ti
☒ Be	☒ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☒ Na	☒ Zn
☒ Co	☒ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum*(all below)*
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-230663-1

Login Number: 230663

List Source: Eurofins Savannah

List Number: 1

Creator: Sims, Robert D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-230663-1
Project/Site: 125915/JM02.09 G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 2/28/2023 10:13:10 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-230711-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

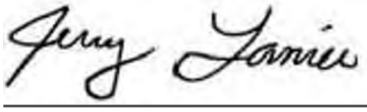
See page two for job notes and contact information.

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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2/28/2023 10:13:10 AM

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Certification Summary 39

Job ID: 680-230711-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-230711-1

Receipt
The samples were received on 2/16/2023 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 19.9°C

Metals
Sample AF54575 (680-230711-1) failed MS/MSD recoveries and was re-prepped and analyzed to confirm results per client requ
Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-230711-1	AF54575	Water	02/08/23 09:30	02/16/23 11:00
680-230711-2	AF54576	Water	02/08/23 12:29	02/16/23 11:00
680-230711-3	AF54577	Water	02/08/23 12:34	02/16/23 11:00
680-230711-4	AF54578	Water	02/08/23 14:48	02/16/23 11:00
680-230711-5	AF54579	Water	02/08/23 10:43	02/16/23 11:00
680-230711-6	AF54573	Water	02/09/23 11:22	02/16/23 11:00
680-230711-7	AF54581	Water	02/09/23 09:42	02/16/23 11:00

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET SAV
7470A	Mercury (CVAA)	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54575

Lab Sample ID: 680-230711-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	57.2		5.00		ug/L	1		6020B	Total Recoverable
Barium	58.3		5.00		ug/L	1		6020B	Total Recoverable
Calcium	965000		5000		ug/L	10		6020B	Total Recoverable
Calcium	1090000		5000		ug/L	10		6020B	Total Recoverable
Cobalt	0.990		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	1.12		0.500		ug/L	1		6020B	Total Recoverable
Iron	3190		100		ug/L	1		6020B	Total Recoverable
Iron	3360		100		ug/L	1		6020B	Total Recoverable
Magnesium	149000		250		ug/L	1		6020B	Total Recoverable
Magnesium	161000		250		ug/L	1		6020B	Total Recoverable
Manganese	6760		5.00		ug/L	1		6020B	Total Recoverable
Manganese	7270		5.00		ug/L	1		6020B	Total Recoverable
Potassium	8530		1000		ug/L	1		6020B	Total Recoverable
Potassium	8990		1000		ug/L	1		6020B	Total Recoverable
Sodium	209000		500		ug/L	1		6020B	Total Recoverable
Sodium	213000		500		ug/L	1		6020B	Total Recoverable
Barium	55.1		5.00		ug/L	1		6020B	Dissolved
Calcium	959000		5000		ug/L	10		6020B	Dissolved
Cobalt	0.910		0.500		ug/L	1		6020B	Dissolved
Iron	2520		100		ug/L	1		6020B	Dissolved
Magnesium	159000		250		ug/L	1		6020B	Dissolved
Manganese	6750		5.00		ug/L	1		6020B	Dissolved
Potassium	8620		1000		ug/L	1		6020B	Dissolved
Sodium	215000		500		ug/L	1		6020B	Dissolved
Mercury	0.402		0.200		ug/L	1		7470A	Total/NA

Client Sample ID: AF54576

Lab Sample ID: 680-230711-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	177		5.00		ug/L	1		6020B	Total Recoverable
Calcium	79200		500		ug/L	1		6020B	Total Recoverable
Cobalt	6.68		0.500		ug/L	1		6020B	Total Recoverable
Iron	2000		100		ug/L	1		6020B	Total Recoverable
Magnesium	2690		250		ug/L	1		6020B	Total Recoverable
Manganese	79.0		5.00		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample ID: AF54576 (Continued)
Lab Sample ID: 680-230711-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	15100		500		ug/L	1		6020B	Total Recoverable
Barium	174		5.00		ug/L	1		6020B	Dissolved
Calcium	82600		500		ug/L	1		6020B	Dissolved
Cobalt	7.36		0.500		ug/L	1		6020B	Dissolved
Iron	1350		100		ug/L	1		6020B	Dissolved
Magnesium	2990		250		ug/L	1		6020B	Dissolved
Manganese	80.0		5.00		ug/L	1		6020B	Dissolved
Sodium	16700		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54577
Lab Sample ID: 680-230711-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	174		5.00		ug/L	1		6020B	Total Recoverable
Calcium	78000		500		ug/L	1		6020B	Total Recoverable
Cobalt	6.71		0.500		ug/L	1		6020B	Total Recoverable
Iron	1770		100		ug/L	1		6020B	Total Recoverable
Magnesium	2690		250		ug/L	1		6020B	Total Recoverable
Manganese	81.8		5.00		ug/L	1		6020B	Total Recoverable
Sodium	14800		500		ug/L	1		6020B	Total Recoverable
Barium	165		5.00		ug/L	1		6020B	Dissolved
Calcium	80900		500		ug/L	1		6020B	Dissolved
Cobalt	6.95		0.500		ug/L	1		6020B	Dissolved
Iron	1300		100		ug/L	1		6020B	Dissolved
Magnesium	2840		250		ug/L	1		6020B	Dissolved
Manganese	81.2		5.00		ug/L	1		6020B	Dissolved
Sodium	15500		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54578
Lab Sample ID: 680-230711-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	229		5.00		ug/L	1		6020B	Total Recoverable
Calcium	122000		500		ug/L	1		6020B	Total Recoverable
Cobalt	5.48		0.500		ug/L	1		6020B	Total Recoverable
Magnesium	3150		250		ug/L	1		6020B	Total Recoverable
Manganese	197		5.00		ug/L	1		6020B	Total Recoverable
Potassium	1000		1000		ug/L	1		6020B	Total Recoverable
Sodium	18400		500		ug/L	1		6020B	Total Recoverable
Barium	197		5.00		ug/L	1		6020B	Dissolved
Calcium	141000		500		ug/L	1		6020B	Dissolved
Cobalt	5.66		0.500		ug/L	1		6020B	Dissolved
Magnesium	4270		250		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54578 (Continued)
Lab Sample ID: 680-230711-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	227		5.00		ug/L	1		6020B	Dissolved
Potassium	1060		1000		ug/L	1		6020B	Dissolved
Sodium	20000		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54579
Lab Sample ID: 680-230711-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	994		100		ug/L	1		6020B	Total Recoverable
Barium	44.5		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	4.45		0.500		ug/L	1		6020B	Total Recoverable
Calcium	18600		500		ug/L	1		6020B	Total Recoverable
Cobalt	36.4		0.500		ug/L	1		6020B	Total Recoverable
Iron	115		100		ug/L	1		6020B	Total Recoverable
Lead	2.63		2.50		ug/L	1		6020B	Total Recoverable
Magnesium	5790		250		ug/L	1		6020B	Total Recoverable
Manganese	31.9		5.00		ug/L	1		6020B	Total Recoverable
Nickel	28.5		5.00		ug/L	1		6020B	Total Recoverable
Sodium	2850		500		ug/L	1		6020B	Total Recoverable
Zinc	36.7		20.0		ug/L	1		6020B	Total Recoverable
Aluminum	820		100		ug/L	1		6020B	Dissolved
Barium	44.7		5.00		ug/L	1		6020B	Dissolved
Beryllium	4.39		0.500		ug/L	1		6020B	Dissolved
Calcium	20000		500		ug/L	1		6020B	Dissolved
Cobalt	37.0		0.500		ug/L	1		6020B	Dissolved
Magnesium	6100		250		ug/L	1		6020B	Dissolved
Manganese	33.7		5.00		ug/L	1		6020B	Dissolved
Nickel	28.7		5.00		ug/L	1		6020B	Dissolved
Sodium	3100		500		ug/L	1		6020B	Dissolved
Zinc	37.3		20.0		ug/L	1		6020B	Dissolved

Client Sample ID: AF54573
Lab Sample ID: 680-230711-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	58.0		5.00		ug/L	1		6020B	Total Recoverable
Calcium	57400		500		ug/L	1		6020B	Total Recoverable
Magnesium	1580		250		ug/L	1		6020B	Total Recoverable
Manganese	81.6		5.00		ug/L	1		6020B	Total Recoverable
Sodium	7920		500		ug/L	1		6020B	Total Recoverable
Barium	57.0		5.00		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: AF54573 (Continued)
Lab Sample ID: 680-230711-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	58300		500		ug/L	1		6020B	Dissolved
Magnesium	1740		250		ug/L	1		6020B	Dissolved
Manganese	81.1		5.00		ug/L	1		6020B	Dissolved
Sodium	8360		500		ug/L	1		6020B	Dissolved

Client Sample ID: AF54581
Lab Sample ID: 680-230711-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	107		100		ug/L	1		6020B	Total Recoverable
Barium	25.8		5.00		ug/L	1		6020B	Total Recoverable
Calcium	1670		500		ug/L	1		6020B	Total Recoverable
Cobalt	17.2		0.500		ug/L	1		6020B	Total Recoverable
Iron	148		100		ug/L	1		6020B	Total Recoverable
Magnesium	465		250		ug/L	1		6020B	Total Recoverable
Manganese	100		5.00		ug/L	1		6020B	Total Recoverable
Sodium	4560		500		ug/L	1		6020B	Total Recoverable
Aluminum	111		100		ug/L	1		6020B	Dissolved
Barium	22.3		5.00		ug/L	1		6020B	Dissolved
Calcium	1760		500		ug/L	1		6020B	Dissolved
Cobalt	15.5		0.500		ug/L	1		6020B	Dissolved
Iron	103		100		ug/L	1		6020B	Dissolved
Magnesium	495		250		ug/L	1		6020B	Dissolved
Manganese	88.5		5.00		ug/L	1		6020B	Dissolved
Sodium	4540		500		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54575
Lab Sample ID: 680-230711-1
Date Collected: 02/08/23 09:30
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:02	02/22/23 15:11	1
Aluminum	100	U	100		ug/L		02/24/23 05:26	02/24/23 18:27	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Antimony	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Arsenic	3.00	U	3.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Barium	**57.2**		5.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Barium	**58.3**		5.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 15:11	1
Beryllium	0.500	U	0.500		ug/L		02/24/23 05:26	02/24/23 18:27	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 15:11	1
Cadmium	0.500	U	0.500		ug/L		02/24/23 05:26	02/24/23 18:27	1
Calcium	**965000**		5000		ug/L		02/20/23 14:02	02/22/23 15:32	10
Calcium	**1090000**		5000		ug/L		02/24/23 05:26	02/25/23 10:52	10
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Chromium	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Cobalt	**0.990**		0.500		ug/L		02/20/23 14:02	02/22/23 15:11	1
Cobalt	**1.12**		0.500		ug/L		02/24/23 05:26	02/24/23 18:27	1
Iron	**3190**		100		ug/L		02/20/23 14:02	02/22/23 15:11	1
Iron	**3360**		100		ug/L		02/24/23 05:26	02/24/23 18:27	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 15:11	1
Lead	2.50	U	2.50		ug/L		02/24/23 05:26	02/24/23 18:27	1
Magnesium	**149000**		250		ug/L		02/20/23 14:02	02/22/23 15:11	1
Magnesium	**161000**		250		ug/L		02/24/23 05:26	02/24/23 18:27	1
Manganese	**6760**		5.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Manganese	**7270**		5.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Nickel	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Potassium	**8530**		1000		ug/L		02/20/23 14:02	02/22/23 15:11	1
Potassium	**8990**		1000		ug/L		02/24/23 05:26	02/24/23 18:27	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 15:11	1
Selenium	2.50	U	2.50		ug/L		02/24/23 05:26	02/24/23 18:27	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Silver	1.00	U	1.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Sodium	**209000**		500		ug/L		02/20/23 14:02	02/22/23 15:11	1
Sodium	**213000**		500		ug/L		02/24/23 05:26	02/24/23 18:27	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 15:11	1
Thallium	1.00	U	1.00		ug/L		02/24/23 05:26	02/24/23 18:27	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 15:11	1
Zinc	20.0	U	20.0		ug/L		02/24/23 05:26	02/24/23 18:27	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:12	02/21/23 14:40	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Barium	**55.1**		5.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:40	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:40	1
Calcium	**959000**		5000		ug/L		02/20/23 14:12	02/22/23 16:49	10

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54575
Lab Sample ID: 680-230711-1
Date Collected: 02/08/23 09:30
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Cobalt	**0.910**		0.500		ug/L		02/20/23 14:12	02/21/23 14:40	1
Iron	**2520**		100		ug/L		02/20/23 14:12	02/21/23 14:40	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:40	1
Magnesium	**159000**		250		ug/L		02/20/23 14:12	02/21/23 14:40	1
Manganese	**6750**		5.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Potassium	**8620**		1000		ug/L		02/20/23 14:12	02/21/23 14:40	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:40	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Sodium	**215000**		500		ug/L		02/20/23 14:12	02/21/23 14:40	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:40	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 14:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.402**		0.200		ug/L		02/22/23 11:03	02/22/23 14:58	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:27	1

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54576
Lab Sample ID: 680-230711-2
Date Collected: 02/08/23 12:29
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:02	02/22/23 16:00	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Barium	**177**		5.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:00	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:00	1
Calcium	**79200**		500		ug/L		02/20/23 14:02	02/22/23 16:00	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Cobalt	**6.68**		0.500		ug/L		02/20/23 14:02	02/22/23 16:00	1
Iron	**2000**		100		ug/L		02/20/23 14:02	02/22/23 16:00	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:00	1
Magnesium	**2690**		250		ug/L		02/20/23 14:02	02/22/23 16:00	1
Manganese	**79.0**		5.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Potassium	1000	U	1000		ug/L		02/20/23 14:02	02/22/23 16:00	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:00	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Sodium	**15100**		500		ug/L		02/20/23 14:02	02/22/23 16:00	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:00	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 16:00	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:12	02/21/23 14:44	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Barium	**174**		5.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:44	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:44	1
Calcium	**82600**		500		ug/L		02/20/23 14:12	02/21/23 14:44	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Cobalt	**7.36**		0.500		ug/L		02/20/23 14:12	02/21/23 14:44	1
Iron	**1350**		100		ug/L		02/20/23 14:12	02/21/23 14:44	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:44	1
Magnesium	**2990**		250		ug/L		02/20/23 14:12	02/21/23 14:44	1
Manganese	**80.0**		5.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Potassium	1000	U	1000		ug/L		02/20/23 14:12	02/21/23 14:44	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:44	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Sodium	**16700**		500		ug/L		02/20/23 14:12	02/21/23 14:44	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:44	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 14:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:01	1

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54576
Lab Sample ID: 680-230711-2
Date Collected: 02/08/23 12:29
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:30	1

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54577
Lab Sample ID: 680-230711-3
Date Collected: 02/08/23 12:34
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:02	02/22/23 16:04	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Barium	**174**		5.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:04	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:04	1
Calcium	**78000**		500		ug/L		02/20/23 14:02	02/22/23 16:04	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Cobalt	**6.71**		0.500		ug/L		02/20/23 14:02	02/22/23 16:04	1
Iron	**1770**		100		ug/L		02/20/23 14:02	02/22/23 16:04	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:04	1
Magnesium	**2690**		250		ug/L		02/20/23 14:02	02/22/23 16:04	1
Manganese	**81.8**		5.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Potassium	1000	U	1000		ug/L		02/20/23 14:02	02/22/23 16:04	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:04	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Sodium	**14800**		500		ug/L		02/20/23 14:02	02/22/23 16:04	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:04	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 16:04	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:12	02/21/23 14:48	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Barium	**165**		5.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:48	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:48	1
Calcium	**80900**		500		ug/L		02/20/23 14:12	02/21/23 14:48	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Cobalt	**6.95**		0.500		ug/L		02/20/23 14:12	02/21/23 14:48	1
Iron	**1300**		100		ug/L		02/20/23 14:12	02/21/23 14:48	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:48	1
Magnesium	**2840**		250		ug/L		02/20/23 14:12	02/21/23 14:48	1
Manganese	**81.2**		5.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Potassium	1000	U	1000		ug/L		02/20/23 14:12	02/21/23 14:48	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:48	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Sodium	**15500**		500		ug/L		02/20/23 14:12	02/21/23 14:48	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:48	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 14:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:05	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54577
Date Collected: 02/08/23 12:34
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230711-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:33	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54578
Date Collected: 02/08/23 14:48
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230711-4
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:02	02/22/23 16:12	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Barium	**229**		5.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:12	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:12	1
Calcium	**122000**		500		ug/L		02/20/23 14:02	02/22/23 16:12	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Cobalt	**5.48**		0.500		ug/L		02/20/23 14:02	02/22/23 16:12	1
Iron	100	U	100		ug/L		02/20/23 14:02	02/22/23 16:12	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:12	1
Magnesium	**3150**		250		ug/L		02/20/23 14:02	02/22/23 16:12	1
Manganese	**197**		5.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Potassium	**1000**		1000		ug/L		02/20/23 14:02	02/22/23 16:12	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:12	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Sodium	**18400**		500		ug/L		02/20/23 14:02	02/22/23 16:12	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:12	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 16:12	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:12	02/21/23 14:52	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Barium	**197**		5.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:52	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 14:52	1
Calcium	**141000**		500		ug/L		02/20/23 14:12	02/21/23 14:52	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Cobalt	**5.66**		0.500		ug/L		02/20/23 14:12	02/21/23 14:52	1
Iron	100	U	100		ug/L		02/20/23 14:12	02/21/23 14:52	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:52	1
Magnesium	**4270**		250		ug/L		02/20/23 14:12	02/21/23 14:52	1
Manganese	**227**		5.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Potassium	**1060**		1000		ug/L		02/20/23 14:12	02/21/23 14:52	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 14:52	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Sodium	**20000**		500		ug/L		02/20/23 14:12	02/21/23 14:52	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 14:52	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 14:52	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:08	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54578
Date Collected: 02/08/23 14:48
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230711-4
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:37	1

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54579
Lab Sample ID: 680-230711-5
Date Collected: 02/08/23 10:43
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**994**		100		ug/L		02/20/23 14:02	02/22/23 16:08	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Barium	**44.5**		5.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Beryllium	**4.45**		0.500		ug/L		02/20/23 14:02	02/22/23 16:08	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:08	1
Calcium	**18600**		500		ug/L		02/20/23 14:02	02/22/23 16:08	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Cobalt	**36.4**		0.500		ug/L		02/20/23 14:02	02/22/23 16:08	1
Iron	**115**		100		ug/L		02/20/23 14:02	02/22/23 16:08	1
Lead	**2.63**		2.50		ug/L		02/20/23 14:02	02/22/23 16:08	1
Magnesium	**5790**		250		ug/L		02/20/23 14:02	02/22/23 16:08	1
Manganese	**31.9**		5.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Nickel	**28.5**		5.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Potassium	1000	U	1000		ug/L		02/20/23 14:02	02/22/23 16:08	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:08	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Sodium	**2850**		500		ug/L		02/20/23 14:02	02/22/23 16:08	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:08	1
Zinc	**36.7**		20.0		ug/L		02/20/23 14:02	02/22/23 16:08	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**820**		100		ug/L		02/20/23 14:12	02/21/23 15:05	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Barium	**44.7**		5.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Beryllium	**4.39**		0.500		ug/L		02/20/23 14:12	02/21/23 15:05	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 15:05	1
Calcium	**20000**		500		ug/L		02/20/23 14:12	02/21/23 15:05	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Cobalt	**37.0**		0.500		ug/L		02/20/23 14:12	02/21/23 15:05	1
Iron	100	U	100		ug/L		02/20/23 14:12	02/21/23 15:05	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 15:05	1
Magnesium	**6100**		250		ug/L		02/20/23 14:12	02/21/23 15:05	1
Manganese	**33.7**		5.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Nickel	**28.7**		5.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Potassium	1000	U	1000		ug/L		02/20/23 14:12	02/21/23 15:05	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 15:05	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Sodium	**3100**		500		ug/L		02/20/23 14:12	02/21/23 15:05	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 15:05	1
Zinc	**37.3**		20.0		ug/L		02/20/23 14:12	02/21/23 15:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:17	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54579
Date Collected: 02/08/23 10:43
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230711-5
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:40	1

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54573
Lab Sample ID: 680-230711-6
Date Collected: 02/09/23 11:22
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:02	02/22/23 16:16	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Barium	**58.0**		5.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:16	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:16	1
Calcium	**57400**		500		ug/L		02/20/23 14:02	02/22/23 16:16	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Cobalt	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:16	1
Iron	100	U	100		ug/L		02/20/23 14:02	02/22/23 16:16	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:16	1
Magnesium	**1580**		250		ug/L		02/20/23 14:02	02/22/23 16:16	1
Manganese	**81.6**		5.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Potassium	1000	U	1000		ug/L		02/20/23 14:02	02/22/23 16:16	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:16	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Sodium	**7920**		500		ug/L		02/20/23 14:02	02/22/23 16:16	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:16	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 16:16	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:12	02/21/23 15:09	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Barium	**57.0**		5.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 15:09	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 15:09	1
Calcium	**58300**		500		ug/L		02/20/23 14:12	02/21/23 15:09	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Cobalt	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 15:09	1
Iron	100	U	100		ug/L		02/20/23 14:12	02/21/23 15:09	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 15:09	1
Magnesium	**1740**		250		ug/L		02/20/23 14:12	02/21/23 15:09	1
Manganese	**81.1**		5.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Potassium	1000	U	1000		ug/L		02/20/23 14:12	02/21/23 15:09	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 15:09	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Sodium	**8360**		500		ug/L		02/20/23 14:12	02/21/23 15:09	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 15:09	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 15:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:21	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54573
Date Collected: 02/09/23 11:22
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230711-6
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:43	1

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54581
Lab Sample ID: 680-230711-7
Date Collected: 02/09/23 09:42
Matrix: Water
Date Received: 02/16/23 11:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**107**		100		ug/L		02/20/23 14:02	02/22/23 16:20	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Barium	**25.8**		5.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:20	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 16:20	1
Calcium	**1670**		500		ug/L		02/20/23 14:02	02/22/23 16:20	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Cobalt	**17.2**		0.500		ug/L		02/20/23 14:02	02/22/23 16:20	1
Iron	**148**		100		ug/L		02/20/23 14:02	02/22/23 16:20	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:20	1
Magnesium	**465**		250		ug/L		02/20/23 14:02	02/22/23 16:20	1
Manganese	**100**		5.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Potassium	1000	U	1000		ug/L		02/20/23 14:02	02/22/23 16:20	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 16:20	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Sodium	**4560**		500		ug/L		02/20/23 14:02	02/22/23 16:20	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 16:20	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 16:20	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**111**		100		ug/L		02/20/23 14:12	02/21/23 15:13	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Barium	**22.3**		5.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 15:13	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 15:13	1
Calcium	**1760**		500		ug/L		02/20/23 14:12	02/21/23 15:13	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Cobalt	**15.5**		0.500		ug/L		02/20/23 14:12	02/21/23 15:13	1
Iron	**103**		100		ug/L		02/20/23 14:12	02/21/23 15:13	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 15:13	1
Magnesium	**495**		250		ug/L		02/20/23 14:12	02/21/23 15:13	1
Manganese	**88.5**		5.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Potassium	1000	U	1000		ug/L		02/20/23 14:12	02/21/23 15:13	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 15:13	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Sodium	**4540**		500		ug/L		02/20/23 14:12	02/21/23 15:13	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 15:13	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 15:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:24	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

Client Sample ID: AF54581
Date Collected: 02/09/23 09:42
Date Received: 02/16/23 11:00

Lab Sample ID: 680-230711-7
Matrix: Water

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 15:46	1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-764150/1-A
Matrix: Water
Analysis Batch: 764596

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:02	02/22/23 15:03	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Barium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 15:03	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 15:03	1
Calcium	500	U	500		ug/L		02/20/23 14:02	02/22/23 15:03	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Cobalt	0.500	U	0.500		ug/L		02/20/23 14:02	02/22/23 15:03	1
Iron	100	U	100		ug/L		02/20/23 14:02	02/22/23 15:03	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 15:03	1
Magnesium	250	U	250		ug/L		02/20/23 14:02	02/22/23 15:03	1
Manganese	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Potassium	1000	U	1000		ug/L		02/20/23 14:02	02/22/23 15:03	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:02	02/22/23 15:03	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Sodium	500	U	500		ug/L		02/20/23 14:02	02/22/23 15:03	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:02	02/22/23 15:03	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:02	02/22/23 15:03	1

Lab Sample ID: LCS 680-764150/2-A
Matrix: Water
Analysis Batch: 764596

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5327		ug/L		107	80 - 120
Antimony	50.0	51.92		ug/L		104	80 - 120
Arsenic	100	110.1		ug/L		110	80 - 120
Barium	100	106.7		ug/L		107	80 - 120
Beryllium	50.0	53.03		ug/L		106	80 - 120
Cadmium	50.0	51.58		ug/L		103	80 - 120
Calcium	5000	5501		ug/L		110	80 - 120
Chromium	100	104.7		ug/L		105	80 - 120
Cobalt	50.0	55.71		ug/L		111	80 - 120
Iron	5000	5568		ug/L		111	80 - 120
Lead	505	532.7		ug/L		106	80 - 120
Magnesium	5010	5330		ug/L		106	80 - 120
Manganese	400	443.6		ug/L		111	80 - 120
Nickel	100	109.9		ug/L		110	80 - 120
Potassium	6970	7619		ug/L		109	80 - 120
Selenium	100	117.6		ug/L		118	80 - 120
Silver	50.0	51.94		ug/L		104	80 - 120
Sodium	5050	5743		ug/L		114	80 - 120
Thallium	50.0	51.12		ug/L		102	80 - 120
Zinc	100	107.0		ug/L		107	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230711-1 MS
Matrix: Water
Analysis Batch: 764596

Client Sample ID: AF54575
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	100	U	5000	5102		ug/L		101	75 - 125
Antimony	5.00	U	50.0	51.30		ug/L		103	75 - 125
Arsenic	3.00	U	100	107.4		ug/L		107	75 - 125
Barium	57.2		100	157.2		ug/L		100	75 - 125
Beryllium	0.500	U	50.0	51.80		ug/L		104	75 - 125
Cadmium	0.500	U	50.0	51.10		ug/L		102	75 - 125
Chromium	5.00	U	100	99.07		ug/L		99	75 - 125
Cobalt	0.990		50.0	52.05		ug/L		102	75 - 125
Iron	3190		5000	8339		ug/L		103	75 - 125
Lead	2.50	U	505	520.5		ug/L		103	75 - 125
Magnesium	149000		5010	148600	4	ug/L		-5	75 - 125
Manganese	6760		400	6989	4	ug/L		56	75 - 125
Nickel	5.00	U	100	103.8		ug/L		102	75 - 125
Potassium	8530		6970	15490		ug/L		100	75 - 125
Selenium	2.50	U	100	108.4		ug/L		108	75 - 125
Silver	1.00	U	50.0	48.20		ug/L		96	75 - 125
Sodium	209000		5050	207400	4	ug/L		-37	75 - 125
Thallium	1.00	U	50.0	50.41		ug/L		101	75 - 125
Zinc	20.0	U	100	119.5		ug/L		115	75 - 125

Lab Sample ID: 680-230711-1 MS
Matrix: Water
Analysis Batch: 764596

Client Sample ID: AF54575
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	965000		5000	916500	4	ug/L		-971	75 - 125

Lab Sample ID: 680-230711-1 MSD
Matrix: Water
Analysis Batch: 764596

Client Sample ID: AF54575
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	100	U	5000	5006		ug/L		99	75 - 125	2	20
Antimony	5.00	U	50.0	50.36		ug/L		101	75 - 125	2	20
Arsenic	3.00	U	100	107.3		ug/L		107	75 - 125	0	20
Barium	57.2		100	156.5		ug/L		99	75 - 125	0	20
Beryllium	0.500	U	50.0	50.71		ug/L		101	75 - 125	2	20
Cadmium	0.500	U	50.0	47.74		ug/L		95	75 - 125	7	20
Chromium	5.00	U	100	98.86		ug/L		99	75 - 125	0	20
Cobalt	0.990		50.0	51.56		ug/L		101	75 - 125	1	20
Iron	3190		5000	8354		ug/L		103	75 - 125	0	20
Lead	2.50	U	505	515.7		ug/L		102	75 - 125	1	20
Magnesium	149000		5010	143800	4	ug/L		-102	75 - 125	3	20
Manganese	6760		400	6893	4	ug/L		32	75 - 125	1	20
Nickel	5.00	U	100	103.7		ug/L		102	75 - 125	0	20
Potassium	8530		6970	15260		ug/L		97	75 - 125	1	20
Selenium	2.50	U	100	105.0		ug/L		105	75 - 125	3	20
Silver	1.00	U	50.0	47.87		ug/L		96	75 - 125	1	20
Sodium	209000		5050	202800	4	ug/L		-126	75 - 125	2	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230711-1 MSD
Matrix: Water
Analysis Batch: 764596

Client Sample ID: AF54575
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium	1.00	U	50.0	49.49		ug/L		99	75 - 125	2	20
Zinc	20.0	U	100	99.18		ug/L		95	75 - 125	19	20

Lab Sample ID: 680-230711-1 MSD
Matrix: Water
Analysis Batch: 764596

Client Sample ID: AF54575
Prep Type: Total Recoverable
Prep Batch: 764150

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	965000		5000	916200	4	ug/L		-976	75 - 125	0	20

Lab Sample ID: MB 680-764259/1-A
Matrix: Water
Analysis Batch: 764406

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 764259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/20/23 14:12	02/21/23 13:27	1
Antimony	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Arsenic	3.00	U	3.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Barium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Beryllium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 13:27	1
Cadmium	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 13:27	1
Calcium	500	U	500		ug/L		02/20/23 14:12	02/21/23 13:27	1
Chromium	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Cobalt	0.500	U	0.500		ug/L		02/20/23 14:12	02/21/23 13:27	1
Iron	100	U	100		ug/L		02/20/23 14:12	02/21/23 13:27	1
Lead	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 13:27	1
Magnesium	250	U	250		ug/L		02/20/23 14:12	02/21/23 13:27	1
Manganese	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Nickel	5.00	U	5.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Potassium	1000	U	1000		ug/L		02/20/23 14:12	02/21/23 13:27	1
Selenium	2.50	U	2.50		ug/L		02/20/23 14:12	02/21/23 13:27	1
Silver	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Sodium	500	U	500		ug/L		02/20/23 14:12	02/21/23 13:27	1
Thallium	1.00	U	1.00		ug/L		02/20/23 14:12	02/21/23 13:27	1
Zinc	20.0	U	20.0		ug/L		02/20/23 14:12	02/21/23 13:27	1

Lab Sample ID: LCS 680-764259/2-A
Matrix: Water
Analysis Batch: 764406

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	4937		ug/L		99	80 - 120
Antimony	50.0	48.68		ug/L		97	80 - 120
Arsenic	100	102.4		ug/L		102	80 - 120
Barium	100	95.03		ug/L		95	80 - 120
Beryllium	50.0	47.55		ug/L		95	80 - 120
Cadmium	50.0	47.75		ug/L		95	80 - 120
Calcium	5000	4951		ug/L		99	80 - 120
Chromium	100	93.99		ug/L		94	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-764259/2-A
Matrix: Water
Analysis Batch: 764406

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	50.0	51.55		ug/L		103	80 - 120
Iron	5000	5209		ug/L		104	80 - 120
Lead	505	494.4		ug/L		98	80 - 120
Magnesium	5010	5055		ug/L		101	80 - 120
Manganese	400	394.4		ug/L		99	80 - 120
Nickel	100	100.7		ug/L		101	80 - 120
Potassium	6970	6856		ug/L		98	80 - 120
Selenium	100	104.2		ug/L		104	80 - 120
Silver	50.0	48.28		ug/L		97	80 - 120
Sodium	5050	5206		ug/L		103	80 - 120
Thallium	50.0	47.24		ug/L		94	80 - 120
Zinc	100	100.3		ug/L		100	80 - 120

Lab Sample ID: MB 680-764784/1-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 764784

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	100	U	100		ug/L		02/24/23 05:26	02/24/23 17:26	1
Antimony	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Arsenic	3.00	U	3.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Barium	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Beryllium	0.500	U	0.500		ug/L		02/24/23 05:26	02/24/23 17:26	1
Cadmium	0.500	U	0.500		ug/L		02/24/23 05:26	02/24/23 17:26	1
Calcium	500	U	500		ug/L		02/24/23 05:26	02/24/23 17:26	1
Chromium	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Cobalt	0.500	U	0.500		ug/L		02/24/23 05:26	02/24/23 17:26	1
Iron	100	U	100		ug/L		02/24/23 05:26	02/24/23 17:26	1
Lead	2.50	U	2.50		ug/L		02/24/23 05:26	02/24/23 17:26	1
Magnesium	250	U	250		ug/L		02/24/23 05:26	02/24/23 17:26	1
Manganese	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Nickel	5.00	U	5.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Potassium	1000	U	1000		ug/L		02/24/23 05:26	02/24/23 17:26	1
Selenium	2.50	U	2.50		ug/L		02/24/23 05:26	02/24/23 17:26	1
Silver	1.00	U	1.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Sodium	500	U	500		ug/L		02/24/23 05:26	02/24/23 17:26	1
Thallium	1.00	U	1.00		ug/L		02/24/23 05:26	02/24/23 17:26	1
Zinc	20.0	U	20.0		ug/L		02/24/23 05:26	02/24/23 17:26	1

Lab Sample ID: LCS 680-764784/2-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5407		ug/L		108	80 - 120
Antimony	50.0	52.35		ug/L		105	80 - 120
Arsenic	100	108.1		ug/L		108	80 - 120
Barium	100	101.4		ug/L		101	80 - 120
Beryllium	50.0	50.87		ug/L		102	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-764784/2-A
Matrix: Water
Analysis Batch: 764981

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 764784

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	50.0	51.97		ug/L		104	80 - 120
Calcium	5000	5244		ug/L		105	80 - 120
Chromium	100	100.2		ug/L		100	80 - 120
Cobalt	50.0	54.56		ug/L		109	80 - 120
Iron	5000	5380		ug/L		108	80 - 120
Lead	505	535.5		ug/L		106	80 - 120
Magnesium	5010	5311		ug/L		106	80 - 120
Manganese	400	426.9		ug/L		107	80 - 120
Nickel	100	107.3		ug/L		107	80 - 120
Potassium	6970	7236		ug/L		104	80 - 120
Selenium	100	106.2		ug/L		106	80 - 120
Silver	50.0	51.26		ug/L		103	80 - 120
Sodium	5050	5280		ug/L		105	80 - 120
Thallium	50.0	51.31		ug/L		103	80 - 120
Zinc	100	107.5		ug/L		108	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-764470/1-A
Matrix: Water
Analysis Batch: 764526

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 764470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/23 11:03	02/22/23 14:39	1

Lab Sample ID: LCS 680-764470/2-A
Matrix: Water
Analysis Batch: 764526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 764470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.526		ug/L		101	80 - 120

Metals

Prep Batch: 764150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Total Recoverable	Water	3005A	
680-230711-2	AF54576	Total Recoverable	Water	3005A	
680-230711-3	AF54577	Total Recoverable	Water	3005A	
680-230711-4	AF54578	Total Recoverable	Water	3005A	
680-230711-5	AF54579	Total Recoverable	Water	3005A	
680-230711-6	AF54573	Total Recoverable	Water	3005A	
680-230711-7	AF54581	Total Recoverable	Water	3005A	
MB 680-764150/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-764150/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-230711-1 MS	AF54575	Total Recoverable	Water	3005A	
680-230711-1 MSD	AF54575	Total Recoverable	Water	3005A	

Prep Batch: 764259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Dissolved	Water	3005A	
680-230711-2	AF54576	Dissolved	Water	3005A	
680-230711-3	AF54577	Dissolved	Water	3005A	
680-230711-4	AF54578	Dissolved	Water	3005A	
680-230711-5	AF54579	Dissolved	Water	3005A	
680-230711-6	AF54573	Dissolved	Water	3005A	
680-230711-7	AF54581	Dissolved	Water	3005A	
MB 680-764259/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-764259/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 764406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Dissolved	Water	6020B	764259
680-230711-2	AF54576	Dissolved	Water	6020B	764259
680-230711-3	AF54577	Dissolved	Water	6020B	764259
680-230711-4	AF54578	Dissolved	Water	6020B	764259
680-230711-5	AF54579	Dissolved	Water	6020B	764259
680-230711-6	AF54573	Dissolved	Water	6020B	764259
680-230711-7	AF54581	Dissolved	Water	6020B	764259
MB 680-764259/1-A	Method Blank	Total Recoverable	Water	6020B	764259
LCS 680-764259/2-A	Lab Control Sample	Total Recoverable	Water	6020B	764259

Prep Batch: 764470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Dissolved	Water	7470A	
680-230711-1	AF54575	Total/NA	Water	7470A	
680-230711-2	AF54576	Dissolved	Water	7470A	
680-230711-2	AF54576	Total/NA	Water	7470A	
680-230711-3	AF54577	Dissolved	Water	7470A	
680-230711-3	AF54577	Total/NA	Water	7470A	
680-230711-4	AF54578	Dissolved	Water	7470A	
680-230711-4	AF54578	Total/NA	Water	7470A	
680-230711-5	AF54579	Dissolved	Water	7470A	
680-230711-5	AF54579	Total/NA	Water	7470A	
680-230711-6	AF54573	Dissolved	Water	7470A	
680-230711-6	AF54573	Total/NA	Water	7470A	
680-230711-7	AF54581	Dissolved	Water	7470A	

Metals (Continued)

Prep Batch: 764470 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-7	AF54581	Total/NA	Water	7470A	
MB 680-764470/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-764470/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 764526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Dissolved	Water	7470A	764470
680-230711-1	AF54575	Total/NA	Water	7470A	764470
680-230711-2	AF54576	Dissolved	Water	7470A	764470
680-230711-2	AF54576	Total/NA	Water	7470A	764470
680-230711-3	AF54577	Dissolved	Water	7470A	764470
680-230711-3	AF54577	Total/NA	Water	7470A	764470
680-230711-4	AF54578	Dissolved	Water	7470A	764470
680-230711-4	AF54578	Total/NA	Water	7470A	764470
680-230711-5	AF54579	Dissolved	Water	7470A	764470
680-230711-5	AF54579	Total/NA	Water	7470A	764470
680-230711-6	AF54573	Dissolved	Water	7470A	764470
680-230711-6	AF54573	Total/NA	Water	7470A	764470
680-230711-7	AF54581	Dissolved	Water	7470A	764470
680-230711-7	AF54581	Total/NA	Water	7470A	764470
MB 680-764470/1-A	Method Blank	Total/NA	Water	7470A	764470
LCS 680-764470/2-A	Lab Control Sample	Total/NA	Water	7470A	764470

Analysis Batch: 764596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Dissolved	Water	6020B	764259
680-230711-1	AF54575	Total Recoverable	Water	6020B	764150
680-230711-1	AF54575	Total Recoverable	Water	6020B	764150
680-230711-2	AF54576	Total Recoverable	Water	6020B	764150
680-230711-3	AF54577	Total Recoverable	Water	6020B	764150
680-230711-4	AF54578	Total Recoverable	Water	6020B	764150
680-230711-5	AF54579	Total Recoverable	Water	6020B	764150
680-230711-6	AF54573	Total Recoverable	Water	6020B	764150
680-230711-7	AF54581	Total Recoverable	Water	6020B	764150
MB 680-764150/1-A	Method Blank	Total Recoverable	Water	6020B	764150
LCS 680-764150/2-A	Lab Control Sample	Total Recoverable	Water	6020B	764150
680-230711-1 MS	AF54575	Total Recoverable	Water	6020B	764150
680-230711-1 MS	AF54575	Total Recoverable	Water	6020B	764150
680-230711-1 MSD	AF54575	Total Recoverable	Water	6020B	764150
680-230711-1 MSD	AF54575	Total Recoverable	Water	6020B	764150

Prep Batch: 764784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Total Recoverable	Water	3005A	
MB 680-764784/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-764784/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 764981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Total Recoverable	Water	6020B	764784
MB 680-764784/1-A	Method Blank	Total Recoverable	Water	6020B	764784

Metals (Continued)

Analysis Batch: 764981 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-764784/2-A	Lab Control Sample	Total Recoverable	Water	6020B	764784

Analysis Batch: 764983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230711-1	AF54575	Total Recoverable	Water	6020B	764784

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54575
Lab Sample ID: 680-230711-1

Date Collected: 02/08/23 09:30
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 14:40
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		10	764596	BWR	EET SAV	02/22/23 16:49
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 15:11
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		10	764596	BWR	EET SAV	02/22/23 15:32
Total Recoverable	Prep	3005A			764784	RR	EET SAV	02/24/23 05:26
Total Recoverable	Analysis	6020B		1	764981	BWR	EET SAV	02/24/23 18:27
Total Recoverable	Prep	3005A			764784	RR	EET SAV	02/24/23 05:26
Total Recoverable	Analysis	6020B		10	764983	BWR	EET SAV	02/25/23 10:52
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:27
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 14:58

Client Sample ID: AF54576
Lab Sample ID: 680-230711-2

Date Collected: 02/08/23 12:29
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 14:44
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 16:00
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:30
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:01

Client Sample ID: AF54577
Lab Sample ID: 680-230711-3

Date Collected: 02/08/23 12:34
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 14:48
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 16:04
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:33
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:05

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54578
Lab Sample ID: 680-230711-4
Date Collected: 02/08/23 14:48
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 14:52
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 16:12
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:37
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:08

Client Sample ID: AF54579
Lab Sample ID: 680-230711-5
Date Collected: 02/08/23 10:43
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 15:05
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 16:08
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:40
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:17

Client Sample ID: AF54573
Lab Sample ID: 680-230711-6
Date Collected: 02/09/23 11:22
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 15:09
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 16:16
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:43
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:21

Client Sample ID: AF54581
Lab Sample ID: 680-230711-7
Date Collected: 02/09/23 09:42
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			764259	RR	EET SAV	02/20/23 14:12
Dissolved	Analysis	6020B		1	764406	BWR	EET SAV	02/21/23 15:13

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54581
Lab Sample ID: 680-230711-7
Date Collected: 02/09/23 09:42
Matrix: Water
Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			764150	RR	EET SAV	02/20/23 14:02
Total Recoverable	Analysis	6020B		1	764596	BWR	EET SAV	02/22/23 16:20
Dissolved	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Dissolved	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:46
Total/NA	Prep	7470A			764470	BCB	EET SAV	02/22/23 11:03
Total/NA	Analysis	7470A		1	764526	BCB	EET SAV	02/22/23 15:24

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info. TA SAV Contract Lab Due Date (Lab Only). 2 / 28 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone (843)761-8000 Ext. 5148
Fax. (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc sample info • Any other notes	TOTAL METALS SEE BELOW	DISSOLVED METALS SEE BELOW		
AF54575	CCMAP - 3	2/8/23	0930	ZDM BSB	2	P	G	GW	2	S Hg-7470	X	X		
76	CCMAP - 4		1229							ALL OTHERS 6020		X		
77	CCMAP - 4D		1234											
78	CCMAP - 5		1448							* SEE SHEET FOR RLS.				
79	CCMAP - 6		1043											
AF54573	CCMAP - 1	2/9/23	1122											
AF54581	CCMAP - 8		0942											

680-230711 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/15/23	1530				
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☒ Ag	☐ Cu	☒ Sb
☒ Al	☒ Fe	☒ Se
☒ As	☒ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☒ Mg	☐ Ti
☒ Be	☒ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☒ Na	☒ Zn
☒ Co	☒ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Napthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

2/16/23 1100
19.9/19.9

Matrix codes GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-230711-1

Login Number: 230711

List Source: Eurofins Savannah

List Number: 1

Creator: Johnson, Corey M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-230711-1
Project/Site: 125915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 2/27/2023 9:07:27 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-230959-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

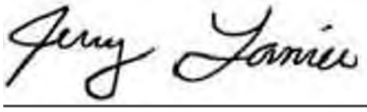
See page two for job notes and contact information.

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
Jerry Lanier, Project Manager I
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(912)250-0281

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Job ID: 680-230959-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-230959-1

Receipt
The samples were received on 2/22/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.1°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-230959-1	AF54572	Water	01/24/23 11:46	02/22/23 10:30
680-230959-2	AF54600	Water	01/24/23 10:18	02/22/23 10:30
680-230959-3	AF54561	Water	02/01/23 12:32	02/22/23 10:30
680-230959-4	AF54591	Water	02/07/23 11:40	02/22/23 10:30
680-230959-5	AF54565	Water	02/02/23 11:13	02/22/23 10:30
680-230959-6	AF54557	Water	02/06/23 11:39	02/22/23 10:30
680-230959-7	AF54588	Water	02/06/23 12:55	02/22/23 10:30
680-230959-8	AF54589	Water	02/06/23 15:32	02/22/23 10:30
680-230959-9	AF54602	Water	01/30/23 11:26	02/22/23 10:30

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Method	Method Description	Protocol	Laboratory
300.0-1993 R2.1	Anions, Ion Chromatography	MCAWW	EET SAV
6010D	Metals, Silica (ICP)	SW846	EET SAV
FILTRATION	Sample Filtration	None	EET SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client: South Carolina Public Service Authority
Job ID: 680-230959-1
Project/Site: 125915/JM02.09.G01.1/36500

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Job ID: 680-230959-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54572 — Lab Sample ID: 680-230959-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	3110		500		ug/L	1		6010D	Dissolved

Client Sample ID: AF54600 — Lab Sample ID: 680-230959-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	33000		500		ug/L	1		6010D	Dissolved

Client Sample ID: AF54561 — Lab Sample ID: 680-230959-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	28000		500		ug/L	1		6010D	Dissolved

Client Sample ID: AF54591 — Lab Sample ID: 680-230959-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	117000		5000		ug/L	10		6010D	Dissolved

Client Sample ID: AF54565 — Lab Sample ID: 680-230959-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	38200		500		ug/L	1		6010D	Dissolved

Client Sample ID: AF54557 — Lab Sample ID: 680-230959-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	119000		5000		ug/L	10		6010D	Dissolved

Client Sample ID: AF54588 — Lab Sample ID: 680-230959-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	86700		5000		ug/L	10		6010D	Dissolved

Client Sample ID: AF54589 — Lab Sample ID: 680-230959-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	557		5.00		mg/L	5		300.0-1993 R2.1	Total/NA
Chloride	417		2.50		mg/L	5		300.0-1993 R2.1	Total/NA
SiO2, Silica	47900		500		ug/L	1		6010D	Dissolved

Client Sample ID: AF54602 — Lab Sample ID: 680-230959-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO2, Silica	22500		500		ug/L	1		6010D	Dissolved

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54572
Date Collected: 01/24/23 11:46
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-1
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**3110**		500		ug/L			02/23/23 18:24	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54600
Date Collected: 01/24/23 10:18
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-2
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**33000**		500		ug/L			02/23/23 18:29	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54561
Date Collected: 02/01/23 12:32
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-3
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**28000**		500		ug/L			02/23/23 18:31	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54591
Date Collected: 02/07/23 11:40
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-4
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**117000**		5000		ug/L			02/26/23 10:42	10

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54565
Date Collected: 02/02/23 11:13
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-5
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**38200**		500		ug/L			02/23/23 18:34	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54557
Date Collected: 02/06/23 11:39
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-6
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**119000**		5000		ug/L			02/26/23 10:44	10

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54588
Date Collected: 02/06/23 12:55
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-7
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**86700**		5000		ug/L			02/26/23 10:45	10

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54589
Date Collected: 02/06/23 15:32
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-8
Matrix: Water

Method: MCAWW 300.0-1993 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**557**		5.00		mg/L			02/23/23 18:32	5
Chloride	**417**		2.50		mg/L			02/23/23 18:32	5

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**47900**		500		ug/L			02/23/23 18:42	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54602
Date Collected: 01/30/23 11:26
Date Received: 02/22/23 10:30

Lab Sample ID: 680-230959-9
Matrix: Water

Method: SW846 6010D - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	**22500**		500		ug/L			02/23/23 18:44	1

Method: 300.0-1993 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 680-764690/2
Matrix: Water
Analysis Batch: 764690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.00	U	1.00		mg/L			02/23/23 11:20	1
Chloride	0.500	U	0.500		mg/L			02/23/23 11:20	1

Lab Sample ID: LCS 680-764690/4
Matrix: Water
Analysis Batch: 764690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	10.0	10.42		mg/L		104	90 - 110
Chloride	10.0	9.954		mg/L		100	90 - 110

Lab Sample ID: LCSD 680-764690/5
Matrix: Water
Analysis Batch: 764690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	10.0	10.32		mg/L		103	90 - 110	1	15
Chloride	10.0	9.995		mg/L		100	90 - 110	0	15

Method: 6010D - Metals, Silica (ICP)

Lab Sample ID: MB 680-764734/1-A
Matrix: Water
Analysis Batch: 764991

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2, Silica	500	U	500		ug/L			02/23/23 18:21	1

Lab Sample ID: LCS 680-764734/2-A
Matrix: Water
Analysis Batch: 764991

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
SiO2, Silica	21400	21510		ug/L		101	75 - 125

Lab Sample ID: 680-230959-1 MS
Matrix: Water
Analysis Batch: 764991

Client Sample ID: AF54572
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
SiO2, Silica	3110		21400	24290		ug/L		99	75 - 125

Lab Sample ID: 680-230959-1 MSD
Matrix: Water
Analysis Batch: 764991

Client Sample ID: AF54572
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
SiO2, Silica	3110		21400	24330		ug/L		99	75 - 125	0	20

QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

HPLC/IC

Analysis Batch: 764690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230959-8	AF54589	Total/NA	Water	300.0-1993 R2.1	
MB 680-764690/2	Method Blank	Total/NA	Water	300.0-1993 R2.1	
LCS 680-764690/4	Lab Control Sample	Total/NA	Water	300.0-1993 R2.1	
LCSD 680-764690/5	Lab Control Sample Dup	Total/NA	Water	300.0-1993 R2.1	

Metals

Filtration Batch: 764734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230959-1	AF54572	Dissolved	Water	FILTRATION	
680-230959-2	AF54600	Dissolved	Water	FILTRATION	
680-230959-3	AF54561	Dissolved	Water	FILTRATION	
680-230959-4	AF54591	Dissolved	Water	FILTRATION	
680-230959-5	AF54565	Dissolved	Water	FILTRATION	
680-230959-6	AF54557	Dissolved	Water	FILTRATION	
680-230959-7	AF54588	Dissolved	Water	FILTRATION	
680-230959-8	AF54589	Dissolved	Water	FILTRATION	
680-230959-9	AF54602	Dissolved	Water	FILTRATION	
MB 680-764734/1-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 680-764734/2-A	Lab Control Sample	Dissolved	Water	FILTRATION	
680-230959-1 MS	AF54572	Dissolved	Water	FILTRATION	
680-230959-1 MSD	AF54572	Dissolved	Water	FILTRATION	

Analysis Batch: 764991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230959-1	AF54572	Dissolved	Water	6010D	764734
680-230959-2	AF54600	Dissolved	Water	6010D	764734
680-230959-3	AF54561	Dissolved	Water	6010D	764734
680-230959-5	AF54565	Dissolved	Water	6010D	764734
680-230959-8	AF54589	Dissolved	Water	6010D	764734
680-230959-9	AF54602	Dissolved	Water	6010D	764734
MB 680-764734/1-A	Method Blank	Dissolved	Water	6010D	764734
LCS 680-764734/2-A	Lab Control Sample	Dissolved	Water	6010D	764734
680-230959-1 MS	AF54572	Dissolved	Water	6010D	764734
680-230959-1 MSD	AF54572	Dissolved	Water	6010D	764734

Analysis Batch: 764992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-230959-4	AF54591	Dissolved	Water	6010D	764734
680-230959-6	AF54557	Dissolved	Water	6010D	764734
680-230959-7	AF54588	Dissolved	Water	6010D	764734

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230959-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54572
Lab Sample ID: 680-230959-1
Date Collected: 01/24/23 11:46
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		1	764991	BCB	EET SAV	02/23/23 18:24

Client Sample ID: AF54600
Lab Sample ID: 680-230959-2
Date Collected: 01/24/23 10:18
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		1	764991	BCB	EET SAV	02/23/23 18:29

Client Sample ID: AF54561
Lab Sample ID: 680-230959-3
Date Collected: 02/01/23 12:32
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		1	764991	BCB	EET SAV	02/23/23 18:31

Client Sample ID: AF54591
Lab Sample ID: 680-230959-4
Date Collected: 02/07/23 11:40
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		10	764992	BCB	EET SAV	02/26/23 10:42

Client Sample ID: AF54565
Lab Sample ID: 680-230959-5
Date Collected: 02/02/23 11:13
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		1	764991	BCB	EET SAV	02/23/23 18:34

Client Sample ID: AF54557
Lab Sample ID: 680-230959-6
Date Collected: 02/06/23 11:39
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		10	764992	BCB	EET SAV	02/26/23 10:44

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-230959-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF54588
Lab Sample ID: 680-230959-7

Date Collected: 02/06/23 12:55
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		10	764992	BCB	EET SAV	02/26/23 10:45

Client Sample ID: AF54589
Lab Sample ID: 680-230959-8

Date Collected: 02/06/23 15:32
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0-1993 R2.1		5	764690	GE	EET SAV	02/23/23 18:32
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		1	764991	BCB	EET SAV	02/23/23 18:42

Client Sample ID: AF54602
Lab Sample ID: 680-230959-9

Date Collected: 01/30/23 11:26
Matrix: Water
Date Received: 02/22/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			764734	BCB	EET SAV	02/23/23 15:15
Dissolved	Analysis	6010D		1	764991	BCB	EET SAV	02/23/23 18:44

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info TA-SAV Contract Lab Due Date (Lab Only) 2/27/23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone (843)761-8000 Ext. 5148
Fax. (843)761-4175

Customer Email/Report Recipient: LCWILLIA@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC Yes (No)

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	1.5			
AF54572.	CBW-1	1/24/23	1146	MDS CDM	1	P	G	GW	1	METHOD-6010	X			
600	PM 1	1	1018	1										
561	CAP 5	2/1/23	1232	ZDM BSB										
591	CGYP-6	2/7/23	1140											
565	CAP-9	2/2/23	1113											
557	CAP-1	2/6/23	1139											
588	CGYP-3	1	1255											
589	CGYP-4	1	1532											
602	EPOZ-4	1/30/23	1126	1	1	1	1	1	1		1			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	2/21/23	1300		222.23	1050	
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 2.1 2.1 Initial:
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

680-230959 Chain of Custody

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

☐ Ultim
☐ %
☐ As
☐ Su
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-230959-1

Login Number: 230959

List Source: Eurofins Savannah

List Number: 1

Creator: Sims, Robert D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-230959-1
Project/Site: 125915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

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JOB DESCRIPTION

12915/JM02.09.G01.1/36500

JOB NUMBER

680-232605-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

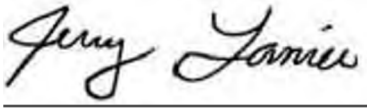
See page two for job notes and contact information.

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Revision 1

Authorized for release by
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Job ID: 680-232605-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-232605-1

REVISION

The report being provided is a revision of the original report sent on 4/20/2023. The report (revision 1) is being revised to report a less dilute Se result per client request..

Receipt
The samples were received on 3/27/2023 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 20.1°C

Metals
Method 6010D: preparation batch 160-605942 and analytical batch 160-606620 The MS/MSD/serial dilution/PDS was analyzed on a different job within the prep batch. The sample chosen for batch QC had a different analyte list and QC requirements. As a result, the MS/MSD/serial dilution/PDS for Boron and Calcium was not applied to this job. AF58977 (680-232605-1), AF58978 (680-232605-2) and AF58979 (680-232605-3) Method performance is demonstrated by acceptable LCS recovery.

Method 6010D: preparation batch 160-605942 and analytical batch 160-606620 The following samples were diluted to bring the concentration of target analytes within the calibration range: AF58977 (680-232605-1), AF58978 (680-232605-2) and AF58979 (680-232605-3). Elevated reporting limits (RLs) are provided.

Method 6010D: preparation batch 160-605942 and analytical batch 160-606635 The following samples were diluted to bring the concentration of target analytes within the calibration range: AF58977 (680-232605-1) and AF58978 (680-232605-2). Elevated reporting limits (RLs) are provided.

Method 6010D: preparation batch 160-605942 and analytical batch 160-608950 The following sample was diluted to bring the concentration of target analytes within the calibration range: AF58978 (680-232605-2). Elevated reporting limits (RLs) are provided.

Method 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 680-770494 and analytical batch 680-770613 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-232605-1	AF58977	Water	03/20/23 10:37	03/27/23 11:00
680-232605-2	AF58978	Water	03/20/23 10:42	03/27/23 11:00
680-232605-3	AF58979	Water	03/20/23 09:28	03/27/23 11:00
680-232605-4	AF58980	Water	03/20/23 12:20	03/27/23 11:00

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET SL
6020B	Metals (ICP/MS)	SW846	EET SAV
7470A	Mercury (CVAA)	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3010A	Preparation, Total Metals	SW846	EET SL
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58977 — Lab Sample ID: 680-232605-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	10800		500		ug/L	10		6010D	Total/NA
Calcium	397000		5000		ug/L	5		6010D	Total/NA
Arsenic	16.8		3.00		ug/L	1		6020B	Total Recoverable
Barium	29.2		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	9.44		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.790		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	99.4		0.500		ug/L	1		6020B	Total Recoverable
Lead	36.1		2.50		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF58978 — Lab Sample ID: 680-232605-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	11700		500		ug/L	10		6010D	Total/NA
Calcium	418000		5000		ug/L	5		6010D	Total/NA
Arsenic	17.9		3.00		ug/L	1		6020B	Total Recoverable
Barium	30.7		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	9.79		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.630		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	105		0.500		ug/L	1		6020B	Total Recoverable
Lead	37.5		2.50		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF58979 — Lab Sample ID: 680-232605-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	51.5		50.0		ug/L	1		6010D	Total/NA
Calcium	192000		2000		ug/L	2		6010D	Total/NA
Barium	105		5.00		ug/L	1		6020B	Total Recoverable
Cobalt	0.660		0.500		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF58980 — Lab Sample ID: 680-232605-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	15.8		0.500		ug/L	1		6020B	Total Recoverable
Dissolved Cobalt	14.1		0.500		ug/L	1		6020B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: South Carolina Public Service Authority
Job ID: 680-232605-1
Project/Site: 12915/JM02.09.G01.1/36500

Client Sample ID: AF58977
Lab Sample ID: 680-232605-1

Date Collected: 03/20/23 10:37
Matrix: Water
Date Received: 03/27/23 11:00

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**10800**		500		ug/L		04/03/23 14:08	04/10/23 09:20	10
Calcium	**397000**		5000		ug/L		04/03/23 14:08	04/07/23 12:58	5
Lithium	50.0	U	50.0		ug/L		04/03/23 14:08	04/05/23 14:20	1
Molybdenum	40.0	U	40.0		ug/L		04/03/23 14:08	04/05/23 14:20	1
Selenium	15.0	U	15.0		ug/L		04/03/23 14:08	04/05/23 14:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:13	1
Arsenic	**16.8**		3.00		ug/L		03/28/23 12:26	03/29/23 14:13	1
Barium	**29.2**		5.00		ug/L		03/28/23 12:26	03/29/23 14:13	1
Beryllium	**9.44**		0.500		ug/L		03/28/23 12:26	03/29/23 14:13	1
Cadmium	**0.790**		0.500		ug/L		03/28/23 12:26	03/29/23 14:13	1
Chromium	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:13	1
Cobalt	**99.4**		0.500		ug/L		03/28/23 12:26	03/29/23 14:13	1
Lead	**36.1**		2.50		ug/L		03/28/23 12:26	03/29/23 14:13	1
Thallium	1.00	U	1.00		ug/L		03/28/23 12:26	03/29/23 14:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U F1	0.200		ug/L		03/30/23 09:56	03/30/23 15:41	1
Mercury	0.200	U	0.200		ug/L		04/17/23 08:07	04/17/23 17:48	1

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58978

Date Collected: 03/20/23 10:42
Date Received: 03/27/23 11:00

Lab Sample ID: 680-232605-2

Matrix: Water

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**11700**		500		ug/L		04/03/23 14:08	04/10/23 09:25	10
Calcium	**418000**		5000		ug/L		04/03/23 14:08	04/07/23 13:03	5
Lithium	50.0	U	50.0		ug/L		04/03/23 14:08	04/05/23 14:24	1
Molybdenum	40.0	U	40.0		ug/L		04/03/23 14:08	04/05/23 14:24	1
Selenium	30.0	U	30.0		ug/L		04/03/23 14:08	04/26/23 09:36	2

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:25	1
Arsenic	**17.9**		3.00		ug/L		03/28/23 12:26	03/29/23 14:25	1
Barium	**30.7**		5.00		ug/L		03/28/23 12:26	03/29/23 14:25	1
Beryllium	**9.79**		0.500		ug/L		03/28/23 12:26	03/29/23 14:25	1
Cadmium	**0.630**		0.500		ug/L		03/28/23 12:26	03/29/23 14:25	1
Chromium	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:25	1
Cobalt	**105**		0.500		ug/L		03/28/23 12:26	03/29/23 14:25	1
Lead	**37.5**		2.50		ug/L		03/28/23 12:26	03/29/23 14:25	1
Thallium	1.00	U	1.00		ug/L		03/28/23 12:26	03/29/23 14:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		03/30/23 09:56	03/30/23 15:46	1

Client Sample Results

Client: South Carolina Public Service Authority
Job ID: 680-232605-1
Project/Site: 12915/JM02.09.G01.1/36500

Client Sample ID: AF58979
Lab Sample ID: 680-232605-3

Date Collected: 03/20/23 09:28
Matrix: Water
Date Received: 03/27/23 11:00

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**51.5**		50.0		ug/L		04/03/23 14:08	04/05/23 14:29	1
Calcium	**192000**		2000		ug/L		04/03/23 14:08	04/07/23 13:07	2
Lithium	50.0	U	50.0		ug/L		04/03/23 14:08	04/05/23 14:29	1
Molybdenum	40.0	U	40.0		ug/L		04/03/23 14:08	04/05/23 14:29	1
Selenium	15.0	U	15.0		ug/L		04/03/23 14:08	04/05/23 14:29	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:29	1
Arsenic	3.00	U	3.00		ug/L		03/28/23 12:26	03/29/23 14:29	1
Barium	**105**		5.00		ug/L		03/28/23 12:26	03/29/23 14:29	1
Beryllium	0.500	U	0.500		ug/L		03/28/23 12:26	03/29/23 14:29	1
Cadmium	0.500	U	0.500		ug/L		03/28/23 12:26	03/29/23 14:29	1
Chromium	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:29	1
Cobalt	**0.660**		0.500		ug/L		03/28/23 12:26	03/29/23 14:29	1
Lead	2.50	U	2.50		ug/L		03/28/23 12:26	03/29/23 14:29	1
Thallium	1.00	U	1.00		ug/L		03/28/23 12:26	03/29/23 14:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		03/30/23 09:56	03/30/23 15:47	1

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58980
Date Collected: 03/20/23 12:20
Date Received: 03/27/23 11:00

Lab Sample ID: 680-232605-4
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	15.8		0.500		ug/L		03/28/23 12:26	03/29/23 14:33	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Cobalt	14.1		0.500		ug/L		03/28/23 12:26	03/29/23 14:37	1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 160-605942/1-A
Matrix: Water
Analysis Batch: 606308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 605942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	50.0	U	50.0		ug/L		04/03/23 14:08	04/05/23 13:01	1
Calcium	1000	U	1000		ug/L		04/03/23 14:08	04/05/23 13:01	1
Lithium	50.0	U	50.0		ug/L		04/03/23 14:08	04/05/23 13:01	1
Molybdenum	40.0	U	40.0		ug/L		04/03/23 14:08	04/05/23 13:01	1
Selenium	15.0	U	15.0		ug/L		04/03/23 14:08	04/05/23 13:01	1

Lab Sample ID: LCS 160-605942/2-A
Matrix: Water
Analysis Batch: 606308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 605942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	200	206.5		ug/L		103	80 - 120
Calcium	10000	10630		ug/L		106	80 - 120
Lithium	100	104.7		ug/L		105	80 - 120
Molybdenum	495	512.3		ug/L		103	80 - 120
Selenium	500	462.0		ug/L		92	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-770078/1-A
Matrix: Water
Analysis Batch: 770464

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 770078

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:04	1
Arsenic	3.00	U	3.00		ug/L		03/28/23 12:26	03/29/23 14:04	1
Barium	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:04	1
Beryllium	0.500	U	0.500		ug/L		03/28/23 12:26	03/29/23 14:04	1
Cadmium	0.500	U	0.500		ug/L		03/28/23 12:26	03/29/23 14:04	1
Chromium	5.00	U	5.00		ug/L		03/28/23 12:26	03/29/23 14:04	1
Lead	2.50	U	2.50		ug/L		03/28/23 12:26	03/29/23 14:04	1
Thallium	1.00	U	1.00		ug/L		03/28/23 12:26	03/29/23 14:04	1
Cobalt	0.500	U	0.500		ug/L		03/28/23 12:26	03/29/23 14:04	1
Dissolved Cobalt	0.500	U	0.500		ug/L		03/28/23 12:26	03/29/23 14:04	1

Lab Sample ID: LCS 680-770078/2-A
Matrix: Water
Analysis Batch: 770464

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 770078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	49.91		ug/L		100	80 - 120
Arsenic	100	103.9		ug/L		104	80 - 120
Barium	100	98.65		ug/L		99	80 - 120
Beryllium	50.0	48.85		ug/L		98	80 - 120
Cadmium	50.0	49.84		ug/L		100	80 - 120
Chromium	100	106.5		ug/L		106	80 - 120
Lead	505	505.3		ug/L		100	80 - 120
Thallium	50.0	48.29		ug/L		97	80 - 120
Cobalt	50.0	52.03		ug/L		104	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-770078/2-A
Matrix: Water
Analysis Batch: 770464

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 770078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Cobalt	50.0	52.03		ug/L		104	80 - 120

Lab Sample ID: 680-232605-1 MS
Matrix: Water
Analysis Batch: 770464

Client Sample ID: AF58977
Prep Type: Total Recoverable
Prep Batch: 770078

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	5.00	U	50.0	51.90		ug/L		103	75 - 125
Arsenic	16.8		100	114.0		ug/L		97	75 - 125
Barium	29.2		100	124.6		ug/L		95	75 - 125
Beryllium	9.44		50.0	58.23		ug/L		98	75 - 125
Cadmium	0.790		50.0	50.79		ug/L		100	75 - 125
Chromium	5.00	U	100	104.3		ug/L		101	75 - 125
Lead	36.1		505	537.1		ug/L		99	75 - 125
Thallium	1.00	U	50.0	50.69		ug/L		101	75 - 125
Cobalt	99.4		50.0	146.3		ug/L		94	75 - 125
Dissolved Cobalt	99.4		50.0	146.3		ug/L		94	75 - 125

Lab Sample ID: 680-232605-1 MSD
Matrix: Water
Analysis Batch: 770464

Client Sample ID: AF58977
Prep Type: Total Recoverable
Prep Batch: 770078

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	5.00	U	50.0	55.56		ug/L		110	75 - 125	7	20
Arsenic	16.8		100	124.3		ug/L		108	75 - 125	9	20
Barium	29.2		100	130.2		ug/L		101	75 - 125	4	20
Beryllium	9.44		50.0	62.44		ug/L		106	75 - 125	7	20
Cadmium	0.790		50.0	54.26		ug/L		107	75 - 125	7	20
Chromium	5.00	U	100	112.1		ug/L		109	75 - 125	7	20
Lead	36.1		505	573.9		ug/L		107	75 - 125	7	20
Thallium	1.00	U	50.0	53.65		ug/L		107	75 - 125	6	20
Cobalt	99.4		50.0	157.1		ug/L		116	75 - 125	7	20
Dissolved Cobalt	99.4		50.0	157.1		ug/L		116	75 - 125	7	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-770494/1-A
Matrix: Water
Analysis Batch: 770613

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 770494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		03/30/23 09:56	03/30/23 15:38	1

Lab Sample ID: LCS 680-770494/2-A
Matrix: Water
Analysis Batch: 770613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 770494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.360		ug/L		94	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 680-232605-1 MS — **Client Sample ID: AF58977**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 770613 — **Prep Batch: 770494**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U F1	1.00	0.2704	F1	ug/L		27	80 - 120

Lab Sample ID: 680-232605-1 MSD — **Client Sample ID: AF58977**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 770613 — **Prep Batch: 770494**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U F1	1.00	0.2524	F1	ug/L		25	80 - 120	7	20

Lab Sample ID: MB 680-773632/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 774039 — **Prep Batch: 773632**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		04/17/23 08:07	04/17/23 17:37	1

Lab Sample ID: LCS 680-773632/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 774039 — **Prep Batch: 773632**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.485		ug/L		99	80 - 120

Metals

Prep Batch: 605942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	3010A	
680-232605-2	AF58978	Total/NA	Water	3010A	
680-232605-3	AF58979	Total/NA	Water	3010A	
MB 160-605942/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-605942/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 606308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	6010D	605942
680-232605-2	AF58978	Total/NA	Water	6010D	605942
680-232605-3	AF58979	Total/NA	Water	6010D	605942
MB 160-605942/1-A	Method Blank	Total/NA	Water	6010D	605942
LCS 160-605942/2-A	Lab Control Sample	Total/NA	Water	6010D	605942

Analysis Batch: 606620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	6010D	605942
680-232605-2	AF58978	Total/NA	Water	6010D	605942
680-232605-3	AF58979	Total/NA	Water	6010D	605942

Analysis Batch: 606635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	6010D	605942
680-232605-2	AF58978	Total/NA	Water	6010D	605942

Analysis Batch: 608950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-2	AF58978	Total/NA	Water	6010D	605942

Prep Batch: 770078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total Recoverable	Water	3005A	
680-232605-2	AF58978	Total Recoverable	Water	3005A	
680-232605-3	AF58979	Total Recoverable	Water	3005A	
680-232605-4	AF58980	Dissolved	Water	3005A	
680-232605-4	AF58980	Total Recoverable	Water	3005A	
MB 680-770078/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-770078/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-232605-1 MS	AF58977	Total Recoverable	Water	3005A	
680-232605-1 MSD	AF58977	Total Recoverable	Water	3005A	

Analysis Batch: 770464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total Recoverable	Water	6020B	770078
680-232605-2	AF58978	Total Recoverable	Water	6020B	770078
680-232605-3	AF58979	Total Recoverable	Water	6020B	770078
680-232605-4	AF58980	Dissolved	Water	6020B	770078
680-232605-4	AF58980	Total Recoverable	Water	6020B	770078
MB 680-770078/1-A	Method Blank	Total Recoverable	Water	6020B	770078
LCS 680-770078/2-A	Lab Control Sample	Total Recoverable	Water	6020B	770078
680-232605-1 MS	AF58977	Total Recoverable	Water	6020B	770078

Metals (Continued)

Analysis Batch: 770464 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1 MSD	AF58977	Total Recoverable	Water	6020B	770078

Prep Batch: 770494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	7470A	
680-232605-2	AF58978	Total/NA	Water	7470A	
680-232605-3	AF58979	Total/NA	Water	7470A	
MB 680-770494/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-770494/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-232605-1 MS	AF58977	Total/NA	Water	7470A	
680-232605-1 MSD	AF58977	Total/NA	Water	7470A	

Analysis Batch: 770613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	7470A	770494
680-232605-2	AF58978	Total/NA	Water	7470A	770494
680-232605-3	AF58979	Total/NA	Water	7470A	770494
MB 680-770494/1-A	Method Blank	Total/NA	Water	7470A	770494
LCS 680-770494/2-A	Lab Control Sample	Total/NA	Water	7470A	770494
680-232605-1 MS	AF58977	Total/NA	Water	7470A	770494
680-232605-1 MSD	AF58977	Total/NA	Water	7470A	770494

Prep Batch: 773632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	7470A	
MB 680-773632/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-773632/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 774039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-232605-1	AF58977	Total/NA	Water	7470A	773632
MB 680-773632/1-A	Method Blank	Total/NA	Water	7470A	773632
LCS 680-773632/2-A	Lab Control Sample	Total/NA	Water	7470A	773632

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58977
Date Collected: 03/20/23 10:37
Date Received: 03/27/23 11:00

Lab Sample ID: 680-232605-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		1	606308	LKP	EET SL	04/05/23 14:20
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		5	606620	LKP	EET SL	04/07/23 12:58
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		10	606635	CGB	EET SL	04/10/23 09:20
Total Recoverable	Prep	3005A			770078	RR	EET SAV	03/28/23 12:26
Total Recoverable	Analysis	6020B		1	770464	BWR	EET SAV	03/29/23 14:13
Total/NA	Prep	7470A			770494	JKL	EET SAV	03/30/23 09:56
Total/NA	Analysis	7470A		1	770613	JKL	EET SAV	03/30/23 15:41
Total/NA	Prep	7470A			773632	JKL	EET SAV	04/17/23 08:07
Total/NA	Analysis	7470A		1	774039	JKL	EET SAV	04/17/23 17:48

Client Sample ID: AF58978
Date Collected: 03/20/23 10:42
Date Received: 03/27/23 11:00

Lab Sample ID: 680-232605-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		1	606308	LKP	EET SL	04/05/23 14:24
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		5	606620	LKP	EET SL	04/07/23 13:03
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		10	606635	CGB	EET SL	04/10/23 09:25
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		2	608950	LKP	EET SL	04/26/23 09:36
Total Recoverable	Prep	3005A			770078	RR	EET SAV	03/28/23 12:26
Total Recoverable	Analysis	6020B		1	770464	BWR	EET SAV	03/29/23 14:25
Total/NA	Prep	7470A			770494	JKL	EET SAV	03/30/23 09:56
Total/NA	Analysis	7470A		1	770613	JKL	EET SAV	03/30/23 15:46

Client Sample ID: AF58979
Date Collected: 03/20/23 09:28
Date Received: 03/27/23 11:00

Lab Sample ID: 680-232605-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		1	606308	LKP	EET SL	04/05/23 14:29
Total/NA	Prep	3010A			605942	CGB	EET SL	04/03/23 14:08
Total/NA	Analysis	6010D		2	606620	LKP	EET SL	04/07/23 13:07
Total Recoverable	Prep	3005A			770078	RR	EET SAV	03/28/23 12:26
Total Recoverable	Analysis	6020B		1	770464	BWR	EET SAV	03/29/23 14:29
Total/NA	Prep	7470A			770494	JKL	EET SAV	03/30/23 09:56
Total/NA	Analysis	7470A		1	770613	JKL	EET SAV	03/30/23 15:47

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58980

Date Collected: 03/20/23 12:20
Date Received: 03/27/23 11:00

Lab Sample ID: 680-232605-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			770078	RR	EET SAV	03/28/23 12:26
Dissolved	Analysis	6020B		1	770464	BWR	EET SAV	03/29/23 14:37
Total Recoverable	Prep	3005A			770078	RR	EET SAV	03/28/23 12:26
Total Recoverable	Analysis	6020B		1	770464	BWR	EET SAV	03/29/23 14:33

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Contract Lab Info TA SAV Contract Lab Due Date (Lab Only). 4 / 10 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone (843)761-8000 Ext. 5148
Fax (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS SEE BELOW	Hg	Co	DISSOLVED Co
AF58977	CGYP 7	3/20/23	1037	ZM BB	2	P	G	GW	2	Hg- 7471 B, Li, Mo - 6010	X	X		
AF58978	CGYP-7D	"	1042	"	"	"	"	"	"	ALL OTHERS 6020	"	"		
AF58979	POZ- 3	"	0928	"	"	"	"	"	"	-PLEASE SEND BORON TO	"	"		
AF58980	CCMAP-8	"	1220	"	2	"	"	"	"	ST LOUIS (ONE BOTTLE CAN BE SENT)			X	X
										-PLEASE SEE SHEET FOR				
										RLS				
										PLEASE RETURN				
										COOLER.				

680-232605 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	35594	3/27/23	8:10	Will Hodge	COURIER	3/27/23	8:10
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	Courier	3.27.23	11:00	[signature]		3/27/23	1100
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#: 20.1/20.1 3.4/3.4
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☒ Sb
☐ Al	☐ Fe	☒ Se
☒ As	☐ K	☐ Sn
☒ B	☒ Li	☐ Sr
☒ Ba	☐ Mg	☐ Ti
☒ Be	☐ Mn	☒ Tl
☒ Ca	☒ Mo	☐ V
☒ Cd	☐ Na	☐ Zn
☒ Co	☐ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912-354-7858 Fax: 912-352-0165

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Lanier, Jerry A	Carrier Tracking No(s):	COC No: 680-732222.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jerry.Lanier@et.eurofinsus.com	State of Origin: South Carolina	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Florida; State - South Carolina; State Program ...		Job #: 680-232605-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/4/2023			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: 12915/JM02.09.G01.1/36500	Project #: 68008190			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3010A_2% 5 ICP Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AF58977 (680-232605-1)	3/20/23	10:37 Eastern		Water			X	1	
AF58978 (680-232605-2)	3/20/23	10:42 Eastern		Water			X	1	
AF58979 (680-232605-3)	3/20/23	09:28 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by: FED EX	Date/Time:	Company
Relinquished by: FED EX	Date/Time:	Company	Received by: Sierra Woodrington	Date/Time: MAR 31 2023 0910	Company ENSR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-232605-1

Login Number: 232605
List Number: 1
Creator: Johnson, Corey M

List Source: Eurofins Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-232605-1

Login Number: 232605
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 03/31/23 01:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-232605-1
Project/Site: 12915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-23
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-23
Florida	NELAP	E87689	06-30-23
HI - RadChem Recognition	State	n/a	06-30-23
Illinois	NELAP	200023	11-30-23
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-23
Kentucky (DW)	State	KY90125	12-31-23
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-23
Louisiana (All)	NELAP	04080	06-30-23
Louisiana (DW)	State	LA011	12-31-23
Maryland	State	310	09-30-23
MI - RadChem Recognition	State	9005	06-30-23
Missouri	State	780	06-30-25
Nevada	State	MO000542020-1	07-31-23
New Jersey	NELAP	MO002	06-30-23
New York	NELAP	11616	03-31-24
North Carolina (DW)	State	29700	07-31-23
North Dakota	State	R-207	06-30-23
Oklahoma	NELAP	9997	08-31-23
Oregon	NELAP	4157	09-01-23
Pennsylvania	NELAP	68-00540	02-28-24
South Carolina	State	85002001	06-30-23
Texas	NELAP	T104704193	07-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00028	06-11-23
Utah	NELAP	MO000542021-14	07-31-23
Virginia	NELAP	10310	06-14-23
Washington	State	C592	08-30-23
West Virginia DEP	State	381	10-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

GEL Laboratories LLC
a member of The GEL Group INC

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

November 03, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 641316

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 13, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Jordan Melton

Jordan Melton for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 641316 GEL Work Order: 641316

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, Julie Robinson.

Reviewed by Jordan Melton

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80265	Project:	SOOP00119
Sample ID:	641316001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:23		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.93	+/-1.10	1.39	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.58	+/-1.16			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.655	+/-0.389	0.448	1.00	pCi/L			LXP1	11/02/23	0756	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80266	Project:	SOOP00119
Sample ID:	641316002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:28		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.98	+/-1.26	1.56	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.05	+/-1.27			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.0767	+/-0.184	0.368	1.00	pCi/L			LXP1	11/02/23	0756	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80267	Project:	SOOP00119
Sample ID:	641316003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 10:15		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-1.54	+/-1.06	2.22	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.205	+/-1.13			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.205	+/-0.403	0.739	1.00	pCi/L			LXP1	11/02/23	0831	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: November 3, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **641316**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2509217										
QC1205547740 641316001 DUP										
Radium-228		2.93		3.95	pCi/L	29.7		(0% - 100%)	JE1	10/24/23 08:47
	Uncertainty	+/-1.10		+/-1.15						
QC1205547741 LCS										
Radium-228	78.3			71.6	pCi/L		91.4	(75%-125%)		10/24/23 08:48
	Uncertainty			+/-3.85						
QC1205547739 MB										
Radium-228			U	0.166	pCi/L					10/24/23 08:47
	Uncertainty			+/-0.981						
Rad Ra-226										
Batch 2509249										
QC1205547810 641316001 DUP										
Radium-226		0.655		1.02	pCi/L	43.9		(0% - 100%)	LXP1	11/02/23 08:31
	Uncertainty	+/-0.389		+/-0.511						
QC1205547812 LCS										
Radium-226	26.9			23.3	pCi/L		86.5	(75%-125%)		11/02/23 08:31
	Uncertainty			+/-2.01						
QC1205547809 MB										
Radium-226			U	0.176	pCi/L					11/02/23 08:31
	Uncertainty			+/-0.345						
QC1205547811 641316001 MS										
Radium-226	134	0.655		106	pCi/L		78.5	(75%-125%)		11/02/23 08:31
	Uncertainty	+/-0.389		+/-10.4						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **641316**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 641316

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2509217

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

GEL Sample ID#	Client Sample Identification
641316001	AF80265
641316002	AF80266
641316003	AF80267
1205547739	Method Blank (MB)
1205547740	641316001(AF80265) Sample Duplicate (DUP)
1205547741	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: 2509249

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

GEL Sample ID#	Client Sample Identification
641316001	AF80265
641316002	AF80266
641316003	AF80267
1205547809	Method Blank (MB)
1205547810	641316001(AF80265) Sample Duplicate (DUP)
1205547811	641316001(AF80265) Matrix Spike (MS)
1205547812	Laboratory Control Sample (LCS)

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

Data Summary:

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

applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
The matrix spike, 1205547811 (AF80265MS), 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.

11/13/23 — RAD

Contract Lab Info: GEL   Contract Lab Due Date (Lab Only): 11 / 20 / 23   Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

641316 & 641317

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	F, Cl, SO4	
AF80265	CGYP-7	10/10/23	1123	ZM BB	3	P	G	GW	2/1		2	X	1	
AF80266	CGYP-7 DUP	|	1128	|	|	|	|	|	|		|	|	|	
AF80267	POZ-3	|	1015	|	|	|	|	|	|		|	|	|	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	36851	10/13/23	0944	[signature]	GEL	10/13/23	0944
[signature]	GEL	10/13/23	1610	[signature]	GEL	10/13/23	1610

Sample Receiving (Internal Use Only)
TEMP (°C):________ Initial:________
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCCP	SDG/AR/COC/Work Order: 641316 / 641317
Received By: QG	Date Received: 10/13/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
	n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓		✓	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 3°c
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ____ Date 10/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 03 November 2023

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-04
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

June 26, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 626523

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 16, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Jessica Ward for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 626523 GEL Work Order: 626523

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

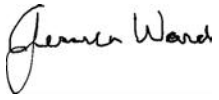
J Value is estimated

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66432	Project:	SOOP00119
Sample ID:	626523001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-JUN-23 09:11		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.33	0.330	1.00	mg/L		1	RM3	06/20/23	2305	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66433	Project:	SOOP00119
Sample ID:	626523002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-JUN-23 09:16		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.30	0.330	1.00	mg/L		1	RM3	06/22/23	1543	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66434	Project:	SOOP00119
Sample ID:	626523003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-JUN-23 10:14		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.06	0.330	1.00	mg/L		1	RM3	06/21/23	0023	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66435	Project:	SOOP00119
Sample ID:	626523004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-JUN-23 11:06		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.98	0.330	1.00	mg/L		1	RM3	06/21/23	0042	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66436	Project:	SOOP00119
Sample ID:	626523005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-JUN-23 12:12		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.888	0.330	1.00	mg/L		1	RM3	06/21/23	0124	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66437	Project:	SOOP00119
Sample ID:	626523006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-JUN-23 13:39		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.69	0.330	1.00	mg/L		1	RM3	06/21/23	0143	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66438	Project:	SOOP00119
Sample ID:	626523007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-JUN-23 08:55		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.556	0.330	1.00	mg/L		1	RM3	06/21/23	0202	2446751	1
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.0350	0.100	mg/L		5	AXH3	06/19/23	0613	2444686	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66442	Project:	SOOP00119
Sample ID:	626523008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-JUN-23 10:09		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.09	0.330	1.00	mg/L		1	RM3	06/21/23	0222	2446751	1
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	ND	0.0350	0.100	mg/L		5	AXH3	06/19/23	0619	2444686	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: June 26, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **626523**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 2446751										
QC1205438111 626520001 DUP										
Total Organic Carbon Average		2.70		2.78	mg/L	3.25 ^		(+/-1.00)	RM3	06/20/23 20:46
QC1205438113 626523002 DUP										
Total Organic Carbon Average		2.30		2.29	mg/L	0.393 ^		(+/-1.00)		06/22/23 16:03
QC1205438110 LCS										
Total Organic Carbon Average	10.0			9.70	mg/L		97	(80%-120%)		06/20/23 17:01
QC1205438109 MB										
Total Organic Carbon Average			U	ND	mg/L					06/20/23 16:52
QC1205438112 626520001 PS										
Total Organic Carbon Average	10.0	2.70		12.8	mg/L		101	(65%-120%)		06/20/23 21:05
QC1205438114 626523002 PS										
Total Organic Carbon Average	10.0	2.30		12.5	mg/L		102	(65%-120%)		06/22/23 16:22
Nutrient Analysis										
Batch 2444686										
QC1205434328 626075001 DUP										
Nitrogen, Nitrate/Nitrite	J	0.0197	J	0.0193	mg/L	2.05 ^		(+/-0.0200)	AXH3	06/19/23 06:06
QC1205434327 LCS										
Nitrogen, Nitrate/Nitrite	1.00			1.04	mg/L		104	(90%-110%)		06/19/23 06:03
QC1205434326 MB										
Nitrogen, Nitrate/Nitrite			U	ND	mg/L					06/19/23 06:02

QC Summary

Workorder: **626523**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis												
Batch 2444686												
QC1205434329 626075001 PS												
Nitrogen, Nitrate/Nitrite	1.00	J	0.0197		1.07	mg/L		105	(90%-110%)	AXH3	06/19/23	06:07

Notes:

The Qualifiers in this report are defined as follows:

U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
J	Value is estimated
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
B	The target analyte was detected in the associated blank.
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
J	See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 626523

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2446751

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

GEL Sample ID#	Client Sample Identification
626523001	AF66432
626523002	AF66433
626523003	AF66434
626523004	AF66435
626523005	AF66436
626523006	AF66437
626523007	AF66438
626523008	AF66442
1205438109	Method Blank (MB)
1205438110	Laboratory Control Sample (LCS)
1205438111	626520001(AF66443) Sample Duplicate (DUP)
1205438112	626520001(AF66443) Post Spike (PS)
1205438113	626523002(AF66433) Sample Duplicate (DUP)
1205438114	626523002(AF66433) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Re-analysis
Samples 1205438113 (AF66433DUP), 1205438114 (AF66433PS) and 626523002 (AF66433) were reanalyzed due to PS failure. The reanalysis data was reported.

Product: **Nitrate/Nitrite Cad Redux Low Level**
Analytical Method: EPA 353.2 Low Level
Analytical Procedure: GL-GC-E-128 REV# 11
Analytical Batch: 2444686

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

GEL Sample ID#	Client Sample Identification
626523007	AF66438
626523008	AF66442

1205434326	Method Blank (MB)
1205434327	Laboratory Control Sample (LCS)
1205434328	626075001(NonSDG) Sample Duplicate (DUP)
1205434329	626075001(NonSDG) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions
The following samples 626523007 (AF66438) and 626523008 (AF66442) in this sample group were diluted due to matrix interference. 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	626523	
	007	008
Nitrogen, Nitrate/Nitrite	5X	5X

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.

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 6 / 26 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

626523

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Analysis Group: TOC	NO3/NO2		
AF66432	CLFIB-1	6/12/23	0911	WJK ML	1	G	G	GW	3/1		1			
AF66433	CLFIB-1 DUP		0916											
AF66434	CLFIB-2		1014											
AF66435	CLFIB-3		1106											
AF66436	CLFIB-4		1212											
AF66437	CLFIB-5		1339											
AF66438	CLFIB-5D	6/14/23	0855		2						1	1		
AF66442	FOZ-5D		1009								1	1		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/16/23	1026		GEL	6/16/23	1026
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	6/16/23	1640		GEL	6/16/23	920
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☒ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

JR

Client: SCCR	SDG/AR/COC/Work Order: 626523
Received By: QG	Date Received: 6/16/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

n/a

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/ mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓		✓	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 4°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR4-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials RW Date 6/19/23 Page ___ of ___

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 26 June 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

September 01, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 632243

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 04, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Caitlin Olive

Caitlin Olive for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 632243 GEL Work Order: 632243

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, Julie Robinson.

Reviewed by Caitlin Olive

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71896	Project:	SOOP00119
Sample ID:	632243001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	01-AUG-23 09:53		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.250	+/-0.724	1.45	3.00	pCi/L			JE1	08/22/23	0845	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.30	+/-0.953			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.30	+/-0.620	0.321	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71893	Project:	SOOP00119
Sample ID:	632243002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	01-AUG-23 10:45		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.34	+/-1.17	1.70	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.04	+/-1.23			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.700	+/-0.364	0.335	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71894	Project:	SOOP00119
Sample ID:	632243003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	01-AUG-23 11:52		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.983	+/-0.864	1.39	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.46	+/-0.939			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.474	+/-0.368	0.530	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71895	Project:	SOOP00119
Sample ID:	632243004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	01-AUG-23 13:17		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.57	+/-1.07	1.65	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.24	+/-1.17			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.670	+/-0.484	0.690	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71891	Project:	SOOP00119
Sample ID:	632243005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	02-AUG-23 09:03		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.128	+/-1.09	1.98	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.10	+/-1.16			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.970	+/-0.409	0.372	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71892	Project:	SOOP00119
Sample ID:	632243006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	02-AUG-23 09:08		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.321	+/-0.911	1.65	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.04	+/-0.983			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.715	+/-0.372	0.342	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71897	Project:	SOOP00119
Sample ID:	632243007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	02-AUG-23 10:00		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.85	+/-1.39	2.24	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.55	+/-1.52			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.70	+/-0.623	0.597	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71898	Project:	SOOP00119
Sample ID:	632243008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	02-AUG-23 10:05		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.63	+/-1.07	1.08	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.34	+/-1.15			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.706	+/-0.412	0.415	1.00	pCi/L			LXP1	09/01/23	0947	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: September 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF71899	Project:	SOOP00119
Sample ID:	632243009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	02-AUG-23 11:37		
Receive Date:	04-AUG-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.477	+/-0.639	1.10	3.00	pCi/L			JE1	08/22/23	0846	2473346	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.18	+/-0.766			pCi/L			NXL1	09/01/23	1121	2475367	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.706	+/-0.423	0.520	1.00	pCi/L			LXP1	09/01/23	1020	2473318	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: September 1, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **632243**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2473346										
QC1205482994 632243001 DUP										
Radium-228	U	-0.250	U	2.00	pCi/L	N/A		N/A	JE1	08/22/23 08:45
	Uncertainty	+/-0.724		+/-1.31						
QC1205482995 LCS										
Radium-228	78.9			72.0	pCi/L		91.3	(75%-125%)		08/22/23 08:45
	Uncertainty			+/-4.46						
QC1205482993 MB										
Radium-228			U	0.164	pCi/L					08/22/23 08:45
	Uncertainty			+/-0.807						
Rad Ra-226										
Batch 2473318										
QC1205482927 632243001 DUP										
Radium-226		2.30		2.08	pCi/L	10.2		(0%-20%)	LXP1	09/01/23 10:20
	Uncertainty	+/-0.620		+/-0.667						
QC1205482929 LCS										
Radium-226	26.3			20.9	pCi/L		79.6	(75%-125%)		09/01/23 10:20
	Uncertainty			+/-1.80						
QC1205482926 MB										
Radium-226			U	0.524	pCi/L					09/01/23 10:20
	Uncertainty			+/-0.407						
QC1205482928 632243001 MS										
Radium-226	133	2.30		137	pCi/L		101	(75%-125%)		09/01/23 10:20
	Uncertainty	+/-0.620		+/-10.4						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **632243**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 632243

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2473346

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

GEL Sample ID#	Client Sample Identification
632243001	AF71896
632243002	AF71893
632243003	AF71894
632243004	AF71895
632243005	AF71891
632243006	AF71892
632243007	AF71897
632243008	AF71898
632243009	AF71899
1205482993	Method Blank (MB)
1205482994	632243001(AF71896) Sample Duplicate (DUP)
1205482995	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: 2473318

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

GEL Sample ID#	Client Sample Identification
632243001	AF71896
632243002	AF71893
632243003	AF71894
632243004	AF71895
632243005	AF71891
632243006	AF71892
632243007	AF71897

632243008	AF71898
632243009	AF71899
1205482926	Method Blank (MB)
1205482927	632243001(AF71896) Sample Duplicate (DUP)
1205482928	632243001(AF71896) Matrix Spike (MS)
1205482929	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205482928 (AF71896MS), 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.

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 9 / 1 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

0032243

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC	
AF71896	CCMGP-5	8/1/23	0953	WJK EB	2	P	G	GW	2		1	1	X	
93	CCMGP-2		1045											
94	CCMGP-3		1152											
95	CCMGP-4		1317											
AF71891	CCMGP-1	8/2/23	0903											
92	CCMGP-1 DUP		0908											
97	CGYP-7		1000											
98	CGYP-7 DUP		1005											
99	POZ-3		1137											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	8/4/23	1007	M.	GEL	8/4/23	1007
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	8/4/23	12:00			8/4/23	1200
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix Codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative codes: 1-4°C, 2-HNO3, 3-H2SO4, 4-HCl, 5-Na2S2O3, 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCDP	**SDG/AR/COC/Work Order:** 632243
Received By: JW	**Date Received:** 8/4/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		/	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		/	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		/	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): _____CPM / mR/Hr **Classified as: Rad 1 Rad 2 Rad 3**
D) Did the client designate samples are hazardous?		/	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		/	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	**Comments/Qualifiers (Required for Non-Conforming Items)**
1	Shipping containers received intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	/			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	/			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 4 Chem 4/20 R.
4	Daily check performed and passed on IR temperature gun?	/			**Temperature Device Serial #:** IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	/			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			/	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	/			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	/			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	/			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	/			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	/			
13	COC form is properly signed in relinquished/received sections?	/			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials DD Date 8/7/23 Page 1 of 1

List of current GEL Certifications as of 01 September 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

July 17, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 626517

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 16, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 626517 GEL Work Order: 626517

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

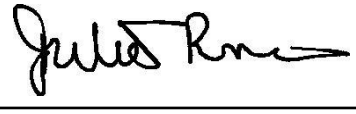
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66402	Project:	SOOP00119
Sample ID:	626517001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-JUN-23 10:17		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.874	+/-1.01	1.69	3.00	pCi/L			JE1	06/30/23	1516	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.97	+/-1.22			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.10	+/-0.686	0.920	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66400	Project:	SOOP00119
Sample ID:	626517002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-JUN-23 11:04		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.78	+/-1.12	1.47	3.00	pCi/L			JE1	06/30/23	1353	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.41	+/-1.20			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.622	+/-0.422	0.597	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66401	Project:	SOOP00119
Sample ID:	626517003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-JUN-23 11:09		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.90	+/-1.36	1.78	3.00	pCi/L			JE1	06/30/23	1353	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.69	+/-1.45			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.796	+/-0.516	0.716	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66399	Project:	SOOP00119
Sample ID:	626517004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-JUN-23 12:31		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.737	+/-0.853	1.43	3.00	pCi/L			JE1	06/30/23	1353	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.63	+/-0.964			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.893	+/-0.449	0.402	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66398	Project:	SOOP00119
Sample ID:	626517005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-JUN-23 14:18		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.03	+/-1.76	2.69	3.00	pCi/L			JE1	06/30/23	1353	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.88	+/-1.80			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.850	+/-0.391	0.325	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			63.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66443	Project:	SOOP00119
Sample ID:	626517006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 09:19		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.773	+/-0.691	1.10	3.00	pCi/L			JE1	06/30/23	1353	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.65	+/-0.802			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.873	+/-0.408	0.398	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66440	Project:	SOOP00119
Sample ID:	626517007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 10:32		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.13	+/-1.35	2.27	3.00	pCi/L			JE1	06/30/23	1353	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.53	+/-1.40			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.406	+/-0.386	0.605	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66444	Project:	SOOP00119
Sample ID:	626517008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 12:21		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.655	+/-1.11	1.93	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.10	+/-1.19			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.445	+/-0.436	0.685	1.00	pCi/L			LXP1	07/14/23	0941	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			82.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66445	Project:	SOOP00119
Sample ID:	626517009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 12:26		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.80	+/-0.952	1.35	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.63	+/-1.04			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.822	+/-0.427	0.393	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66441	Project:	SOOP00119
Sample ID:	626517010	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 15:00		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.78	+/-1.40	2.09	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.95	+/-1.53			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.17	+/-0.611	0.399	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66405	Project:	SOOP00119
Sample ID:	626517011	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-JUN-23 09:52		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.954	+/-0.752	1.16	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.24	+/-0.808			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.287	+/-0.296	0.458	1.00	pCi/L			LXP1	07/14/23	1047	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66392	Project:	SOOP00119
Sample ID:	626517012	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-JUN-23 13:19		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.55	+/-1.12	1.73	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.34	+/-1.21			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.784	+/-0.470	0.578	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66397	Project:	SOOP00119
Sample ID:	626517013	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-JUN-23 11:46		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.166	+/-0.807	1.50	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.03	+/-0.938			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.861	+/-0.478	0.607	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66396	Project:	SOOP00119
Sample ID:	626517014	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-JUN-23 12:47		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		13.8	+/-2.14	1.86	3.00	pCi/L			JE1	07/06/23	0909	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		20.9	+/-2.42			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		7.07	+/-1.14	0.600	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			78.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66395	Project:	SOOP00119
Sample ID:	626517015	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-JUN-23 13:39		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.549	+/-1.07	1.89	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.48	+/-1.21			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.930	+/-0.551	0.750	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: July 17, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66394	Project:	SOOP00119
Sample ID:	626517016	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-JUN-23 14:43		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.20	+/-1.07	1.73	3.00	pCi/L			JE1	06/30/23	1354	2445907	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.53	+/-1.12			pCi/L			NXL1	07/17/23	1000	2448613	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.331	+/-0.334	0.523	1.00	pCi/L			LXP1	07/14/23	1014	2445895	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: July 17, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **626517**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 2445907											
QC1205436495 626517001 DUP											
Radium-228	U	0.874	U	0.348	pCi/L	N/A		N/A	JE1	06/30/23	15:16
	Uncertainty	+/-1.01		+/-0.925							
QC1205436496 LCS											
Radium-228	80.2			64.8	pCi/L		80.9	(75%-125%)		06/30/23	13:53
	Uncertainty			+/-3.93							
QC1205436494 MB											
Radium-228				1.23	pCi/L					06/30/23	13:53
	Uncertainty			+/-0.797							
Rad Ra-226											
Batch 2445895											
QC1205436460 626517001 DUP											
Radium-226		1.10		2.35	pCi/L	72.7		(0% - 100%)	LXP1	07/14/23	10:47
	Uncertainty	+/-0.686		+/-0.868							
QC1205436462 LCS											
Radium-226	26.3			27.0	pCi/L		103	(75%-125%)		07/14/23	10:47
	Uncertainty			+/-2.06							
QC1205436459 MB											
Radium-226			U	0.371	pCi/L					07/14/23	10:47
	Uncertainty			+/-0.315							
QC1205436461 626517001 MS											
Radium-226	127	1.10		144	pCi/L		113	(75%-125%)		07/14/23	10:47
	Uncertainty	+/-0.686		+/-12.0							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **626517**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 626517

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2445907

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

GEL Sample ID#	Client Sample Identification
626517001	AF66402
626517002	AF66400
626517003	AF66401
626517004	AF66399
626517005	AF66398
626517006	AF66443
626517007	AF66440
626517008	AF66444
626517009	AF66445
626517010	AF66441
626517011	AF66405
626517012	AF66392
626517013	AF66397
626517014	AF66396
626517015	AF66395
626517016	AF66394
1205436494	Method Blank (MB)
1205436495	626517001(AF66402) Sample Duplicate (DUP)
1205436496	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
1205436494 (MB)	Radium-228	Result: 1.23 pCi/L > MDA: 1.18 pCi/L <= RDL: 3.00 pCi/L

Technical Information

Recounts
Samples 1205436495 (AF66402DUP) and 626517001 (AF66402) were recounted due to high relative percent difference/relative error ratio. The recounts are reported. Sample 626517014 (AF66396) was re-eluted and recounted to verify sample result. The recount is reported.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2445895

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

GEL Sample ID#	Client Sample Identification
626517001	AF66402
626517002	AF66400
626517003	AF66401
626517004	AF66399
626517005	AF66398
626517006	AF66443
626517007	AF66440
626517008	AF66444
626517009	AF66445
626517010	AF66441
626517011	AF66405
626517012	AF66392
626517013	AF66397
626517014	AF66396
626517015	AF66395
626517016	AF66394
1205436459	Method Blank (MB)
1205436460	626517001(AF66402) Sample Duplicate (DUP)
1205436461	626517001(AF66402) Matrix Spike (MS)
1205436462	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205436461 (AF66402MS), 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.

6/26/23 - TOC

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 18 / 23 – RAD Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

626517/6520

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAM@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G02.3 / 36500

Rerun request for any flagged QC (Yes) No

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Analysis Group: RAD 226/228	TOTAL RAD CALC	TOC	
AF66402	CAP-10	6/8/23	1017	WJK ML	2	P	G	GW	2		2	X		
AF66400	CAP-9		1104											
AF66401	CAP-9 DUP		1109											
AF66399	CAP-8		1231											
AF66398	CAP-7	—	1418	—	—	—	—	—	—		—	—		
AF66443	POZ-6	6/13/23	0919		3	P/G			2/3/1		2	X	1	
AF66440	POZ-3		1032											
AF66444	POZ-7		1221											
AF66445	POZ-7 DUP		1226											
AF66441	POZ-4	—	1500	—	—	—	—	—	—		—	—	—	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/16/23	1026		GEL	6/16/23	1026
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	6/16/23	1400		GEL	6/16/23	1600
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix Codes: GW-Groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 18 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G02.3 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD GHLC	NO3/NO2	
AF66405	CAP-13	6/15/23	0952	WJK ML	2	P	G	GW	2		2	X		
AF66392	CAP-1	〃	1319	〃	〃	〃	〃	〃	〃		〃	〃		
AF66397	CAP-6	6/14/23	1146	〃	〃	〃	〃	〃	〃		〃	〃		
AF66396	CAP-5	〃	1247	〃	〃	〃	〃	〃	〃		〃	〃		
AF66395	CAP-4	〃	1339	〃	〃	〃	〃	〃	〃		〃	〃		
AF66394	CAP-3	〃	1443	〃	〃	〃	〃	〃	〃		〃	〃		
AF66407	CBW-1	6/6/23	0859	〃	1	P	G	GW	1/3				X	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
BJBrown	35594	6/15/23	1026	[signature]	GEL	6/16/23	1626
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
[signature]	BFL	6-16-23	1610	[signature]	GEL	6/16/23	920
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AlM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCDR	SDG/AR/COC/Work Order: 626517/6520
Received By: QG	Date Received: 6/16/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓		✓	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 4°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR4-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓		✓	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials RW Date 6/19/23 Page ___ of ___

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 17 July 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

January 08, 2024

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 648208

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 08, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 648208 GEL Work Order: 648208

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

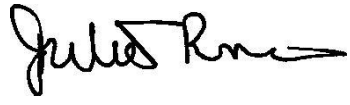
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: January 8, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF84383	Project:	SOOP00119
Sample ID:	648208001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-DEC-23 13:26		
Receive Date:	08-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.72	+/-1.37	1.64	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.52	+/-1.44			pCi/L			NXL1	01/04/24	1425	2545693	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.797	+/-0.425	0.408	1.00	pCi/L			LXP1	01/02/24	0953	2539558	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			76.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 8, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF84384	Project:	SOOP00119
Sample ID:	648208002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-DEC-23 13:31		
Receive Date:	08-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.55	+/-1.39	1.95	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.67	+/-1.48			pCi/L			NXL1	01/04/24	1425	2545693	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.12	+/-0.525	0.485	1.00	pCi/L			LXP1	01/02/24	0953	2539558	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 8, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF84385	Project:	SOOP00119
Sample ID:	648208003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-DEC-23 10:14		
Receive Date:	08-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.21	+/-0.774	1.16	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.49	+/-0.834			pCi/L			NXL1	01/04/24	1425	2545693	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.281	+/-0.311	0.488	1.00	pCi/L			LXP1	01/02/24	1012	2539558	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

QC Summary

Report Date: January 8, 2024

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **648208**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 2542833											
QC1205605880 648208001 DUP											
Radium-228		4.72		2.46	pCi/L	63		(0% - 100%)	JE1	12/29/23	13:55
	Uncertainty	+/-1.37		+/-1.03							
QC1205605881 LCS											
Radium-228	74.3			71.5	pCi/L		96.1	(75%-125%)		12/29/23	13:55
	Uncertainty			+/-4.39							
QC1205605879 MB											
Radium-228			U	0.437	pCi/L					12/29/23	13:55
	Uncertainty			+/-0.605							
Rad Ra-226											
Batch 2539558											
QC1205600116 648208001 DUP											
Radium-226		0.797		1.10	pCi/L	32		(0% - 100%)	LXP1	01/02/24	10:31
	Uncertainty	+/-0.425		+/-0.502							
QC1205600120 LCS											
Radium-226	27.0			27.0	pCi/L		100	(75%-125%)		01/02/24	10:52
	Uncertainty			+/-2.37							
QC1205600115 MB											
Radium-226			U	0.0674	pCi/L					01/02/24	10:31
	Uncertainty			+/-0.171							
QC1205600118 648208001 MS											
Radium-226	134	0.797		110	pCi/L		81.7	(75%-125%)		01/02/24	10:52
	Uncertainty	+/-0.425		+/-10.1							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **648208**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 648208

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2542833

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

GEL Sample ID#	Client Sample Identification
648208001	AF84383
648208002	AF84384
648208003	AF84385
1205605879	Method Blank (MB)
1205605880	648208001(AF84383) Sample Duplicate (DUP)
1205605881	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: 2539558

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

GEL Sample ID#	Client Sample Identification
648208001	AF84383
648208002	AF84384
648208003	AF84385
1205600115	Method Blank (MB)
1205600116	648208001(AF84383) Sample Duplicate (DUP)
1205600118	648208001(AF84383) Matrix Spike (MS)
1205600120	Laboratory Control Sample (LCS)

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

Data Summary:

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

applicable, with the following exceptions.

Preparation Information

Aliquot Reduced
1205600118 (AF84383MS) Aliquot was reduced due to limited sample volume.

Certification Statement

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

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 1 / 11 / 24 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

648208

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.GP1.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC		
AF84383	CGYP-7	12/5/23	1326	ZM BB	2	P	G	GW	2		X	X		
AF84384	CGYP-7 DUP	"	1331	"	"	"	"	"	"		"	"		
AF84385	POZ-3	"	1014	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	36851	12/8/23	1008	Thypsia Tatum	GEL	12/8/23	10:08
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
Thypsia Tatum	GEL	12/8/23	3:20	Thypsia Tatum	GEL	12/8/23	3:20
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ %·Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 648208 S.R.
Received By: Thyasia Tatum	Date Received: 12/8/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2CHEM-1.6°C GCHEM -2°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR2-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials [signature] Date 12/9/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 08 January 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

June 26, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 626520

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 16, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Jessica Ward for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 626520 GEL Work Order: 626520

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

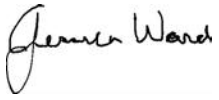
J Value is estimated

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66443	Project:	SOOP00119
Sample ID:	626520001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 09:19		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.70	0.330	1.00	mg/L		1	RM3	06/20/23	2026	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66440	Project:	SOOP00119
Sample ID:	626520002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 10:32		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.85	0.330	1.00	mg/L		1	RM3	06/20/23	2147	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66444	Project:	SOOP00119
Sample ID:	626520003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 12:21		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.507	0.330	1.00	mg/L		1	RM3	06/20/23	2206	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66445	Project:	SOOP00119
Sample ID:	626520004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 12:26		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.503	0.330	1.00	mg/L		1	RM3	06/20/23	2226	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66441	Project:	SOOP00119
Sample ID:	626520005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-JUN-23 15:00		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.67	0.330	1.00	mg/L		1	RM3	06/20/23	2245	2446751	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 26, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66407	Project:	SOOP00119
Sample ID:	626520006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 08:59		
Receive Date:	16-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		1.49	0.0350	0.100	mg/L		5	AXH3	06/19/23	0612	2444686	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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

QC Summary

Report Date: June 26, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **626520**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 2446751										
QC1205438111 626520001 DUP										
Total Organic Carbon Average		2.70		2.78	mg/L	3.25 ^		(+/-1.00)	RM3	06/20/23 20:46
QC1205438113 626523002 DUP										
Total Organic Carbon Average		2.30		2.29	mg/L	0.393 ^		(+/-1.00)		06/22/23 16:03
QC1205438110 LCS										
Total Organic Carbon Average	10.0			9.70	mg/L		97	(80%-120%)		06/20/23 17:01
QC1205438109 MB										
Total Organic Carbon Average			U	ND	mg/L					06/20/23 16:52
QC1205438112 626520001 PS										
Total Organic Carbon Average	10.0	2.70		12.8	mg/L		101	(65%-120%)		06/20/23 21:05
QC1205438114 626523002 PS										
Total Organic Carbon Average	10.0	2.30		12.5	mg/L		102	(65%-120%)		06/22/23 16:22
Nutrient Analysis										
Batch 2444686										
QC1205434328 626075001 DUP										
Nitrogen, Nitrate/Nitrite	J	0.0197	J	0.0193	mg/L	2.05 ^		(+/-0.0200)	AXH3	06/19/23 06:06
QC1205434327 LCS										
Nitrogen, Nitrate/Nitrite	1.00			1.04	mg/L		104	(90%-110%)		06/19/23 06:03
QC1205434326 MB										
Nitrogen, Nitrate/Nitrite			U	ND	mg/L					06/19/23 06:02

QC Summary

Workorder: **626520**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis												
Batch 2444686												
QC1205434329 626075001 PS												
Nitrogen, Nitrate/Nitrite	1.00	J	0.0197		1.07	mg/L		105	(90%-110%)	AXH3	06/19/23	06:07

Notes:

The Qualifiers in this report are defined as follows:

U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
J	Value is estimated
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
B	The target analyte was detected in the associated blank.
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
J	See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 626520

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2446751

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

GEL Sample ID#	Client Sample Identification
626520001	AF66443
626520002	AF66440
626520003	AF66444
626520004	AF66445
626520005	AF66441
1205438109	Method Blank (MB)
1205438110	Laboratory Control Sample (LCS)
1205438111	626520001(AF66443) Sample Duplicate (DUP)
1205438112	626520001(AF66443) Post Spike (PS)
1205438113	626523002(AF66433) Sample Duplicate (DUP)
1205438114	626523002(AF66433) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Re-analysis
Samples 1205438113 (AF66433DUP) and 1205438114 (AF66433PS) were reanalyzed due to PS failure. The reanalysis data was reported.

Product: **Nitrate/Nitrite Cad Redux Low Level**
Analytical Method: EPA 353.2 Low Level
Analytical Procedure: GL-GC-E-128 REV# 11
Analytical Batch: 2444686

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

GEL Sample ID#	Client Sample Identification
626520006	AF66407
1205434326	Method Blank (MB)
1205434327	Laboratory Control Sample (LCS)
1205434328	626075001(NonSDG) Sample Duplicate (DUP)
1205434329	626075001(NonSDG) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions
The following sample 626520006 (AF66407) in this sample group was diluted due to matrix interference. 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	626520 006
Nitrogen, Nitrate/Nitrite	5X

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.

6/26/23 - TOC

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 18 / 23 – RAD Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

626517/6520

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LINDA.WILLIAM@santeecooper.com	/ /	125915 / JM02.08.G02.3 / 36500	(Yes) No

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Analysis Group: RAD 226/228	TOTAL RAD CALC	TOC	
AF66402	CAP-10	6/8/23	1017	WJK ML	2	P	G	GW	2		2	X		
AF66400	CAP-9	"	1104	"	"	"	"	"	"		"	"		
AF66401	CAP-9 DUP	"	1109	"	"	"	"	"	"		"	"		
AF66399	CAP-8	"	1231	"	"	"	"	"	"		"	"		
AF66398	CAP-7	"	1418	"	"	"	"	"	"		"	"		
AF66443	POZ-6	6/13/23	0919	"	3	P/G	"	"	2/3/1		2	X	1	
AF66440	POZ-3	"	1032	"	"	"	"	"	"		"	"	"	
AF66444	POZ-7	"	1221	"	"	"	"	"	"		"	"	"	
AF66445	POZ-7 DUP	"	1226	"	"	"	"	"	"		"	"	"	
AF66441	POZ-4	"	1500	"	"	"	"	"	"		"	"	"	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/16/23	1026		GEL	6/16/23	1026
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	6/16/23	1400		GEL	6/16/23	1600
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 18 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G02.3 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD GHLC	NO3/NO2	
AF66405	CAP-13	6/15/23	0952	WJK ML	2	P	G	GW	2		2	X		
AF66392	CAP-1	〃	1319	〃	〃	〃	〃	〃	〃					
AF66397	CAP-6	6/14/23	1146											
AF66396	CAP-5		1247											
AF66395	CAP-4		1339											
AF66394	CAP-3	—	1443	—	—	—	—	—	—		—	—		
AF66407	CBW-1	6/6/23	0859	〃	1	P	G	GW	1/3				X	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
BJBrown	35594	6/15/23	1026	[signature]	GEL	6/16/23	1626
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	BFL	6-16-23	1610	[signature]	GEL	6/16/23	920
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCOR	SDG/AR/COC/Work Order: 626517/6520
Received By: QG	Date Received: 6/16/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 0 CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓		✓	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 4°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR4-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓		✓	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?		✓		Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials RW Date 6/19/23 Page ___ of ___

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 26 June 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

January 11, 2024

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 649122

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 15, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 649122 GEL Work Order: 649122

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

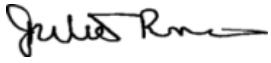
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85222	Project:	SOOP00119
Sample ID:	649122001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 13:19		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.18	+/-0.837	1.29	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.83	+/-0.888			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.646	+/-0.296	0.311	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85223	Project:	SOOP00119
Sample ID:	649122002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 10:24		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.944	+/-1.02	1.71	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.52	+/-1.17			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.58	+/-0.567	0.297	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85224	Project:	SOOP00119
Sample ID:	649122003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 10:29		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.39	+/-0.763	1.07	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.18	+/-0.935			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.79	+/-0.539	0.495	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85225	Project:	SOOP00119
Sample ID:	649122004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 11:50		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.328	+/-0.652	1.17	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.72	+/-0.827			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.39	+/-0.509	0.561	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

QC Summary

Report Date: January 11, 2024

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **649122**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2542833										
QC1205605880 648208001 DUP										
Radium-228		4.72		2.46	pCi/L	63		(0% - 100%)	JE1	12/29/23 13:55
	Uncertainty	+/-1.37		+/-1.03						
QC1205605881 LCS										
Radium-228	74.3			71.5	pCi/L		96.1	(75%-125%)		12/29/23 13:55
	Uncertainty			+/-4.39						
QC1205605879 MB										
Radium-228			U	0.437	pCi/L					12/29/23 13:55
	Uncertainty			+/-0.605						
Rad Ra-226										
Batch 2541882										
QC1205603843 649122001 DUP										
Radium-226		0.646		0.568	pCi/L	12.8		(0% - 100%)	LXP1	01/10/24 09:11
	Uncertainty	+/-0.296		+/-0.341						
QC1205603846 LCS										
Radium-226	17.0			13.0	pCi/L		76.2	(75%-125%)		01/10/24 09:11
	Uncertainty			+/-1.02						
QC1205603841 MB										
Radium-226			U	0.177	pCi/L					01/10/24 09:11
	Uncertainty			+/-0.203						
QC1205603845 649122001 MS										
Radium-226	113	0.646		93.8	pCi/L		82.2	(75%-125%)		01/10/24 09:11
	Uncertainty	+/-0.296		+/-6.51						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **649122**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 649122

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2542833

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

GEL Sample ID#	Client Sample Identification
649122001	AF85222
649122002	AF85223
649122003	AF85224
649122004	AF85225
1205605879	Method Blank (MB)
1205605880	648208001(AF84383) Sample Duplicate (DUP)
1205605881	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: 2541882

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

GEL Sample ID#	Client Sample Identification
649122001	AF85222
649122002	AF85223
649122003	AF85224
649122004	AF85225
1205603841	Method Blank (MB)
1205603843	649122001(AF85222) Sample Duplicate (DUP)
1205603845	649122001(AF85222) Matrix Spike (MS)
1205603846	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Aliquots for the matrix spikes, 1205603845 (AF85222MS), were 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.

Contract Lab Info: TA - SAV Contract Lab Due Date (Lab Only): 1 / 18 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

649122

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JMC2.09.G21.1 / 36500

Rerun request for any flagged QC: (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC		
AF85222	WAP -27	12/11/23	1319	ZM ML	2	G	G	GW	2		X	X		
AF85223	WAP -28	"	1024	"	"	"	"	"	"		"	"		
AF85224	WAP -28 DUP	"	1029	"	"	"	"	"	"		"	"		
AF85225	WAP -29	"	1150	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	12/15/23	0923		GEL	12/15/23	0923
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
	GEL	12.15.23	1610		GEL	12/15/23	1610
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
- ☐ TOC
- ☐ DOC
- ☐ TP/TPO4
- ☐ NH3-N
- ☐ F
- ☐ Cl
- ☐ NO2
- ☐ Br
- ☐ NO3
- ☐ SO4

MISC.
- ☐ BTEX
- ☐ Naphthalene
- ☐ THM/HAA
- ☐ VOC
- ☐ Oil & Grease
- ☐ E. Coli
- ☐ Total Coliform
- ☐ pH
- ☐ Dissolved As
- ☐ Dissolved Fe
- ☐ Rad 226
- ☐ Rad 228
- ☐ PCB

Gypsum
- ☐ **Wallboard Gypsum(*all below*)**
  - ☐ AIM
  - ☐ TOC
  - ☐ Total metals
  - ☐ Soluble Metals
  - ☐ Purity (CaSO4)
  - ☐ % Moisture
  - ☐ Sulfites
  - ☐ pH
  - ☐ Chlorides
  - ☐ Particle Size
- ☐ Sulfur

Coal
- ☐ **Ultimate**
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN
- **Other Tests:**
  - ☐ XRF Scan
  - ☐ HGI
  - ☐ Fineness
  - ☐ Particulate Matter

Flyash
- ☐ Ammonia
- ☐ LOI
- ☐ % Carbon
- ☐ Mineral Analysis
- ☐ Sieve
- ☐ % Moisture

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

Oil
- ☐ **Trans. Oil Qual.**
  - ☐ %Moisture
  - ☐ Color
  - ☐ Acidity
  - ☐ Dielectric Strength
  - ☐ IFT
  - ☐ Dissolved Gases
- ☐ **Used Oil**
  - ☐ Flashpoint
  - ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
  - ☐ TX
- ☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SDOP	SDG/AR/COC/Work Order: 649122
Received By: QG	Date Received: 12/15/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other N/A

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/ mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?		✓		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?		✓		If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?			✓	Circle Applicable: No container count on COC Other (describe) Only received 1 container for AF85752 *WO 649127
12	Are sample containers identifiable as GEL provided by use of GEL labels?				
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JW Date 12/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 11 January 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

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JOB DESCRIPTION

125915/JM02.08.G02.3/36500

JOB NUMBER

680-236600-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

See page two for job notes and contact information.

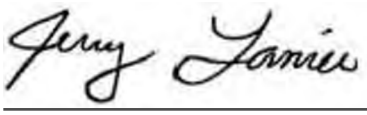
myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Job ID: 680-236600-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-236600-1

Receipt

The samples were received on 6/20/2023 10:01 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 20.3°C

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Job ID: 680-236600-1
Project/Site: 125915/JM02.08.G02.3/36500

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-236600-1	AF66402	Water	06/08/23 10:17	06/20/23 10:01
680-236600-2	AF66400	Water	06/08/23 11:04	06/20/23 10:01
680-236600-3	AF66401	Water	06/08/23 11:09	06/20/23 10:01
680-236600-4	AF66399	Water	06/08/23 12:31	06/20/23 10:01
680-236600-5	AF66398	Water	06/08/23 14:18	06/20/23 10:01
680-236600-6	AF66443	Water	06/13/23 09:19	06/20/23 10:01
680-236600-7	AF66440	Water	06/13/23 10:32	06/20/23 10:01
680-236600-8	AF66444	Water	06/13/23 12:21	06/20/23 10:01
680-236600-9	AF66445	Water	06/13/23 12:26	06/20/23 10:01
680-236600-10	AF66441	Water	06/13/23 15:00	06/20/23 10:01
680-236600-11	AF66397	Water	06/14/23 11:46	06/20/23 10:01
680-236600-12	AF66396	Water	06/14/23 12:47	06/20/23 10:01
680-236600-13	AF66395	Water	06/14/23 13:39	06/20/23 10:01
680-236600-14	AF66394	Water	06/14/23 14:43	06/20/23 10:01
680-236600-15	AF66405	Water	06/15/23 09:52	06/20/23 10:01
680-236600-16	AF66392	Water	06/15/23 13:19	06/20/23 10:01

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Method	Method Description	Protocol	Laboratory
7470A	Mercury (CVAA)	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: South Carolina Public Service Authority
Job ID: 680-236600-1
Project/Site: 125915/JM02.08.G02.3/36500

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Job ID: 680-236600-1
Project/Site: 125915/JM02.08.G02.3/36500

Client Sample ID: AF66402 **Lab Sample ID: 680-236600-1**

No Detections.

Client Sample ID: AF66400 **Lab Sample ID: 680-236600-2**

No Detections.

Client Sample ID: AF66401 **Lab Sample ID: 680-236600-3**

No Detections.

Client Sample ID: AF66399 **Lab Sample ID: 680-236600-4**

No Detections.

Client Sample ID: AF66398 **Lab Sample ID: 680-236600-5**

No Detections.

Client Sample ID: AF66443 **Lab Sample ID: 680-236600-6**

No Detections.

Client Sample ID: AF66440 **Lab Sample ID: 680-236600-7**

No Detections.

Client Sample ID: AF66444 **Lab Sample ID: 680-236600-8**

No Detections.

Client Sample ID: AF66445 **Lab Sample ID: 680-236600-9**

No Detections.

Client Sample ID: AF66441 **Lab Sample ID: 680-236600-10**

No Detections.

Client Sample ID: AF66397 **Lab Sample ID: 680-236600-11**

No Detections.

Client Sample ID: AF66396 **Lab Sample ID: 680-236600-12**

No Detections.

Client Sample ID: AF66395 **Lab Sample ID: 680-236600-13**

No Detections.

Client Sample ID: AF66394 **Lab Sample ID: 680-236600-14**

No Detections.

Client Sample ID: AF66405 **Lab Sample ID: 680-236600-15**

No Detections.

Client Sample ID: AF66392 **Lab Sample ID: 680-236600-16**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66402
Date Collected: 06/08/23 10:17
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-1
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:45	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66400
Date Collected: 06/08/23 11:04
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-2
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:49	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66401
Date Collected: 06/08/23 11:09
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:51	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66399
Date Collected: 06/08/23 12:31
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-4
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:52	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66398
Date Collected: 06/08/23 14:18
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-5
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:54	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66443
Date Collected: 06/13/23 09:19
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-6
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:55	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66440
Date Collected: 06/13/23 10:32
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-7
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:57	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66444
Date Collected: 06/13/23 12:21
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-8
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:58	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66445
Date Collected: 06/13/23 12:26
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-9
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:03	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66441
Date Collected: 06/13/23 15:00
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-10
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:05	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66397
Date Collected: 06/14/23 11:46
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-11
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:06	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66396
Date Collected: 06/14/23 12:47
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-12
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:08	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66395
Date Collected: 06/14/23 13:39
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-13
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:09	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66394
Date Collected: 06/14/23 14:43
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-14
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:11	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66405
Date Collected: 06/15/23 09:52
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-15
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:12	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66392
Date Collected: 06/15/23 13:19
Date Received: 06/20/23 10:01

Lab Sample ID: 680-236600-16
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 14:14	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-784720/1-A
Matrix: Water
Analysis Batch: 785049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 784720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/21/23 09:47	06/22/23 13:38	1

Lab Sample ID: LCS 680-784720/2-A
Matrix: Water
Analysis Batch: 785049

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 784720

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.408		ug/L		96	80 - 120		

Lab Sample ID: 680-236600-1 MS
Matrix: Water
Analysis Batch: 785049

Client Sample ID: AF66402
Prep Type: Total/NA
Prep Batch: 784720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	0.9928		ug/L		99	80 - 120		

Lab Sample ID: 680-236600-1 MSD
Matrix: Water
Analysis Batch: 785049

Client Sample ID: AF66402
Prep Type: Total/NA
Prep Batch: 784720

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	0.9964		ug/L		100	80 - 120	0	20

Metals

Prep Batch: 784720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-236600-1	AF66402	Total/NA	Water	7470A	
680-236600-2	AF66400	Total/NA	Water	7470A	
680-236600-3	AF66401	Total/NA	Water	7470A	
680-236600-4	AF66399	Total/NA	Water	7470A	
680-236600-5	AF66398	Total/NA	Water	7470A	
680-236600-6	AF66443	Total/NA	Water	7470A	
680-236600-7	AF66440	Total/NA	Water	7470A	
680-236600-8	AF66444	Total/NA	Water	7470A	
680-236600-9	AF66445	Total/NA	Water	7470A	
680-236600-10	AF66441	Total/NA	Water	7470A	
680-236600-11	AF66397	Total/NA	Water	7470A	
680-236600-12	AF66396	Total/NA	Water	7470A	
680-236600-13	AF66395	Total/NA	Water	7470A	
680-236600-14	AF66394	Total/NA	Water	7470A	
680-236600-15	AF66405	Total/NA	Water	7470A	
680-236600-16	AF66392	Total/NA	Water	7470A	
MB 680-784720/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-784720/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-236600-1 MS	AF66402	Total/NA	Water	7470A	
680-236600-1 MSD	AF66402	Total/NA	Water	7470A	

Analysis Batch: 785049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-236600-1	AF66402	Total/NA	Water	7470A	784720
680-236600-2	AF66400	Total/NA	Water	7470A	784720
680-236600-3	AF66401	Total/NA	Water	7470A	784720
680-236600-4	AF66399	Total/NA	Water	7470A	784720
680-236600-5	AF66398	Total/NA	Water	7470A	784720
680-236600-6	AF66443	Total/NA	Water	7470A	784720
680-236600-7	AF66440	Total/NA	Water	7470A	784720
680-236600-8	AF66444	Total/NA	Water	7470A	784720
680-236600-9	AF66445	Total/NA	Water	7470A	784720
680-236600-10	AF66441	Total/NA	Water	7470A	784720
680-236600-11	AF66397	Total/NA	Water	7470A	784720
680-236600-12	AF66396	Total/NA	Water	7470A	784720
680-236600-13	AF66395	Total/NA	Water	7470A	784720
680-236600-14	AF66394	Total/NA	Water	7470A	784720
680-236600-15	AF66405	Total/NA	Water	7470A	784720
680-236600-16	AF66392	Total/NA	Water	7470A	784720
MB 680-784720/1-A	Method Blank	Total/NA	Water	7470A	784720
LCS 680-784720/2-A	Lab Control Sample	Total/NA	Water	7470A	784720
680-236600-1 MS	AF66402	Total/NA	Water	7470A	784720
680-236600-1 MSD	AF66402	Total/NA	Water	7470A	784720

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-236600-1
Project/Site: 125915/JM02.08.G02.3/36500

Client Sample ID: AF66402
Lab Sample ID: 680-236600-1
Date Collected: 06/08/23 10:17
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:45

Client Sample ID: AF66400
Lab Sample ID: 680-236600-2
Date Collected: 06/08/23 11:04
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:49

Client Sample ID: AF66401
Lab Sample ID: 680-236600-3
Date Collected: 06/08/23 11:09
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:51

Client Sample ID: AF66399
Lab Sample ID: 680-236600-4
Date Collected: 06/08/23 12:31
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:52

Client Sample ID: AF66398
Lab Sample ID: 680-236600-5
Date Collected: 06/08/23 14:18
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:54

Client Sample ID: AF66443
Lab Sample ID: 680-236600-6
Date Collected: 06/13/23 09:19
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:55

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

Client Sample ID: AF66440
Lab Sample ID: 680-236600-7

Date Collected: 06/13/23 10:32
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:57

Client Sample ID: AF66444
Lab Sample ID: 680-236600-8

Date Collected: 06/13/23 12:21
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 13:58

Client Sample ID: AF66445
Lab Sample ID: 680-236600-9

Date Collected: 06/13/23 12:26
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:03

Client Sample ID: AF66441
Lab Sample ID: 680-236600-10

Date Collected: 06/13/23 15:00
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:05

Client Sample ID: AF66397
Lab Sample ID: 680-236600-11

Date Collected: 06/14/23 11:46
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:06

Client Sample ID: AF66396
Lab Sample ID: 680-236600-12

Date Collected: 06/14/23 12:47
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:08

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-236600-1
Project/Site: 125915/JM02.08.G02.3/36500

Client Sample ID: AF66395
Lab Sample ID: 680-236600-13
Date Collected: 06/14/23 13:39
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:09

Client Sample ID: AF66394
Lab Sample ID: 680-236600-14
Date Collected: 06/14/23 14:43
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:11

Client Sample ID: AF66405
Lab Sample ID: 680-236600-15
Date Collected: 06/15/23 09:52
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:12

Client Sample ID: AF66392
Lab Sample ID: 680-236600-16
Date Collected: 06/15/23 13:19
Matrix: Water
Date Received: 06/20/23 10:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			784720	DW	EET SAV	06/21/23 09:47
Total/NA	Analysis	7470A		1	785049	DW	EET SAV	06/22/23 14:14

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info. TA-SAV Contract Lab Due Date (Lab Only). 6 / 29 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

6/22/2023

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com **Date Results Needed by:** ___/___/___ **Project/Task/Unit #:** 125915 / JM02.08.G02.3 / 36500 **Rerun request for any flagged QC** (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AF66402	CAP-10	6/8/23	1017	WJK ML	1	P	G	GW	2	7470 RL ≤ 0.2 mg/L	X			
AF66400	CAP-9		1104											
AF66401	CAP-9 DUP		1109											
AF66399	CAP-8		1231											
AF66398	CAP-7	—	1418	—	—	—	—	—	—		—			
AF66443	POZ-6	6/13/23	0919											
40	POZ-3		1032											
44	POZ-7		1221											
45	POZ-7 DUP		1226											
— 41	POZ-4	—	1500	—	—	—	—	—	—		—			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
BJMoran	35594	6/19/23	1300	[signature]	JM	6.20.23	1001
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 20.5/20.3 Initial: ___
Correct pH: Yes No
Preservative Lot#:

680-236600 Chain of Custody

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
Flashpoint
Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info. TA - SAV Contract Lab Due Date (Lab Only) 6 / 29 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

6/22/2023

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone. (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: _____@santeecooper.com

Date Results Needed by: ____/____/____

Project/Task/Unit #: _____/_____/_____

Rerun request for any flagged QC Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AF66397	CAP-6	6/14/23	1146	WJT ML	1	P	G	GW	2	7470 RL< 0.2 mg/L	X			
96	CAP-5	"	1247	"	"	"	"	"	"	"	"			
95	CAP-4	"	1339	"	"	"	"	"	"	"	"			
94	CAP-3	"	1443	"	"	"	"	"	"	"	"			
AF66405	CAP-13	6/15/23	0952	"	"	"	"	"	"	"	"			
AF66392	CAP-1	"	1319	"	"	"	"	"	"	"	"			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/19/23	1300	[signature]	TA	6-20-23	1001
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-236600-1

Login Number: 236600

List Source: Eurofins Savannah

List Number: 1

Creator: Sims, Robert D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-236600-1
Project/Site: 125915/JM02.08.G02.3/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 10/20/2023 9:13:29 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-241786-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

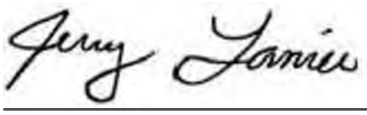
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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10/20/2023 9:13:29 AM

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

Table of Contents

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Certification Summary 17

Job ID: 680-241786-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-241786-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/17/2023 9:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 18.4°C

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-241786-1	AF80265	Water	10/10/23 11:23	10/17/23 09:42
680-241786-2	AF80266	Water	10/10/23 11:28	10/17/23 09:42
680-241786-3	AF80267	Water	10/10/23 10:15	10/17/23 09:42

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Method	Method Description	Protocol	Laboratory
7470A	Mercury (CVAA)	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: South Carolina Public Service Authority
Job ID: 680-241786-1
Project/Site: 125915/JM02.09.G01.1/36500

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Job ID: 680-241786-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF80265 **Lab Sample ID: 680-241786-1**

No Detections.

Client Sample ID: AF80266 **Lab Sample ID: 680-241786-2**

No Detections.

Client Sample ID: AF80267 **Lab Sample ID: 680-241786-3**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Client Sample ID: AF80265
Date Collected: 10/10/23 11:23
Date Received: 10/17/23 09:42

Lab Sample ID: 680-241786-1
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		10/19/23 13:07	10/19/23 19:20	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Client Sample ID: AF80266
Date Collected: 10/10/23 11:28
Date Received: 10/17/23 09:42

Lab Sample ID: 680-241786-2
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		10/19/23 13:07	10/19/23 19:22	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Client Sample ID: AF80267
Date Collected: 10/10/23 10:15
Date Received: 10/17/23 09:42

Lab Sample ID: 680-241786-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		10/19/23 13:07	10/19/23 19:24	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-803558/1-A
Matrix: Water
Analysis Batch: 803723

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 803558

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		10/19/23 13:07	10/19/23 19:08	1

Lab Sample ID: LCS 680-803558/2-A
Matrix: Water
Analysis Batch: 803723

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 803558

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.199		ug/L		88	80 - 120

QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Metals

Prep Batch: 803558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-241786-1	AF80265	Total/NA	Water	7470A	
680-241786-2	AF80266	Total/NA	Water	7470A	
680-241786-3	AF80267	Total/NA	Water	7470A	
MB 680-803558/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-803558/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 803723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-241786-1	AF80265	Total/NA	Water	7470A	803558
680-241786-2	AF80266	Total/NA	Water	7470A	803558
680-241786-3	AF80267	Total/NA	Water	7470A	803558
MB 680-803558/1-A	Method Blank	Total/NA	Water	7470A	803558
LCS 680-803558/2-A	Lab Control Sample	Total/NA	Water	7470A	803558

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

Client Sample ID: AF80265

Lab Sample ID: 680-241786-1

Date Collected: 10/10/23 11:23
Date Received: 10/17/23 09:42

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			803558	DW	EET SAV	10/19/23 13:07
Total/NA	Analysis	7470A		1	803723	BJB	EET SAV	10/19/23 19:20

Client Sample ID: AF80266

Lab Sample ID: 680-241786-2

Date Collected: 10/10/23 11:28
Date Received: 10/17/23 09:42

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			803558	DW	EET SAV	10/19/23 13:07
Total/NA	Analysis	7470A		1	803723	BJB	EET SAV	10/19/23 19:22

Client Sample ID: AF80267

Lab Sample ID: 680-241786-3

Date Collected: 10/10/23 10:15
Date Received: 10/17/23 09:42

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			803558	DW	EET SAV	10/19/23 13:07
Total/NA	Analysis	7470A		1	803723	BJB	EET SAV	10/19/23 19:24

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info: TA-SAV Contract Lab Due Date (Lab Only): 10 / 24 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LINDA.WILLIAMS @santeecooper.com	___/___/___	125915 / JM02.09.G01.1 / 36500	(Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AF80265	CGYP-7	10/10/23	1123	ZM BB	1	P	G	GW	2	7470 RL= 0.2 mg/L	x			
〃 66	CGYP-7 DUP	〃	1128	〃	〃	〃	〃	〃	〃		〃			
〃 67	POZ-3	〃	1015	〃	〃	〃	〃	〃	〃		〃			

680-241786 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	10/16/23	1200	C. Munro	EUROTINS	10/17/23	0942
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):________ Initial:________
Correct pH: Yes No
Preservative Lot#: 18.1/18.4
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum *(all below)*
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-241786-1

Login Number: 241786

List Source: Eurofins Savannah

List Number: 1

Creator: Munro, Caroline

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-241786-1
Project/Site: 125915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

June 19, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 625517

Dear Ms. Gilmetti:

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

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 625517 GEL Work Order: 625517

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

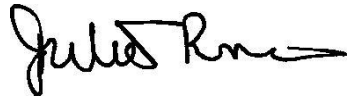
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: June 19, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66407	Project:	SOOP00119
Sample ID:	625517001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 08:59		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.17	0.330	1.00	mg/L		1	TSM	06/14/23	1650	2443166	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 19, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66439	Project:	SOOP00119
Sample ID:	625517002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-JUN-23 14:55		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		5.69	0.330	1.00	mg/L		1	TSM	06/14/23	1711	2443166	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

QC Summary

Report Date: June 19, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **625517**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 2443166										
QC1205432039 625517002 DUP										
Total Organic Carbon Average		5.69		5.58	mg/L	1.92		(0%-20%)	TSM	06/14/23 17:31
QC1205432038 LCS										
Total Organic Carbon Average	10.0			9.79	mg/L		97.9	(80%-120%)		06/14/23 15:35
QC1205432037 MB										
Total Organic Carbon Average			U	ND	mg/L					06/14/23 15:25
QC1205432040 625517002 PS										
Total Organic Carbon Average	10.0	5.69		14.8	mg/L		91.5	(65%-120%)		06/14/23 17:51

Notes:

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **625517**

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

N1 See case narrative

R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.

B The target analyte was detected in the associated blank.

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

J See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Technical Case Narrative
Santee Cooper
SDG #: 625517

General Chemistry

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2443166

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

GEL Sample ID#	Client Sample Identification
625517001	AF66407
625517002	AF66439
1205432037	Method Blank (MB)
1205432038	Laboratory Control Sample (LCS)
1205432039	625517002(AF66439) Sample Duplicate (DUP)
1205432040	625517002(AF66439) Post Spike (PS)

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.

6/19/23 - TOC

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 10 / 23 - RAD Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

625517

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915/ JM02.09-G01.1/ 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	TOC	
AF66431	CGYP-7	6/7/23	0904	WJK ML	2	P	G	GW	2		1	1		
26	CGYP-2	"	1004	"	"	"	"	"	"		"	"		
27	CGYP-2 DUP	"	1009	"	"	"	"	"	"		"	"		
28	CGYP-3	"	1135	"	"	"	"	"	"		"	"		
29	CGYP-4	"	1227	"	"	"	"	"	"		"	"		
30	CGYP-6	"	1337	"	"	"	"	"	"		"	"		
AF66407	CBW-1	6/6/23	0859	"	3	"	"	"	2/3/1		1	1	1	
AF66439	PM-1	6/5/23	1455	"	3	"	"	"	2/3/1		1	1	1	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/9/23	0946	[illegible]	GEL	6/9/23	0946
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
[illegible]	GEL	6/9/23	0946	[illegible]		6/9/23	14:35
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
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Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
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☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCOP	SDG/AR/COC/Work Order: 625517
Received By: Stacy Boone	Date Received: June 9, 2023
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other
	19°c 19°c 1°c

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: See Tracking
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR3-22 IR3-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓	.		Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ZW Date 6/12/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 19 June 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

November 03, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 641316

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 13, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Jordan Melton

Jordan Melton for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 641316 GEL Work Order: 641316

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, Julie Robinson.

Reviewed by Jordan Melton

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80265	Project:	SOOP00119
Sample ID:	641316001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:23		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.93	+/-1.10	1.39	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.58	+/-1.16			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.655	+/-0.389	0.448	1.00	pCi/L			LXP1	11/02/23	0756	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80266	Project:	SOOP00119
Sample ID:	641316002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:28		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.98	+/-1.26	1.56	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.05	+/-1.27			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.0767	+/-0.184	0.368	1.00	pCi/L			LXP1	11/02/23	0756	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80267	Project:	SOOP00119
Sample ID:	641316003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 10:15		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-1.54	+/-1.06	2.22	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.205	+/-1.13			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.205	+/-0.403	0.739	1.00	pCi/L			LXP1	11/02/23	0831	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: November 3, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **641316**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2509217										
QC1205547740 641316001 DUP										
Radium-228		2.93		3.95	pCi/L	29.7		(0% - 100%)	JE1	10/24/23 08:47
	Uncertainty	+/-1.10		+/-1.15						
QC1205547741 LCS										
Radium-228	78.3			71.6	pCi/L		91.4	(75%-125%)		10/24/23 08:48
	Uncertainty			+/-3.85						
QC1205547739 MB										
Radium-228			U	0.166	pCi/L					10/24/23 08:47
	Uncertainty			+/-0.981						
Rad Ra-226										
Batch 2509249										
QC1205547810 641316001 DUP										
Radium-226		0.655		1.02	pCi/L	43.9		(0% - 100%)	LXP1	11/02/23 08:31
	Uncertainty	+/-0.389		+/-0.511						
QC1205547812 LCS										
Radium-226	26.9			23.3	pCi/L		86.5	(75%-125%)		11/02/23 08:31
	Uncertainty			+/-2.01						
QC1205547809 MB										
Radium-226			U	0.176	pCi/L					11/02/23 08:31
	Uncertainty			+/-0.345						
QC1205547811 641316001 MS										
Radium-226	134	0.655		106	pCi/L		78.5	(75%-125%)		11/02/23 08:31
	Uncertainty	+/-0.389		+/-10.4						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **641316**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 641316

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2509217

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

GEL Sample ID#	Client Sample Identification
641316001	AF80265
641316002	AF80266
641316003	AF80267
1205547739	Method Blank (MB)
1205547740	641316001(AF80265) Sample Duplicate (DUP)
1205547741	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: 2509249

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

GEL Sample ID#	Client Sample Identification
641316001	AF80265
641316002	AF80266
641316003	AF80267
1205547809	Method Blank (MB)
1205547810	641316001(AF80265) Sample Duplicate (DUP)
1205547811	641316001(AF80265) Matrix Spike (MS)
1205547812	Laboratory Control Sample (LCS)

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

Data Summary:

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

applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
The matrix spike, 1205547811 (AF80265MS), 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.

11/13/23 — RAD

Contract Lab Info: GEL *Contract Lab Due Date (Lab Only):* 11 / 20 / 23 *Send report to* lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

641316 & 641317

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	F, Cl, SO4	
AF 80265	CGYP-7	10/10/23	1123	ZM BB	3	P	G	GW	2/1		2	x	1	
AF 80266	CGYP-7 DUP	|	1128	|	|	|	|	|	|		|	|	|	
AF 80267	POZ-3	|	1015	|	|	|	|	|	|		|	|	|	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	36851	10/13/23	0944	[signature]	GEL	10/13/23	0944
[signature]	GEL	10/13/23	1610	[signature]	GEL	10/13/23	1610

Sample Receiving (Internal Use Only)
TEMP (°C):________ **Initial:**________
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCCP	SDG/AR/COC/Work Order: 641316 / 641317
Received By: QG	Date Received: 10/13/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
	n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓		✓	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 3°c
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ____ Date 10/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 03 November 2023

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-04
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

July 07, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 625513

Dear Ms. Gilmetti:

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

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 625513 GEL Work Order: 625513

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

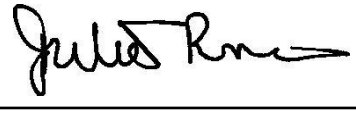
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66418	Project:	SOOP00119
Sample ID:	625513001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 10:07		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.59	+/-1.54	2.23	3.00	pCi/L			JE1	06/29/23	1125	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.25	+/-1.57			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.661	+/-0.343	0.316	1.00	pCi/L			LXP1	07/07/23	0950	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			94.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66419	Project:	SOOP00119
Sample ID:	625513002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 11:17		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.760	+/-0.817	1.36	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.34	+/-0.902			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.583	+/-0.383	0.496	1.00	pCi/L			LXP1	07/07/23	0950	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66420	Project:	SOOP00119
Sample ID:	625513003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 12:17		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.736	+/-0.975	1.66	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.00	+/-1.10			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.26	+/-0.511	0.449	1.00	pCi/L			LXP1	07/07/23	0950	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66425	Project:	SOOP00119
Sample ID:	625513004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 13:29		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.61	+/-1.06	1.39	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.94	+/-1.22			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.32	+/-0.599	0.683	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66421	Project:	SOOP00119
Sample ID:	625513005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 14:58		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.16	+/-1.17	1.95	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.01	+/-1.32			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.85	+/-0.606	0.498	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66417	Project:	SOOP00119
Sample ID:	625513006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 15:45		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.568	+/-0.635	1.06	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.39	+/-0.745			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.824	+/-0.390	0.332	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66431	Project:	SOOP00119
Sample ID:	625513007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-JUN-23 09:04		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.78	+/-1.47	2.11	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		6.60	+/-1.69			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.81	+/-0.840	0.478	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			94	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66426	Project:	SOOP00119
Sample ID:	625513008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-JUN-23 10:04		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.960	+/-1.13	1.91	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.77	+/-1.20			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.809	+/-0.394	0.344	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66427	Project:	SOOP00119
Sample ID:	625513009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-JUN-23 10:09		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.56	+/-0.897	1.30	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.44	+/-1.01			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.875	+/-0.454	0.538	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66428	Project:	SOOP00119
Sample ID:	625513010	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-JUN-23 11:35		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.17	+/-1.37	1.68	3.00	pCi/L			JE1	07/03/23	1431	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.33	+/-1.47			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.16	+/-0.537	0.640	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			78	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66429	Project:	SOOP00119
Sample ID:	625513011	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-JUN-23 12:27		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.51	+/-0.891	1.26	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.67	+/-0.940			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.153	+/-0.300	0.564	1.00	pCi/L			LXP1	07/07/23	1023	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66430	Project:	SOOP00119
Sample ID:	625513012	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-JUN-23 13:37		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.53	+/-1.26	1.43	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.69	+/-1.34			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.16	+/-0.469	0.412	1.00	pCi/L			LXP1	07/07/23	1057	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66407	Project:	SOOP00119
Sample ID:	625513013	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 08:59		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.12	+/-1.22	1.47	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.08	+/-1.31			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.968	+/-0.488	0.590	1.00	pCi/L			LXP1	07/07/23	1057	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Report Date: July 7, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66439	Project:	SOOP00119
Sample ID:	625513014	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-JUN-23 14:55		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.236	+/-1.04	1.88	3.00	pCi/L			JE1	06/29/23	1126	2442125	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.70	+/-1.34			pCi/L			NXL1	07/07/23	1432	2442124	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		3.47	+/-0.842	0.396	1.00	pCi/L			LXP1	07/07/23	1057	2442111	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: July 7, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **625513**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch 2442125											
QC1205429946 625513001 DUP											
Radium-228		3.59		2.51	pCi/L	35.3		(0% - 100%)	JE1	06/29/23	11:25
	Uncertainty	+/-1.54		+/-1.06							
QC1205429947 LCS											
Radium-228	79.7			73.2	pCi/L		91.9	(75%-125%)		06/29/23	11:25
	Uncertainty			+/-4.32							
QC1205429945 MB											
Radium-228			U	1.12	pCi/L					06/29/23	11:25
	Uncertainty			+/-0.786							
Rad Ra-226											
Batch 2442111											
QC1205429911 625513001 DUP											
Radium-226		0.661		0.801	pCi/L	19.1		(0% - 100%)	LXP1	07/07/23	10:57
	Uncertainty	+/-0.343		+/-0.409							
QC1205429913 LCS											
Radium-226	26.3			22.7	pCi/L		86.1	(75%-125%)		07/07/23	10:57
	Uncertainty			+/-2.09							
QC1205429910 MB											
Radium-226			U	0.248	pCi/L					07/07/23	10:57
	Uncertainty			+/-0.256							
QC1205429912 625513001 MS											
Radium-226	129	0.661		109	pCi/L		84.1	(75%-125%)		07/07/23	10:57
	Uncertainty	+/-0.343		+/-9.86							

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **625513**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 625513

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2442125

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

GEL Sample ID#	Client Sample Identification
625513001	AF66418
625513002	AF66419
625513003	AF66420
625513004	AF66425
625513005	AF66421
625513006	AF66417
625513007	AF66431
625513008	AF66426
625513009	AF66427
625513010	AF66428
625513011	AF66429
625513012	AF66430
625513013	AF66407
625513014	AF66439
1205429945	Method Blank (MB)
1205429946	625513001(AF66418) Sample Duplicate (DUP)
1205429947	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Recounts
Sample 625513010 (AF66428) was re-eluted and recounted to verify sample result. The recount is reported.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2442111

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

GEL Sample ID#	Client Sample Identification
625513001	AF66418
625513002	AF66419
625513003	AF66420
625513004	AF66425
625513005	AF66421
625513006	AF66417
625513007	AF66431
625513008	AF66426
625513009	AF66427
625513010	AF66428
625513011	AF66429
625513012	AF66430
625513013	AF66407
625513014	AF66439
1205429910	Method Blank (MB)
1205429911	625513001(AF66418) Sample Duplicate (DUP)
1205429912	625513001(AF66418) Matrix Spike (MS)
1205429913	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.

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.

6/19/23 - TOC

Contract Lab Info: GEL *Contract Lab Due Date (Lab Only):* 7 / 10 / 23 - RAD *Send report to* lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

625513

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LCWILLIA @santeecooper.com	/ /	125915 / JM02.09.G01.1 / 36500	(Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC	
AF66418	CCMGP-2	6/6/23	1007	WJK ML	2	P	G	GW	2		1	1	X	
19	CCMGP-3	|	1117	|	|	|	|	|	|		|	|	|	
20	CCMGP-4	|	1217	|	|	|	|	|	|		|	|	|	
25	CGYP-1	|	1329	|	|	|	|	|	|		|	|	|	
21	CCMGP-5	|	1458	|	|	|	|	|	|		|	|	|	
17	CCMGP-1	⊥	1545	⊥	⊥	⊥	⊥	⊥	⊥		⊥	⊥	⊥	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/9/23	0946	[signature]	GEL	6/9/23	0946
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
[signature]	GEL	6/9/23	1435	[signature]		6/9/23	14:35
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):______ **Initial:**______
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, CCR-coal combustion residual, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

6/19/23 - TOC

Contract Lab Info: GEL *Contract Lab Due Date (Lab Only):* 7 / 10 / 23 - RAD *Send report to* lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915/ JM02.09.G01.1/ 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	TOC	
AF66431	CGYP-7	6/7/23	0904	WJK ML	2	P	G	GW	2		1	1		
26	CGYP-2		1004											
27	CGYP-2 DUP		1009											
28	CGYP-3		1135											
29	CGYP-4		1227											
30	CGYP-6		1337											
AF66407	CBW-1	6/6/23	0859		3				2/3/1		1	1	1	
AF66439	PM-1	6/5/23	1455		3				2/3/1		1	1	1	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/9/23	0946	[signature]	GEL	6/9/23	0946
[signature]	GEL	6-9-23	1436	[signature]		6/9/23	14:35

Sample Receiving (Internal Use Only)
TEMP (°C):________ **Initial:**________
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
Wallboard
% Moisture
Sulfites
pH

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
Ammonia
% Carbon
Mineral Analysis
Sieve
% Moisture

NPDES
Oil & Grease
TSS

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 625513
Received By: Stacy Boone	Date Received: June 9, 2023
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
	19°c 19°c 1°c

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: See Tracking
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: ~~IR3-22~~ IR3-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?				If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer)
					Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No)
				✓	Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials SW Date 6/12/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 07 July 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

January 11, 2024

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 649122

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 15, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 649122 GEL Work Order: 649122

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

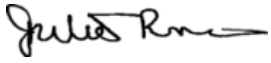
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85222	Project:	SOOP00119
Sample ID:	649122001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 13:19		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.18	+/-0.837	1.29	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.83	+/-0.888			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.646	+/-0.296	0.311	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85223	Project:	SOOP00119
Sample ID:	649122002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 10:24		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.944	+/-1.02	1.71	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.52	+/-1.17			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.58	+/-0.567	0.297	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85224	Project:	SOOP00119
Sample ID:	649122003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 10:29		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.39	+/-0.763	1.07	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.18	+/-0.935			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.79	+/-0.539	0.495	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85225	Project:	SOOP00119
Sample ID:	649122004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 11:50		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.328	+/-0.652	1.17	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.72	+/-0.827			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.39	+/-0.509	0.561	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

QC Summary

Report Date: January 11, 2024

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **649122**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2542833										
QC1205605880 648208001 DUP										
Radium-228		4.72		2.46	pCi/L	63		(0% - 100%)	JE1	12/29/23 13:55
	Uncertainty	+/-1.37		+/-1.03						
QC1205605881 LCS										
Radium-228	74.3			71.5	pCi/L		96.1	(75%-125%)		12/29/23 13:55
	Uncertainty			+/-4.39						
QC1205605879 MB										
Radium-228			U	0.437	pCi/L					12/29/23 13:55
	Uncertainty			+/-0.605						
Rad Ra-226										
Batch 2541882										
QC1205603843 649122001 DUP										
Radium-226		0.646		0.568	pCi/L	12.8		(0% - 100%)	LXP1	01/10/24 09:11
	Uncertainty	+/-0.296		+/-0.341						
QC1205603846 LCS										
Radium-226	17.0			13.0	pCi/L		76.2	(75%-125%)		01/10/24 09:11
	Uncertainty			+/-1.02						
QC1205603841 MB										
Radium-226			U	0.177	pCi/L					01/10/24 09:11
	Uncertainty			+/-0.203						
QC1205603845 649122001 MS										
Radium-226	113	0.646		93.8	pCi/L		82.2	(75%-125%)		01/10/24 09:11
	Uncertainty	+/-0.296		+/-6.51						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **649122**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 649122

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2542833

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

GEL Sample ID#	Client Sample Identification
649122001	AF85222
649122002	AF85223
649122003	AF85224
649122004	AF85225
1205605879	Method Blank (MB)
1205605880	648208001(AF84383) Sample Duplicate (DUP)
1205605881	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: 2541882

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

GEL Sample ID#	Client Sample Identification
649122001	AF85222
649122002	AF85223
649122003	AF85224
649122004	AF85225
1205603841	Method Blank (MB)
1205603843	649122001(AF85222) Sample Duplicate (DUP)
1205603845	649122001(AF85222) Matrix Spike (MS)
1205603846	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Aliquots for the matrix spikes, 1205603845 (AF85222MS), were 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.

Contract Lab Info: TA - SAV Contract Lab Due Date (Lab Only): 1 / 18 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

649122

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JMC2.09.G21.1 / 36500

Rerun request for any flagged QC: (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC		
AF85222	WAP -27	12/11/23	1319	ZM ML	2	G	G	GW	2		X	X		
AF85223	WAP -28	"	1024	"	"	"	"	"	"		"	"		
AF85224	WAP -28 DUP	"	1029	"	"	"	"	"	"		"	"		
AF85225	WAP -29	"	1150	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	12/15/23	0923		GEL	12/15/23	0923
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
	GEL	12.15.23	1610		GEL	12/15/23	1610
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
- ☐ TOC
- ☐ DOC
- ☐ TP/TPO4
- ☐ NH3-N
- ☐ F
- ☐ Cl
- ☐ NO2
- ☐ Br
- ☐ NO3
- ☐ SO4

MISC.
- ☐ BTEX
- ☐ Naphthalene
- ☐ THM/HAA
- ☐ VOC
- ☐ Oil & Grease
- ☐ E. Coli
- ☐ Total Coliform
- ☐ pH
- ☐ Dissolved As
- ☐ Dissolved Fe
- ☐ Rad 226
- ☐ Rad 228
- ☐ PCB

Gypsum
- ☐ **Wallboard Gypsum(*all below*)**
  - ☐ AIM
  - ☐ TOC
  - ☐ Total metals
  - ☐ Soluble Metals
  - ☐ Purity (CaSO4)
  - ☐ % Moisture
  - ☐ Sulfites
  - ☐ pH
  - ☐ Chlorides
  - ☐ Particle Size
- ☐ Sulfur

Coal
- ☐ **Ultimate**
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN
- **Other Tests:**
  - ☐ XRF Scan
  - ☐ HGI
  - ☐ Fineness
  - ☐ Particulate Matter

Flyash
- ☐ Ammonia
- ☐ LOI
- ☐ % Carbon
- ☐ Mineral Analysis
- ☐ Sieve
- ☐ % Moisture

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

Oil
- ☐ **Trans. Oil Qual.**
  - ☐ %Moisture
  - ☐ Color
  - ☐ Acidity
  - ☐ Dielectric Strength
  - ☐ IFT
  - ☐ Dissolved Gases
- ☐ **Used Oil**
  - ☐ Flashpoint
  - ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
  - ☐ TX
- ☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SDOP	SDG/AR/COC/Work Order: 649122
Received By: QG	Date Received: 12/15/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other N/A

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/ mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?		✓		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?		✓		If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?			✓	Circle Applicable: No container count on COC Other (describe) Only received 1 container for AF85752 *WO 649127
12	Are sample containers identifiable as GEL provided by use of GEL labels?				
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JW Date 12/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 11 January 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 12/15/2023 11:58:21 AM Revision 1

JOB DESCRIPTION

125915/JM02 09.G011/36500

JOB NUMBER

680-244036-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

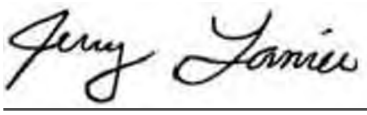
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Revision 1

Authorized for release by
Jerry Lanier, Project Manager I
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(912)250-0281

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Job ID: 680-244036-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-244036-1

REVISION

The report being provided is a revision of the original report sent on 12/13/2023. The report (revision 1) is being revised due to Client wants non-client batch QC reported.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/8/2023 10:03 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 13.7°C

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-244036-1	AF84383	Water	12/05/23 13:26	12/08/23 10:03
680-244036-2	AF84384	Water	12/05/23 13:31	12/08/23 10:03
680-244036-3	AF84385	Water	12/05/23 10:14	12/08/23 10:03

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Method	Method Description	Protocol	Laboratory
7470A	Mercury (CVAA)	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Job ID: 680-244036-1
Project/Site: 125915/JM02 09.G011/36500

Client Sample ID: AF84383 — Lab Sample ID: 680-244036-1

No Detections.

Client Sample ID: AF84384 — Lab Sample ID: 680-244036-2

No Detections.

Client Sample ID: AF84385 — Lab Sample ID: 680-244036-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Client Sample ID: AF84383
Date Collected: 12/05/23 13:26
Date Received: 12/08/23 10:03

Lab Sample ID: 680-244036-1
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		12/12/23 14:51	12/13/23 12:11	1

Client: South Carolina Public Service Authority
Job ID: 680-244036-1
Project/Site: 125915/JM02 09.G011/36500

Client Sample ID: AF84384
Lab Sample ID: 680-244036-2
Date Collected: 12/05/23 13:31
Matrix: Water
Date Received: 12/08/23 10:03

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		12/12/23 14:51	12/13/23 12:13	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Client Sample ID: AF84385
Date Collected: 12/05/23 10:14
Date Received: 12/08/23 10:03

Lab Sample ID: 680-244036-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		12/12/23 14:51	12/13/23 12:20	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-812975/1-A
Matrix: Water
Analysis Batch: 813193

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 812975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		12/12/23 14:51	12/13/23 12:03	1

Lab Sample ID: LCS 680-812975/2-A
Matrix: Water
Analysis Batch: 813193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 812975

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.393		ug/L		96	80 - 120		

Lab Sample ID: 680-243880-E-3-E MS
Matrix: Water
Analysis Batch: 813193

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 812975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	0.9594		ug/L		96	80 - 120		

Lab Sample ID: 680-243880-E-3-F MSD
Matrix: Water
Analysis Batch: 813193

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 812975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	0.9701		ug/L		97	80 - 120	1	20

Metals

Prep Batch: 812975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-244036-1	AF84383	Total/NA	Water	7470A	
680-244036-2	AF84384	Total/NA	Water	7470A	
680-244036-3	AF84385	Total/NA	Water	7470A	
MB 680-812975/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-812975/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-243880-E-3-E MS	Matrix Spike	Total/NA	Water	7470A	
680-243880-E-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 813193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-244036-1	AF84383	Total/NA	Water	7470A	812975
680-244036-2	AF84384	Total/NA	Water	7470A	812975
680-244036-3	AF84385	Total/NA	Water	7470A	812975
MB 680-812975/1-A	Method Blank	Total/NA	Water	7470A	812975
LCS 680-812975/2-A	Lab Control Sample	Total/NA	Water	7470A	812975
680-243880-E-3-E MS	Matrix Spike	Total/NA	Water	7470A	812975
680-243880-E-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	812975

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Client Sample ID: AF84383
Date Collected: 12/05/23 13:26
Date Received: 12/08/23 10:03

Lab Sample ID: 680-244036-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			812975	DW	EET SAV	12/12/23 14:51
Total/NA	Analysis	7470A		1	813193	BCB	EET SAV	12/13/23 12:11

Client Sample ID: AF84384
Date Collected: 12/05/23 13:31
Date Received: 12/08/23 10:03

Lab Sample ID: 680-244036-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			812975	DW	EET SAV	12/12/23 14:51
Total/NA	Analysis	7470A		1	813193	BCB	EET SAV	12/13/23 12:13

Client Sample ID: AF84385
Date Collected: 12/05/23 10:14
Date Received: 12/08/23 10:03

Lab Sample ID: 680-244036-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			812975	DW	EET SAV	12/12/23 14:51
Total/NA	Analysis	7470A		1	813193	BCB	EET SAV	12/13/23 12:20

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info: TA-SAV Contract Lab Due Date (Lab Only): 12 / 15 / 23 Send report to lcwillia@santeecooper.com & slbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4178

Customer Email/Report Recipient: LINDA WILLIAMS @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125715 / JM02 09-GP1 1 / 36500

Rerun request for any flagged QC: (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AF84383	CGYP-7	12/5/23	1326	ZM BB	1	P	G	GW	2	RL<0.2 ug/L 7471	X			
AF84384	CGYP-7 DUP	"	1331	"	"	"	"	"	"		"			
AF84385	POZ-3	"	1014	"	"	"	"	"	"		"			

680-244036 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SRury	35594	12/6/23	1200	[signature]		12/8/23	1603
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 13.4/13.7 Initial.___
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ % Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As, Cd, Cr, Ni, Pb, Hg)
☐ PX
☐ SOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-244036-1

Login Number: 244036
List Number: 1
Creator: Stewart, Rendaisha

List Source: Eurofins Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-244036-1
Project/Site: 125915/JM02 09.G011/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-24

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

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JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-238944-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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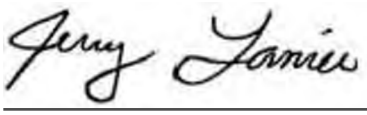
Authorization



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Authorized for release by
Jerry Lanier, Project Manager I
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(912)250-0281

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Job ID: 680-238944-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-238944-1

Receipt

The samples were received on 8/10/2023 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 26.3°C

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-238944-1	AF71896	Water	08/01/23 09:53	08/10/23 10:25
680-238944-2	AF71893	Water	08/01/23 10:45	08/10/23 10:25
680-238944-3	AF71894	Water	08/01/23 11:52	08/10/23 10:25
680-238944-4	AF71895	Water	08/01/23 13:17	08/10/23 10:25
680-238944-5	AF71891	Water	08/02/23 09:03	08/10/23 10:25
680-238944-6	AF71892	Water	08/02/23 09:08	08/10/23 10:25
680-238944-7	AF71897	Water	08/02/23 10:00	08/10/23 10:25
680-238944-8	AF71898	Water	08/02/23 10:05	08/10/23 10:25
680-238944-9	AF71899	Water	08/02/23 11:37	08/10/23 10:25

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	EET SAV
7470A	Mercury (CVAA)	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Client Sample ID: AF71896 — Lab Sample ID: 680-238944-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	67500		500		ug/L	1		6010D	Total Recoverable
Barium	851		5.00		ug/L	1		6020B	Total Recoverable
Cobalt	6.35		0.500		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71893 — Lab Sample ID: 680-238944-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	73400		500		ug/L	1		6010D	Total Recoverable
Arsenic	12.0		3.00		ug/L	1		6020B	Total Recoverable
Barium	21.8		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	3.18		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.820		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	84.7		0.500		ug/L	1		6020B	Total Recoverable
Lead	13.4		2.50		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71894 — Lab Sample ID: 680-238944-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	27400		500		ug/L	1		6010D	Total Recoverable
Arsenic	7.66		3.00		ug/L	1		6020B	Total Recoverable
Barium	30.5		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	7.29		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.615		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	60.6		0.500		ug/L	1		6020B	Total Recoverable
Lead	9.41		2.50		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71895 — Lab Sample ID: 680-238944-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	222000		500		ug/L	1		6010D	Total Recoverable
Barium	510		5.00		ug/L	1		6020B	Total Recoverable
Cobalt	7.74		0.500		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71891 — Lab Sample ID: 680-238944-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	133000		500		ug/L	1		6010D	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample ID: AF71891 (Continued)
Lab Sample ID: 680-238944-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	301		5.00		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71892
Lab Sample ID: 680-238944-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	139000		500		ug/L	1		6010D	Total Recoverable
Barium	310		5.00		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71897
Lab Sample ID: 680-238944-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	262000		500		ug/L	1		6010D	Total Recoverable
Arsenic	15.2		3.00		ug/L	1		6020B	Total Recoverable
Barium	27.1		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	9.82		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.560		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	61.5		0.500		ug/L	1		6020B	Total Recoverable
Lead	37.0		2.50		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71898
Lab Sample ID: 680-238944-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	262000		500		ug/L	1		6010D	Total Recoverable
Arsenic	14.0		3.00		ug/L	1		6020B	Total Recoverable
Barium	26.3		5.00		ug/L	1		6020B	Total Recoverable
Beryllium	9.79		0.500		ug/L	1		6020B	Total Recoverable
Cadmium	0.565		0.500		ug/L	1		6020B	Total Recoverable
Cobalt	60.6		0.500		ug/L	1		6020B	Total Recoverable
Lead	36.6		2.50		ug/L	1		6020B	Total Recoverable

Client Sample ID: AF71899
Lab Sample ID: 680-238944-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	159000		500		ug/L	1		6010D	Total Recoverable
Barium	96.5		5.00		ug/L	1		6020B	Total Recoverable
Cobalt	2.39		0.500		ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Client Sample ID: AF71896
Date Collected: 08/01/23 09:53
Date Received: 08/10/23 10:25

Lab Sample ID: 680-238944-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**67500**		500		ug/L		08/11/23 05:22	08/11/23 13:45	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 13:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:21	1
Arsenic	3.00	U	3.00		ug/L		08/11/23 05:22	08/11/23 13:21	1
Barium	**851**		5.00		ug/L		08/11/23 05:22	08/11/23 13:21	1
Beryllium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:21	1
Cadmium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:21	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:21	1
Cobalt	**6.35**		0.500		ug/L		08/11/23 05:22	08/11/23 13:21	1
Lead	2.50	U	2.50		ug/L		08/11/23 05:22	08/11/23 13:21	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:01	1

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71893
Lab Sample ID: 680-238944-2
Date Collected: 08/01/23 10:45
Matrix: Water
Date Received: 08/10/23 10:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**73400**		500		ug/L		08/11/23 05:22	08/11/23 13:47	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 13:47	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:25	1
Arsenic	**12.0**		3.00		ug/L		08/11/23 05:22	08/11/23 13:25	1
Barium	**21.8**		5.00		ug/L		08/11/23 05:22	08/11/23 13:25	1
Beryllium	**3.18**		0.500		ug/L		08/11/23 05:22	08/11/23 13:25	1
Cadmium	**0.820**		0.500		ug/L		08/11/23 05:22	08/11/23 13:25	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:25	1
Cobalt	**84.7**		0.500		ug/L		08/11/23 05:22	08/11/23 13:25	1
Lead	**13.4**		2.50		ug/L		08/11/23 05:22	08/11/23 13:25	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:02	1

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71894
Lab Sample ID: 680-238944-3
Date Collected: 08/01/23 11:52
Matrix: Water
Date Received: 08/10/23 10:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**27400**		500		ug/L		08/11/23 05:22	08/11/23 13:49	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 13:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:29	1
Arsenic	**7.66**		3.00		ug/L		08/11/23 05:22	08/11/23 13:29	1
Barium	**30.5**		5.00		ug/L		08/11/23 05:22	08/11/23 13:29	1
Beryllium	**7.29**		0.500		ug/L		08/11/23 05:22	08/11/23 13:29	1
Cadmium	**0.615**		0.500		ug/L		08/11/23 05:22	08/11/23 13:29	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:29	1
Cobalt	**60.6**		0.500		ug/L		08/11/23 05:22	08/11/23 13:29	1
Lead	**9.41**		2.50		ug/L		08/11/23 05:22	08/11/23 13:29	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:04	1

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71895
Lab Sample ID: 680-238944-4
Date Collected: 08/01/23 13:17
Matrix: Water
Date Received: 08/10/23 10:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**222000**		500		ug/L		08/11/23 05:22	08/11/23 13:51	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 13:51	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:33	1
Arsenic	3.00	U	3.00		ug/L		08/11/23 05:22	08/11/23 13:33	1
Barium	**510**		5.00		ug/L		08/11/23 05:22	08/11/23 13:33	1
Beryllium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:33	1
Cadmium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:33	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:33	1
Cobalt	**7.74**		0.500		ug/L		08/11/23 05:22	08/11/23 13:33	1
Lead	2.50	U	2.50		ug/L		08/11/23 05:22	08/11/23 13:33	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:05	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Client Sample ID: AF71891
Date Collected: 08/02/23 09:03
Date Received: 08/10/23 10:25

Lab Sample ID: 680-238944-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**133000**		500		ug/L		08/11/23 05:22	08/11/23 13:53	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 13:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:37	1
Arsenic	3.00	U	3.00		ug/L		08/11/23 05:22	08/11/23 13:37	1
Barium	**301**		5.00		ug/L		08/11/23 05:22	08/11/23 13:37	1
Beryllium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:37	1
Cadmium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:37	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:37	1
Cobalt	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:37	1
Lead	2.50	U	2.50		ug/L		08/11/23 05:22	08/11/23 13:37	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:37	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:07	1

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71892
Lab Sample ID: 680-238944-6
Date Collected: 08/02/23 09:08
Matrix: Water
Date Received: 08/10/23 10:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**139000**		500		ug/L		08/11/23 05:22	08/16/23 10:57	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/16/23 10:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:49	1
Arsenic	3.00	U	3.00		ug/L		08/11/23 05:22	08/11/23 13:49	1
Barium	**310**		5.00		ug/L		08/11/23 05:22	08/11/23 13:49	1
Beryllium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:49	1
Cadmium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:49	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:49	1
Cobalt	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 13:49	1
Lead	2.50	U	2.50		ug/L		08/11/23 05:22	08/11/23 13:49	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:49	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:08	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Client Sample ID: AF71897
Date Collected: 08/02/23 10:00
Date Received: 08/10/23 10:25

Lab Sample ID: 680-238944-7
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**262000**		500		ug/L		08/11/23 05:22	08/11/23 14:02	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 14:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:53	1
Arsenic	**15.2**		3.00		ug/L		08/11/23 05:22	08/11/23 13:53	1
Barium	**27.1**		5.00		ug/L		08/11/23 05:22	08/11/23 13:53	1
Beryllium	**9.82**		0.500		ug/L		08/11/23 05:22	08/11/23 13:53	1
Cadmium	**0.560**		0.500		ug/L		08/11/23 05:22	08/11/23 13:53	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:53	1
Cobalt	**61.5**		0.500		ug/L		08/11/23 05:22	08/11/23 13:53	1
Lead	**37.0**		2.50		ug/L		08/11/23 05:22	08/11/23 13:53	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:10	1

Client Sample Results

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71898
Lab Sample ID: 680-238944-8
Date Collected: 08/02/23 10:05
Matrix: Water
Date Received: 08/10/23 10:25

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**262000**		500		ug/L		08/11/23 05:22	08/11/23 14:04	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 14:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:57	1
Arsenic	**14.0**		3.00		ug/L		08/11/23 05:22	08/11/23 13:57	1
Barium	**26.3**		5.00		ug/L		08/11/23 05:22	08/11/23 13:57	1
Beryllium	**9.79**		0.500		ug/L		08/11/23 05:22	08/11/23 13:57	1
Cadmium	**0.565**		0.500		ug/L		08/11/23 05:22	08/11/23 13:57	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 13:57	1
Cobalt	**60.6**		0.500		ug/L		08/11/23 05:22	08/11/23 13:57	1
Lead	**36.6**		2.50		ug/L		08/11/23 05:22	08/11/23 13:57	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 13:57	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:11	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Client Sample ID: AF71899
Date Collected: 08/02/23 11:37
Date Received: 08/10/23 10:25

Lab Sample ID: 680-238944-9
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**159000**		500		ug/L		08/11/23 05:22	08/11/23 14:06	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 14:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 14:01	1
Arsenic	3.00	U	3.00		ug/L		08/11/23 05:22	08/11/23 14:01	1
Barium	**96.5**		5.00		ug/L		08/11/23 05:22	08/11/23 14:01	1
Beryllium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 14:01	1
Cadmium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 14:01	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 14:01	1
Cobalt	**2.39**		0.500		ug/L		08/11/23 05:22	08/11/23 14:01	1
Lead	2.50	U	2.50		ug/L		08/11/23 05:22	08/11/23 14:01	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 14:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 12:16	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 680-792885/1-A
Matrix: Water
Analysis Batch: 793061

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 792885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	500	U	500		ug/L		08/11/23 05:22	08/11/23 13:12	1
Selenium	20.0	U	20.0		ug/L		08/11/23 05:22	08/11/23 13:12	1

Lab Sample ID: LCS 680-792885/2-A
Matrix: Water
Analysis Batch: 793061

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 792885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	5000	4670		ug/L		93	80 - 120
Selenium	100	92.75		ug/L		93	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 680-792884/1-A
Matrix: Water
Analysis Batch: 793058

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 792884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 12:11	1
Arsenic	3.00	U	3.00		ug/L		08/11/23 05:22	08/11/23 12:11	1
Barium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 12:11	1
Beryllium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 12:11	1
Cadmium	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 12:11	1
Chromium	5.00	U	5.00		ug/L		08/11/23 05:22	08/11/23 12:11	1
Cobalt	0.500	U	0.500		ug/L		08/11/23 05:22	08/11/23 12:11	1
Lead	2.50	U	2.50		ug/L		08/11/23 05:22	08/11/23 12:11	1
Thallium	1.00	U	1.00		ug/L		08/11/23 05:22	08/11/23 12:11	1

Lab Sample ID: LCS 680-792884/2-A
Matrix: Water
Analysis Batch: 793058

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 792884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	47.22		ug/L		94	80 - 120
Arsenic	100	99.41		ug/L		99	80 - 120
Barium	100	99.97		ug/L		100	80 - 120
Beryllium	50.0	48.22		ug/L		96	80 - 120
Cadmium	50.0	47.72		ug/L		95	80 - 120
Chromium	100	105.7		ug/L		106	80 - 120
Cobalt	50.0	52.08		ug/L		104	80 - 120
Lead	500	493.8		ug/L		99	80 - 120
Thallium	50.0	47.88		ug/L		96	80 - 120

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-793322/1-A
Matrix: Water
Analysis Batch: 793541

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 793322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		08/14/23 11:38	08/15/23 11:58	1

Lab Sample ID: LCS 680-793322/2-A
Matrix: Water
Analysis Batch: 793541

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 793322

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.427		ug/L		97	80 - 120

Metals

Prep Batch: 792884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-1	AF71896	Total Recoverable	Water	3005A	
680-238944-2	AF71893	Total Recoverable	Water	3005A	
680-238944-3	AF71894	Total Recoverable	Water	3005A	
680-238944-4	AF71895	Total Recoverable	Water	3005A	
680-238944-5	AF71891	Total Recoverable	Water	3005A	
680-238944-6	AF71892	Total Recoverable	Water	3005A	
680-238944-7	AF71897	Total Recoverable	Water	3005A	
680-238944-8	AF71898	Total Recoverable	Water	3005A	
680-238944-9	AF71899	Total Recoverable	Water	3005A	
MB 680-792884/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-792884/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 792885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-1	AF71896	Total Recoverable	Water	3005A	
680-238944-2	AF71893	Total Recoverable	Water	3005A	
680-238944-3	AF71894	Total Recoverable	Water	3005A	
680-238944-4	AF71895	Total Recoverable	Water	3005A	
680-238944-5	AF71891	Total Recoverable	Water	3005A	
680-238944-6	AF71892	Total Recoverable	Water	3005A	
680-238944-7	AF71897	Total Recoverable	Water	3005A	
680-238944-8	AF71898	Total Recoverable	Water	3005A	
680-238944-9	AF71899	Total Recoverable	Water	3005A	
MB 680-792885/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-792885/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 793058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-1	AF71896	Total Recoverable	Water	6020B	792884
680-238944-2	AF71893	Total Recoverable	Water	6020B	792884
680-238944-3	AF71894	Total Recoverable	Water	6020B	792884
680-238944-4	AF71895	Total Recoverable	Water	6020B	792884
680-238944-5	AF71891	Total Recoverable	Water	6020B	792884
680-238944-6	AF71892	Total Recoverable	Water	6020B	792884
680-238944-7	AF71897	Total Recoverable	Water	6020B	792884
680-238944-8	AF71898	Total Recoverable	Water	6020B	792884
680-238944-9	AF71899	Total Recoverable	Water	6020B	792884
MB 680-792884/1-A	Method Blank	Total Recoverable	Water	6020B	792884
LCS 680-792884/2-A	Lab Control Sample	Total Recoverable	Water	6020B	792884

Analysis Batch: 793061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-1	AF71896	Total Recoverable	Water	6010D	792885
680-238944-2	AF71893	Total Recoverable	Water	6010D	792885
680-238944-3	AF71894	Total Recoverable	Water	6010D	792885
680-238944-4	AF71895	Total Recoverable	Water	6010D	792885
680-238944-5	AF71891	Total Recoverable	Water	6010D	792885
680-238944-7	AF71897	Total Recoverable	Water	6010D	792885
680-238944-8	AF71898	Total Recoverable	Water	6010D	792885
680-238944-9	AF71899	Total Recoverable	Water	6010D	792885
MB 680-792885/1-A	Method Blank	Total Recoverable	Water	6010D	792885

Metals (Continued)

Analysis Batch: 793061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-792885/2-A	Lab Control Sample	Total Recoverable	Water	6010D	792885

Prep Batch: 793322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-1	AF71896	Total/NA	Water	7470A	
680-238944-2	AF71893	Total/NA	Water	7470A	
680-238944-3	AF71894	Total/NA	Water	7470A	
680-238944-4	AF71895	Total/NA	Water	7470A	
680-238944-5	AF71891	Total/NA	Water	7470A	
680-238944-6	AF71892	Total/NA	Water	7470A	
680-238944-7	AF71897	Total/NA	Water	7470A	
680-238944-8	AF71898	Total/NA	Water	7470A	
680-238944-9	AF71899	Total/NA	Water	7470A	
MB 680-793322/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-793322/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 793541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-1	AF71896	Total/NA	Water	7470A	793322
680-238944-2	AF71893	Total/NA	Water	7470A	793322
680-238944-3	AF71894	Total/NA	Water	7470A	793322
680-238944-4	AF71895	Total/NA	Water	7470A	793322
680-238944-5	AF71891	Total/NA	Water	7470A	793322
680-238944-6	AF71892	Total/NA	Water	7470A	793322
680-238944-7	AF71897	Total/NA	Water	7470A	793322
680-238944-8	AF71898	Total/NA	Water	7470A	793322
680-238944-9	AF71899	Total/NA	Water	7470A	793322
MB 680-793322/1-A	Method Blank	Total/NA	Water	7470A	793322
LCS 680-793322/2-A	Lab Control Sample	Total/NA	Water	7470A	793322

Analysis Batch: 793702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-238944-6	AF71892	Total Recoverable	Water	6010D	792885

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

Client Sample ID: AF71896

Lab Sample ID: 680-238944-1

Date Collected: 08/01/23 09:53
Date Received: 08/10/23 10:25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 13:45
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:21
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:01

Client Sample ID: AF71893

Lab Sample ID: 680-238944-2

Date Collected: 08/01/23 10:45
Date Received: 08/10/23 10:25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 13:47
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:25
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:02

Client Sample ID: AF71894

Lab Sample ID: 680-238944-3

Date Collected: 08/01/23 11:52
Date Received: 08/10/23 10:25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 13:49
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:29
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:04

Client Sample ID: AF71895

Lab Sample ID: 680-238944-4

Date Collected: 08/01/23 13:17
Date Received: 08/10/23 10:25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 13:51
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:33
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:05

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71891
Lab Sample ID: 680-238944-5

Date Collected: 08/02/23 09:03
Matrix: Water
Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 13:53
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:37
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:07

Client Sample ID: AF71892
Lab Sample ID: 680-238944-6

Date Collected: 08/02/23 09:08
Matrix: Water
Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793702	BJB	EET SAV	08/16/23 10:57
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:49
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:08

Client Sample ID: AF71897
Lab Sample ID: 680-238944-7

Date Collected: 08/02/23 10:00
Matrix: Water
Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 14:02
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:53
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:10

Client Sample ID: AF71898
Lab Sample ID: 680-238944-8

Date Collected: 08/02/23 10:05
Matrix: Water
Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 14:04
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 13:57
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:11

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF71899
Lab Sample ID: 680-238944-9
Date Collected: 08/02/23 11:37
Matrix: Water
Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			792885	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6010D		1	793061	BJB	EET SAV	08/11/23 14:06
Total Recoverable	Prep	3005A			792884	RR	EET SAV	08/11/23 05:22
Total Recoverable	Analysis	6020B		1	793058	BWR	EET SAV	08/11/23 14:01
Total/NA	Prep	7470A			793322	DW	EET SAV	08/14/23 11:38
Total/NA	Analysis	7470A		1	793541	BJB	EET SAV	08/15/23 12:16

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info: TA Contract Lab Due Date (Lab Only): 8 / 18 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

8/16/2023

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LINDA.WILLIAMS@santeecooper.com	/ /	125915 / JM02.09.G01.1 / 36500	(Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	TOTAL METALS -SEE BELOW			
AF71896	CCMGP-5	8/1/23	0953	WJK BB	1	P	G	GW	2	Hg-7470 ALL OTHERS 6020	X			
AF71893	CCMGP-2		1045							-SEE SHEET FOR RLS.				
AF71894	CCMGP-3		1152											
AF71895	CCMGP-4		1317											
AF71891	CCMGP-1	8/2/23	0903											
AF71892	CCMGP-1 DUP		0908											
AF71897	CGYP-7		1000											
AF71898	CGYP-7 DUP		1005											
AF71899	POZ-3		1137											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	8/9/23	1300			8-10-23	1025
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 26.2/26.3 Initial:
Correct pH: Yes No
Preservative Lot#:

680-238944 Chain of Custody

☐ METALS (all)		
☐ Ag	☐ Cu	☒ Sb
☐ Al	☐ Fe	☒ Se
☒ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☒ Ba	☐ Mg	☐ Ti
☒ Be	☐ Mn	☒ Tl
☒ Ca	☐ Mo	☐ V
☒ Cd	☐ Na	☐ Zn
☒ Co	☐ Ni	☒ Hg
☒ Cr	☒ Pb	☐ CrVI

Nutrients
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
Gypsum (see below)
☐ AIM
☐ TOC
■ Total metals
☐ Soluble Metals
■ Purity (CaSO4)
■ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

☐ Ulti
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

☐ OI
☐ % Carbon
■ Mineral Analysis
■ Sieve
☐ % Moisture

NPDES
■ Oil &
☐ As
☐ TSS

☐ Color
☐ Acidity
☐ Dielectric
☐ IFT
☐ Dissolved Gases
Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Page 26 of 29

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Table of Reporting Limits for Groundwater Samples-- Metals Only

Analyte	Unit	GWPS/ MCL/ RSL	Reporting Limits best case
Aluminum	mg/L	0.05 to 0.2	---
Antimony	ug/L	6	5
Arsenic	ug/L	10	5
Arsenic Dissolved	ug/L	---	---
Barium	ug/L	2000	5
Beryllium	ug/L	4	0.5
Boron	ug/L	---	10 to 15
Cadmium	ug/L	5	0.5
Calcium	ug/L	---	0.1
Chromium	ug/L	100	5
Cobalt	ug/L	6	0.5
Copper	mg/L	1	---
Iron	ug/L	300	---
Lead	ug/L	15	1
Lithium	ug/L	40	5
Magnesium	ug/L	---	---
Mercury	ug/L	2	0.2
Molybdenum	ug/L	100	5
Nickel	ug/L	---	---
Potassium	mg/L	---	---
Selenium	ug/L	50	5
Sodium	mg/L	---	---
Thallium	ug/L	2	1
Zinc	ug/L	5000	---

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-238944-1

Login Number: 238944

List Source: Eurofins Savannah

List Number: 1

Creator: Sims, Robert D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-238944-1
Project/Site: 125915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

GEL Laboratories LLC
a member of The GEL Group INC

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

October 23, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 641317

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 13, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 641317 GEL Work Order: 641317

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

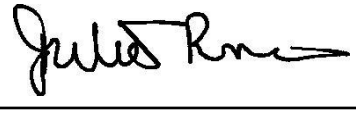
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: October 23, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80265	Project:	SOOP00119
Sample ID:	641317001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:23		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		1.70	0.0330	0.100	mg/L		1	HXC1	10/17/23	2249	2509975	1
Chloride		575	6.70	20.0	mg/L		100	HXC1	10/19/23	0731	2509975	2
Sulfate		789	13.3	40.0	mg/L		100					

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: October 23, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80266	Project:	SOOP00119
Sample ID:	641317002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:28		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		1.67	0.0330	0.100	mg/L		1	HXC1	10/18/23	0022	2509975	1
Chloride		579	6.70	20.0	mg/L		100	HXC1	10/19/23	0903	2509975	2
Sulfate		773	13.3	40.0	mg/L		100					

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: October 23, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80267	Project:	SOOP00119
Sample ID:	641317003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 10:15		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		0.207	0.0330	0.100	mg/L		1	HXC1	10/18/23	0052	2509975	1
Chloride		11.2	0.670	2.00	mg/L		10	HXC1	10/19/23	1107	2509975	2
Sulfate		80.0	1.33	4.00	mg/L		10					

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

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

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

QC Summary

Report Date: October 23, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **641317**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 2509975										
QC1205549254 641317001 DUP										
Chloride		575		575	mg/L	0.0331		(0%-20%)	HXC1	10/19/23 08:02
Fluoride		1.70		1.69	mg/L	1.01		(0%-20%)		10/17/23 23:20
Sulfate		789		791	mg/L	0.268		(0%-20%)		10/19/23 08:02
QC1205549252 LCS										
Chloride	5.00			4.66	mg/L		93.3	(90%-110%)		10/17/23 20:45
Fluoride	2.50			2.40	mg/L		95.9	(90%-110%)		
Sulfate	10.0			9.55	mg/L		95.5	(90%-110%)		
QC1205549251 MB										
Chloride			U	ND	mg/L					10/17/23 20:15
Fluoride			U	ND	mg/L					
Sulfate			U	ND	mg/L					
QC1205549257 641317001 PS										
Chloride	5.00	5.75		11.3	mg/L		112 *	(90%-110%)		10/19/23 08:33
Fluoride	2.50	1.70		3.98	mg/L		90.9	(90%-110%)		10/17/23 23:51
Sulfate	10.0	7.89		17.9	mg/L		99.6	(90%-110%)		10/19/23 08:33

Notes:

QC Summary

Workorder: **641317**

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

The Qualifiers in this report are defined as follows:

U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
J	Value is estimated
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
B	The target analyte was detected in the associated blank.
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
J	See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 641317

Product: **Ion Chromatography**
Analytical Method: EPA 300.0
Analytical Procedure: GL-GC-E-086 REV# 33
Analytical Batch: 2509975

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

GEL Sample ID#	Client Sample Identification
641317001	AF80265
641317002	AF80266
641317003	AF80267
1205549251	Method Blank (MB)
1205549252	Laboratory Control Sample (LCS)
1205549254	641317001(AF80265) Sample Duplicate (DUP)
1205549257	641317001(AF80265) 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	1205549257 (AF80265PS)	112* (90%-110%)

Technical Information

Sample Dilutions
The following samples 1205549254 (AF80265DUP), 1205549257 (AF80265PS), 641317001 (AF80265), 641317002 (AF80266) and 641317003 (AF80267) 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	641317		
	001	002	003
Chloride	100X	100X	10X

Sulfate	100X	100X	10X

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.

11/13/23 – RAD

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 11 / 20 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

641316 & 641317

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.GØ1.1 / 36500

Rerun request for any flagged QC: (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	F, Cl, SO4	
AF80265	CGYP-7	10/10/23	1123	ZM BB	3	P	G	GW	2/1		2	x	1	
AF80266	CGYP-7 DUP	"	1128	"	"	"	"	"	"		"	"	"	
AF80267	POZ-3	"	1015	"	"	"	"	"	"		"	"	"	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	36857	10/13/23	0944	[signature]	GEL	10/13/23	0944
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	GEL	10/13/23	1610	[signature]	GEL	10/13/23	1610
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, G-Gypsum, Gyps-Gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCCP	SDG/AR/COC/Work Order: 641316/641317 SR
Received By: QG	Date Received: 10/13/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry Ice None Other: *all temperatures are recorded in Celsius TEMP: 3°c
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ____ Date 10/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 23 October 2023

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-04
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2022-160
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122022-37
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
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

July 21, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 627344

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 23, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 627344 GEL Work Order: 627344

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

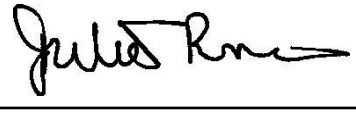
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66446	Project:	SOOP00119
Sample ID:	627344001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	22-JUN-23 09:46		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.71	+/-1.23	1.70	3.00	pCi/L			JE1	07/15/23	1514	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.01	+/-1.27			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.301	+/-0.311	0.481	1.00	pCi/L			LXP1	07/20/23	1003	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66424	Project:	SOOP00119
Sample ID:	627344002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	22-JUN-23 10:58		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.87	+/-1.56	2.35	3.00	pCi/L			JE1	07/15/23	1514	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.32	+/-1.60			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.451	+/-0.350	0.504	1.00	pCi/L			LXP1	07/20/23	1040	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			66.7	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66416	Project:	SOOP00119
Sample ID:	627344003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	22-JUN-23 12:55		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.80	+/-1.37	1.99	3.00	pCi/L			JE1	07/15/23	1514	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.38	+/-1.41			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.579	+/-0.324	0.317	1.00	pCi/L			LXP1	07/20/23	1040	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			71.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66408	Project:	SOOP00119
Sample ID:	627344004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	22-JUN-23 13:51		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.63	+/-1.27	1.77	3.00	pCi/L			JE1	07/15/23	1514	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.93	+/-1.31			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.309	+/-0.319	0.493	1.00	pCi/L			LXP1	07/20/23	1040	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			66.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: July 21, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **627344**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2451868										
QC1205446624 627278001 DUP										
Radium-228	U	2.18	U	-2.11	pCi/L	N/A		N/A	JE1	07/15/23 15:12
	Uncertainty	+/-1.50		+/-1.21						
QC1205446625 LCS										
Radium-228	79.2			88.5	pCi/L		112	(75%-125%)		07/15/23 15:13
	Uncertainty			+/-5.00						
QC1205446626 LCSD										
Radium-228	79.2			67.0	pCi/L	27.5*	84.6	(0%-20%)		07/15/23 15:13
	Uncertainty			+/-4.41						
QC1205446623 MB										
Radium-228				2.55	pCi/L					07/15/23 15:12
	Uncertainty			+/-1.41						
Rad Ra-226										
Batch 2451862										
QC1205446613 627278001 DUP										
Radium-226	U	0.000		0.644	pCi/L	200*		(0% - 100%)	LXP1	07/20/23 11:19
	Uncertainty	+/-0.239		+/-0.445						
QC1205446615 LCS										
Radium-226	26.3			21.2	pCi/L		80.5	(75%-125%)		07/20/23 11:19
	Uncertainty			+/-1.83						
QC1205446616 LCSD										
Radium-226	26.3			23.7	pCi/L	11.2	90.1	(0%-20%)		07/20/23 11:19
	Uncertainty			+/-1.96						
QC1205446612 MB										
Radium-226			U	0.311	pCi/L					07/20/23 11:19
	Uncertainty			+/-0.338						
QC1205446614 627278001 MS										
Radium-226	131 U	0.000		139	pCi/L		106	(75%-125%)		07/20/23 11:19
	Uncertainty	+/-0.239		+/-10.7						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

QC Summary

Workorder: **627344**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 627344

Product: **Radium-226+Radium-228 Calculation**
Analytical Method: Calculation
Analytical Procedure: GL-RAD-D-003 REV# 45
Analytical Batch: 2451867

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

GEL Sample ID#	Client Sample Identification
627344001	AF66446
627344002	AF66424
627344003	AF66416
627344004	AF66408

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

Data Summary:

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

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2451868

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

GEL Sample ID#	Client Sample Identification
627344001	AF66446
627344002	AF66424
627344003	AF66416
627344004	AF66408
1205446623	Method Blank (MB)
1205446624	627278001(AF66414) Sample Duplicate (DUP)
1205446625	Laboratory Control Sample (LCS)
1205446626	Laboratory Control Sample Duplicate (LCSD)

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

Data Summary:

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

Quality Control (QC) Information

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

Sample	Analyte	Value
1205446623 (MB)	Radium-228	Result: 2.55 pCi/L > MDA: 2.12 pCi/L <= RDL: 3.00 pCi/L

Duplication Criteria between LCS and LCSD
The Laboratory Control Sample and Laboratory Control Sample Duplicate (See Below) do not meet the duplication requirement; however, they both meet the spiked recovery requirement.

Sample	Analyte	Value
1205446625 (LCS) and 1205446626 (LCSD)	Radium-228	RPD 27.5* (0%-20%)

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
1205446624 (AF66414DUP)	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: 2451862

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

GEL Sample ID#	Client Sample Identification
627344001	AF66446
627344002	AF66424
627344003	AF66416
627344004	AF66408
1205446612	Method Blank (MB)
1205446613	627278001(AF66414) Sample Duplicate (DUP)
1205446614	627278001(AF66414) Matrix Spike (MS)
1205446615	Laboratory Control Sample (LCS)
1205446616	Laboratory Control Sample Duplicate (LCSD)

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

Data Summary:

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

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample
The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1205446613 (AF66414DUP)	Radium-226	RPD 200* (0.0%-100.0%) RER 2.44 (0-3)

Certification Statement

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

627344

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 24 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LINDA. WILLIAMS @santeecooper.com	___/___/___	125915 / JM62.09.G01.1 / 36500	(Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC.	
AF66446	POZ-8	6/22/23	0946	WJK ML	2	P	G	GW	2		1	1	X	
AF66424	CCMLF-2		1058											
AF66416	CCMAP-8		1255											
AF66408	CCMAP-1		1351											
										SAMPLES SENT 6/23				
										CHAIN LEFT BEHIND				

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/26/23	0710		GEL	6/23/23	0917
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	6/23/23	1520		GEL	6/23/23	1520
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
						6/23/23	

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity ($CaSO_4$)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 627278 627344
Received By: Stacy Boone	Date Received: JUNE 23, 2023
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other 21c 6c 3c

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): ___ CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:___
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR-22 IR3-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC? SB	✓		✓	Circle Applicable: No container count on COC Other (describe) SEE BELOW
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓		✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

AF66408
66416
66424
66446
> NOT ON COC, 2EA

PM (or PMA) review: Initials RW Date 6/26/23 Page ___ of ___

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 21 July 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

December 01, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 644996

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on November 10, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Jordan Melton

Jordan Melton for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 644996 GEL Work Order: 644996

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a Tracer compound

** Analyte is a surrogate compound

B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL

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, Julie Robinson.

Reviewed by Jordan Melton

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

Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81444	Project:	SOOP00119
Sample ID:	644996001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 09:29		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0670	0.200	ug/L	1.00	1	JP2	11/30/23	1115	2532022	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	11/29/23	1215	2532021

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81445	Project:	SOOP00119
Sample ID:	644996002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 09:34		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0670	0.200	ug/L	1.00	1	JP2	11/30/23	1120	2532022	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	11/29/23	1215	2532021

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81446	Project:	SOOP00119
Sample ID:	644996003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 12:29		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury		0.470	0.0670	0.200	ug/L	1.00	1	JP2	11/30/23	1140	2532022	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	11/29/23	1215	2532021

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81447	Project:	SOOP00119
Sample ID:	644996004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 10:39		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0670	0.200	ug/L	1.00	1	JP2	11/30/23	1123	2532022	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	11/29/23	1215	2532021

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81448	Project:	SOOP00119
Sample ID:	644996005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 11:35		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0670	0.200	ug/L	1.00	1	JP2	11/30/23	1125	2532022	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	11/29/23	1215	2532021

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81449	Project:	SOOP00119
Sample ID:	644996006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-NOV-23 14:06		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA												
7470 Cold Vapor Mercury, Liquid "As Received"												
Mercury	U	ND	0.0670	0.200	ug/L	1.00	1	JP2	11/30/23	1126	2532022	1

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	11/29/23	1215	2532021

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	

Notes:

Column headers are defined as follows:

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

QC Summary

Report Date: December 1, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **644996**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis-Mercury											
Batch 2532022											
QC1205586588 644624008 DUP											
Mercury	U	ND	U	ND	ug/L	N/A			JP2	11/30/23	10:27
QC1205586587 LCS											
Mercury	2.00			1.99	ug/L		99.6	(80%-120%)		11/30/23	10:23
QC1205586586 MB											
Mercury			U	ND	ug/L					11/30/23	10:21
QC1205586589 644624008 MS											
Mercury	2.00 U	ND		1.98	ug/L		98.9	(75%-125%)		11/30/23	10:29
QC1205586590 644624008 SDILT											
Mercury	U	ND	U	ND	ug/L	N/A		(0%-10%)		11/30/23	10:31

Notes:

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- N Metals--The Matrix spike sample recovery is not within specified control limits
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria

QC Summary

Workorder: **644996**

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

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

Q One or more quality control criteria have not been met. Refer to the applicable narrative or DER.

FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies

N1 See case narrative

Y Other specific qualifiers were required to properly define the results. Consult case narrative.

J See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81444	Project:	SOOP00119
Sample ID:	644996001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 09:29		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.29	+/-1.33	2.22	3.00	pCi/L			JE1	11/20/23	0951	2524656	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.15	+/-1.40			pCi/L			NXL1	12/01/23	1403	2533033	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.865	+/-0.414	0.289	1.00	pCi/L			LXP1	11/28/23	0915	2526236	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			93.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81445	Project:	SOOP00119
Sample ID:	644996002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 09:34		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.612	+/-0.744	1.59	3.00	pCi/L			JE1	11/20/23	0951	2524656	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.10	+/-0.894			pCi/L			NXL1	12/01/23	1403	2533033	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.10	+/-0.496	0.329	1.00	pCi/L			LXP1	11/28/23	0915	2526236	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			93.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81446	Project:	SOOP00119
Sample ID:	644996003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 12:29		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.52	+/-1.05	1.62	3.00	pCi/L			JE1	11/20/23	0951	2524656	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.14	+/-1.11			pCi/L			NXL1	12/01/23	1403	2533033	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.623	+/-0.341	0.270	1.00	pCi/L			LXP1	11/28/23	0915	2526236	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81447	Project:	SOOP00119
Sample ID:	644996004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 10:39		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.39	+/-1.08	1.73	3.00	pCi/L			JE1	11/20/23	0951	2524656	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.33	+/-1.17			pCi/L			NXL1	12/01/23	1403	2533033	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.935	+/-0.447	0.313	1.00	pCi/L			LXP1	11/28/23	0954	2526236	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81448	Project:	SOOP00119
Sample ID:	644996005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-NOV-23 11:35		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.80	+/-1.03	1.52	3.00	pCi/L			JE1	11/20/23	0952	2524656	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.40	+/-1.22			pCi/L			NXL1	12/01/23	1403	2533033	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.60	+/-0.651	0.591	1.00	pCi/L			LXP1	11/28/23	0954	2526236	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			95.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: December 1, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF81449	Project:	SOOP00119
Sample ID:	644996006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-NOV-23 14:06		
Receive Date:	10-NOV-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.349	+/-0.604	1.32	3.00	pCi/L			JE1	11/20/23	0952	2524656	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.20	+/-0.825			pCi/L			NXL1	12/01/23	1403	2533033	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.20	+/-0.562	0.488	1.00	pCi/L			LXP1	11/28/23	0954	2526236	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			91.9	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: December 1, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **644996**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2524656										
QC1205573617 644996001 DUP										
Radium-228	U	1.29	U	0.0814	pCi/L	N/A		N/A	JE1	11/20/23 09:51
	Uncertainty	+/-1.33		+/-1.34						
QC1205573618 LCS										
Radium-228	75.5			69.2	pCi/L		91.7	(75%-125%)		11/20/23 09:50
	Uncertainty			+/-3.98						
QC1205573616 MB										
Radium-228				1.92	pCi/L					11/20/23 09:50
	Uncertainty			+/-1.08						
Rad Ra-226										
Batch 2526236										
QC1205576422 644996001 DUP										
Radium-226		0.865		0.975	pCi/L	12		(0% - 100%)	LXP1	11/28/23 09:54
	Uncertainty	+/-0.414		+/-0.469						
QC1205576424 LCS										
Radium-226	53.7			60.6	pCi/L		113	(75%-125%)		11/28/23 09:54
	Uncertainty			+/-3.76						
QC1205576421 MB										
Radium-226			U	0.0617	pCi/L					11/28/23 09:54
	Uncertainty			+/-0.320						
QC1205576423 644996001 MS										
Radium-226	135	0.865		156	pCi/L		115	(75%-125%)		11/28/23 09:54
	Uncertainty	+/-0.414		+/-12.9						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **644996**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Technical Case Narrative
Santee Cooper
SDG #: 644996

Metals

Product: **Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer**
Analytical Method: SW846 7470A
Analytical Procedure: GL-MA-E-010 REV# 40
Analytical Batch: 2532022

Preparation Method: SW846 7470A Prep
Preparation Procedure: GL-MA-E-010 REV# 40
Preparation Batch: 2532021

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

GEL Sample ID#	Client Sample Identification
644996001	AF81444
644996002	AF81445
644996003	AF81446
644996004	AF81447
644996005	AF81448
644996006	AF81449
1205586586	Method Blank (MB)**CVAA**
1205586587	Laboratory Control Sample (LCS)
1205586590	644624008(NonSDGL) Serial Dilution (SD)
1205586588	644624008(NonSDGD) Sample Duplicate (DUP)
1205586589	644624008(NonSDGS) Matrix Spike (MS)

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

Data Summary:

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

Quality Control (QC) Information

Method Blank (MB) Statement
The method blanks (MB) analyzed with this SDG met the acceptance criteria. However, where there were negative values in the method blank, the results were evaluated and appropriately flagged on the data.

Sample	Analyte	Value
1205586586 (MB)	Mercury	See applicable report

Radiochemistry

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2524656

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

GEL Sample ID#	Client Sample Identification
644996001	AF81444
644996002	AF81445
644996003	AF81446
644996004	AF81447
644996005	AF81448
644996006	AF81449
1205573616	Method Blank (MB)
1205573617	644996001(AF81444) Sample Duplicate (DUP)
1205573618	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
1205573616 (MB)	Radium-228	Result: 1.92 pCi/L > MDA: 1.60 pCi/L <= RDL: 3.00 pCi/L

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2526236

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

GEL Sample ID#	Client Sample Identification
644996001	AF81444
644996002	AF81445
644996003	AF81446

644996004	AF81447
644996005	AF81448
644996006	AF81449
1205576421	Method Blank (MB)
1205576422	644996001(AF81444) Sample Duplicate (DUP)
1205576423	644996001(AF81444) Matrix Spike (MS)
1205576424	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
The matrix spike, 1205576423 (AF81444MS), 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.

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 11, 27, 23 644996

Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
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Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: lcwillia @santeecooper.com

Date Results Needed by: 11, 27, 23

Project/Task/Unit #: 125915/JM02.09.G01.1/~~35600~~ 36500 LW

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Rad 226/228 Total	HG		
AF81444	CCMGP-1	11/8/23	929	2M/ML	3	P	G	GW	1/2	Rad 226/228 + Total Calc	1	1		
AF81445	CCMGP-1dup		934							7470 RL 0.2 ug/L				
AF81446	CCMGP-2		1229											
AF81447	CCMGP-3		1039											
AF81448	CCMGP-4		1135											
AF81449	CCMGP-5	11/7/23	1406	2M ML										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	35466	11/10/23	0847		GEL	11-10-23	0847
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	11/10/23	1510		GEL	11/10/23	1510
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
- ☐ TOC
- ☐ DOC
- ☐ TP/TPO4
- ☐ NH3-N
- ☐ F
- ☐ Cl
- ☐ NO2
- ☐ Br
- ☐ NO3
- ☐ SO4

MISC.
- ☐ BTEX
- ☐ Napthalene
- ☐ THM/HAA
- ☐ VOC
- ☐ Oil & Grease
- ☐ E. Coli
- ☐ Total Coliform
- ☐ pH
- ☐ Dissolved As
- ☐ Dissolved Fe
- ☐ Rad 226
- ☐ Rad 228
- ☐ PCB

Gypsum
- ☐ Wallboard Gypsum(*all below*)
  - ☐ AIM
  - ☐ TOC
  - ☐ Total metals
  - ☐ Soluble Metals
  - ☐ Purity (CaSO4)
  - ☐ % Moisture
  - ☐ Sulfites
  - ☐ pH
  - ☐ Chlorides
  - ☐ Particle Size
- ☐ Sulfur

Coal
- ☐ Ultimate
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN

Other Tests:
- ☐ XRF Scan
- ☐ HGI
- ☐ Fineness
- ☐ Particulate Matter

Flyash
- ☐ Ammonia
- ☐ LOI
- ☐ % Carbon
- ☐ Mineral Analysis
- ☐ Sieve
- ☐ % Moisture

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

Oil
Trans. Oil Qual.
- ☐ %Moisture
- ☐ Color
- ☐ Acidity
- ☐ Dielectric Strength
- ☐ IFT
- ☐ Dissolved Gases

Used Oil
- ☐ Flashpoint
- ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
- ☐ TX

GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCOP	SDG/AR/COC/Work Order: 644996
Received By: Me'Shalia Mckelvey	Date Received: 11/10/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other 10 190

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: SEE CAVEAT
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR6-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	✓			If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JLW Date 11/11/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 01 December 2023

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

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

November 03, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 641316

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 13, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Jordan Melton

Jordan Melton for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 641316 GEL Work Order: 641316

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, Julie Robinson.

Reviewed by Jordan Melton

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80265	Project:	SOOP00119
Sample ID:	641316001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:23		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.93	+/-1.10	1.39	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.58	+/-1.16			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.655	+/-0.389	0.448	1.00	pCi/L			LXP1	11/02/23	0756	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80266	Project:	SOOP00119
Sample ID:	641316002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 11:28		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.98	+/-1.26	1.56	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.05	+/-1.27			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.0767	+/-0.184	0.368	1.00	pCi/L			LXP1	11/02/23	0756	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: November 3, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF80267	Project:	SOOP00119
Sample ID:	641316003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	10-OCT-23 10:15		
Receive Date:	13-OCT-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-1.54	+/-1.06	2.22	3.00	pCi/L			JE1	10/24/23	0847	2509217	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.205	+/-1.13			pCi/L			NXL1	11/03/23	1610	2515880	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.205	+/-0.403	0.739	1.00	pCi/L			LXP1	11/02/23	0831	2509249	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: November 3, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **641316**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2509217										
QC1205547740 641316001 DUP										
Radium-228		2.93		3.95	pCi/L	29.7		(0% - 100%)	JE1	10/24/23 08:47
	Uncertainty	+/-1.10		+/-1.15						
QC1205547741 LCS										
Radium-228	78.3			71.6	pCi/L		91.4	(75%-125%)		10/24/23 08:48
	Uncertainty			+/-3.85						
QC1205547739 MB										
Radium-228			U	0.166	pCi/L					10/24/23 08:47
	Uncertainty			+/-0.981						
Rad Ra-226										
Batch 2509249										
QC1205547810 641316001 DUP										
Radium-226		0.655		1.02	pCi/L	43.9		(0% - 100%)	LXP1	11/02/23 08:31
	Uncertainty	+/-0.389		+/-0.511						
QC1205547812 LCS										
Radium-226	26.9			23.3	pCi/L		86.5	(75%-125%)		11/02/23 08:31
	Uncertainty			+/-2.01						
QC1205547809 MB										
Radium-226			U	0.176	pCi/L					11/02/23 08:31
	Uncertainty			+/-0.345						
QC1205547811 641316001 MS										
Radium-226	134	0.655		106	pCi/L		78.5	(75%-125%)		11/02/23 08:31
	Uncertainty	+/-0.389		+/-10.4						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **641316**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 641316

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2509217

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

GEL Sample ID#	Client Sample Identification
641316001	AF80265
641316002	AF80266
641316003	AF80267
1205547739	Method Blank (MB)
1205547740	641316001(AF80265) Sample Duplicate (DUP)
1205547741	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: 2509249

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

GEL Sample ID#	Client Sample Identification
641316001	AF80265
641316002	AF80266
641316003	AF80267
1205547809	Method Blank (MB)
1205547810	641316001(AF80265) Sample Duplicate (DUP)
1205547811	641316001(AF80265) Matrix Spike (MS)
1205547812	Laboratory Control Sample (LCS)

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

Data Summary:

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

applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
The matrix spike, 1205547811 (AF80265MS), 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.

11/13/23 — RAD

Contract Lab Info: GEL   Contract Lab Due Date (Lab Only): 11 / 20 / 23   Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

641316 & 641317

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	F, Cl, SO4	
AF 80265	CGYP-7	10/10/23	1123	ZM BB	3	P	G	GW	2/1		2	x	1	
AF 80266	CGYP-7 DUP	|	1128	|	|	|	|	|	|		|	|	|	
AF 80267	POZ-3	|	1615	|	|	|	|	|	|		|	|	|	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	36857	10/13/23	0944	[signature]	GEL	10/13/23	0944
[signature]	GEL	10/13/23	1610	[signature]	GEL	10/13/23	1610

Sample Receiving (Internal Use Only)
TEMP (°C): ________ **Initial:** ________
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCCP	SDG/AR/COC/Work Order: 641316 / 641317
Received By: QG	Date Received: 10/13/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
	n/a

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓		✓	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 3°c
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ____ Date 10/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 03 November 2023

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-04
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

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

January 11, 2024

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 649122

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 15, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 649122 GEL Work Order: 649122

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

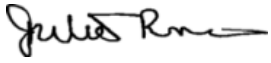
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85222	Project:	SOOP00119
Sample ID:	649122001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 13:19		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.18	+/-0.837	1.29	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.83	+/-0.888			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.646	+/-0.296	0.311	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85223	Project:	SOOP00119
Sample ID:	649122002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 10:24		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.944	+/-1.02	1.71	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.52	+/-1.17			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.58	+/-0.567	0.297	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85224	Project:	SOOP00119
Sample ID:	649122003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 10:29		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.39	+/-0.763	1.07	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.18	+/-0.935			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.79	+/-0.539	0.495	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.4	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: January 11, 2024

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF85225	Project:	SOOP00119
Sample ID:	649122004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	11-DEC-23 11:50		
Receive Date:	15-DEC-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.328	+/-0.652	1.17	3.00	pCi/L			JE1	12/29/23	1355	2542833	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.72	+/-0.827			pCi/L			NXL1	01/11/24	0958	2551440	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.39	+/-0.509	0.561	1.00	pCi/L			LXP1	01/10/24	0839	2541882	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

QC Summary

Report Date: January 11, 2024

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **649122**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2542833										
QC1205605880 648208001 DUP										
Radium-228		4.72		2.46	pCi/L	63		(0% - 100%)	JE1	12/29/23 13:55
	Uncertainty	+/-1.37		+/-1.03						
QC1205605881 LCS										
Radium-228	74.3			71.5	pCi/L		96.1	(75%-125%)		12/29/23 13:55
	Uncertainty			+/-4.39						
QC1205605879 MB										
Radium-228			U	0.437	pCi/L					12/29/23 13:55
	Uncertainty			+/-0.605						
Rad Ra-226										
Batch 2541882										
QC1205603843 649122001 DUP										
Radium-226		0.646		0.568	pCi/L	12.8		(0% - 100%)	LXP1	01/10/24 09:11
	Uncertainty	+/-0.296		+/-0.341						
QC1205603846 LCS										
Radium-226	17.0			13.0	pCi/L		76.2	(75%-125%)		01/10/24 09:11
	Uncertainty			+/-1.02						
QC1205603841 MB										
Radium-226			U	0.177	pCi/L					01/10/24 09:11
	Uncertainty			+/-0.203						
QC1205603845 649122001 MS										
Radium-226	113	0.646		93.8	pCi/L		82.2	(75%-125%)		01/10/24 09:11
	Uncertainty	+/-0.296		+/-6.51						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **649122**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 649122

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2542833

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

GEL Sample ID#	Client Sample Identification
649122001	AF85222
649122002	AF85223
649122003	AF85224
649122004	AF85225
1205605879	Method Blank (MB)
1205605880	648208001(AF84383) Sample Duplicate (DUP)
1205605881	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: 2541882

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

GEL Sample ID#	Client Sample Identification
649122001	AF85222
649122002	AF85223
649122003	AF85224
649122004	AF85225
1205603841	Method Blank (MB)
1205603843	649122001(AF85222) Sample Duplicate (DUP)
1205603845	649122001(AF85222) Matrix Spike (MS)
1205603846	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments
Aliquots for the matrix spikes, 1205603845 (AF85222MS), were 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.

Contract Lab Info: TA - SAV Contract Lab Due Date (Lab Only): 1 / 18 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

649122

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JMC2.09.G21.1 / 36500

Rerun request for any flagged QC: (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC		
AF85222	WAP -27	12/11/23	1319	ZM ML	2	G	G	GW	2		X	X		
AF85223	WAP -28	"	1024	"	"	"	"	"	"		"	"		
AF85224	WAP -28 DUP	"	1029	"	"	"	"	"	"		"	"		
AF85225	WAP -29	"	1150	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	12/15/23	0923		GEL	12/15/23	0923
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
	GEL	12.15.23	1610		GEL	12/15/23	1610
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ **Initial:**_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
- ☐ TOC
- ☐ DOC
- ☐ TP/TPO4
- ☐ NH3-N
- ☐ F
- ☐ Cl
- ☐ NO2
- ☐ Br
- ☐ NO3
- ☐ SO4

MISC.
- ☐ BTEX
- ☐ Naphthalene
- ☐ THM/HAA
- ☐ VOC
- ☐ Oil & Grease
- ☐ E. Coli
- ☐ Total Coliform
- ☐ pH
- ☐ Dissolved As
- ☐ Dissolved Fe
- ☐ Rad 226
- ☐ Rad 228
- ☐ PCB

Gypsum
- ☐ **Wallboard Gypsum(*all below*)**
  - ☐ AIM
  - ☐ TOC
  - ☐ Total metals
  - ☐ Soluble Metals
  - ☐ Purity (CaSO4)
  - ☐ % Moisture
  - ☐ Sulfites
  - ☐ pH
  - ☐ Chlorides
  - ☐ Particle Size
- ☐ Sulfur

Coal
- ☐ **Ultimate**
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN
- **Other Tests:**
  - ☐ XRF Scan
  - ☐ HGI
  - ☐ Fineness
  - ☐ Particulate Matter

Flyash
- ☐ Ammonia
- ☐ LOI
- ☐ % Carbon
- ☐ Mineral Analysis
- ☐ Sieve
- ☐ % Moisture

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

Oil
- ☐ **Trans. Oil Qual.**
  - ☐ %Moisture
  - ☐ Color
  - ☐ Acidity
  - ☐ Dielectric Strength
  - ☐ IFT
  - ☐ Dissolved Gases
- ☐ **Used Oil**
  - ☐ Flashpoint
  - ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
  - ☐ TX
- ☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SDOP	SDG/AR/COC/Work Order: 649122
Received By: QG	Date Received: 12/15/23
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other N/A

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/ mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?		✓		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2°C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR1-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?		✓		If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?			✓	Circle Applicable: No container count on COC Other (describe) Only received 1 container for AF85752 *WO 649127
12	Are sample containers identifiable as GEL provided by use of GEL labels?				
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JW Date 12/16/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 11 January 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

July 21, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 627278

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 23, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 627278 GEL Work Order: 627278

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

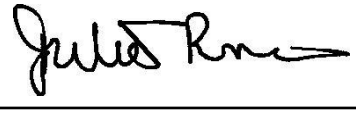
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66414	Project:	SOOP00119
Sample ID:	627278001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	21-JUN-23 11:59		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	2.18	+/-1.50	2.38	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.18	+/-1.52			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.000	+/-0.239	0.530	1.00	pCi/L			LXP1	07/20/23	0925	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			71.2	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66422	Project:	SOOP00119
Sample ID:	627278002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	21-JUN-23 13:27		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.50	+/-1.06	1.31	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.48	+/-1.17			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.983	+/-0.494	0.576	1.00	pCi/L			LXP1	07/20/23	0925	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66423	Project:	SOOP00119
Sample ID:	627278003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	21-JUN-23 14:38		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.19	+/-0.936	1.44	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.87	+/-1.05			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.680	+/-0.486	0.700	1.00	pCi/L			LXP1	07/20/23	0925	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			65.5	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66409	Project:	SOOP00119
Sample ID:	627278004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-JUN-23 09:11		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.43	+/-1.49	2.30	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.15	+/-1.56			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.721	+/-0.471	0.644	1.00	pCi/L			LXP1	07/20/23	1003	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.6	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66415	Project:	SOOP00119
Sample ID:	627278005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-JUN-23 10:17		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.42	+/-1.23	1.73	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.78	+/-1.27			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.360	+/-0.330	0.498	1.00	pCi/L			LXP1	07/20/23	1003	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			67.3	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66410	Project:	SOOP00119
Sample ID:	627278006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-JUN-23 11:20		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	2.62	+/-1.72	2.70	3.00	pCi/L			JE1	07/18/23	1357	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.27	+/-1.77			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.656	+/-0.431	0.558	1.00	pCi/L			LXP1	07/20/23	1003	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			64.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66411	Project:	SOOP00119
Sample ID:	627278007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-JUN-23 13:09		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.77	+/-1.26	1.93	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.94	+/-1.34			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.17	+/-0.449	0.416	1.00	pCi/L			LXP1	07/20/23	1003	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			64.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66412	Project:	SOOP00119
Sample ID:	627278008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-JUN-23 13:14		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.38	+/-1.19	1.64	3.00	pCi/L			JE1	07/15/23	1513	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.00	+/-1.24			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.619	+/-0.371	0.476	1.00	pCi/L			CRO	07/20/23	1640	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.1	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 21, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66413	Project:	SOOP00119
Sample ID:	627278009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-JUN-23 14:50		
Receive Date:	23-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	1.63	+/-1.22	1.91	3.00	pCi/L			JE1	07/15/23	1514	2451868	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.32	+/-1.27			pCi/L			NXL1	07/21/23	0828	2451867	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.695	+/-0.374	0.354	1.00	pCi/L			LXP1	07/20/23	1003	2451862	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	Calculation	
3	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			65.8	(15%-125%)

Notes:
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:

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

QC Summary

Report Date: July 21, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **627278**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2451868										
QC1205446624 627278001 DUP										
Radium-228	U	2.18	U	-2.11	pCi/L	N/A		N/A	JE1	07/15/23 15:12
	Uncertainty	+/-1.50		+/-1.21						
QC1205446625 LCS										
Radium-228	79.2			88.5	pCi/L		112	(75%-125%)		07/15/23 15:13
	Uncertainty			+/-5.00						
QC1205446626 LCSD										
Radium-228	79.2			67.0	pCi/L	27.5*	84.6	(0%-20%)		07/15/23 15:13
	Uncertainty			+/-4.41						
QC1205446623 MB										
Radium-228				2.55	pCi/L					07/15/23 15:12
	Uncertainty			+/-1.41						
Rad Ra-226										
Batch 2451862										
QC1205446613 627278001 DUP										
Radium-226	U	0.000		0.644	pCi/L	200*		(0% - 100%)	LXP1	07/20/23 11:19
	Uncertainty	+/-0.239		+/-0.445						
QC1205446615 LCS										
Radium-226	26.3			21.2	pCi/L		80.5	(75%-125%)		07/20/23 11:19
	Uncertainty			+/-1.83						
QC1205446616 LCSD										
Radium-226	26.3			23.7	pCi/L	11.2	90.1	(0%-20%)		07/20/23 11:19
	Uncertainty			+/-1.96						
QC1205446612 MB										
Radium-226			U	0.311	pCi/L					07/20/23 11:19
	Uncertainty			+/-0.338						
QC1205446614 627278001 MS										
Radium-226	131 U	0.000		139	pCi/L		106	(75%-125%)		07/20/23 11:19
	Uncertainty	+/-0.239		+/-10.7						

Notes:

Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).

The Qualifiers in this report are defined as follows:

QC Summary

Workorder: **627278**

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

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 627278

Product: **Radium-226+Radium-228 Calculation**
Analytical Method: Calculation
Analytical Procedure: GL-RAD-D-003 REV# 45
Analytical Batch: 2451867

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

GEL Sample ID#	Client Sample Identification
627278001	AF66414
627278002	AF66422
627278003	AF66423
627278004	AF66409
627278005	AF66415
627278006	AF66410
627278007	AF66411
627278008	AF66412
627278009	AF66413

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

Data Summary:

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

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2451868

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

GEL Sample ID#	Client Sample Identification
627278001	AF66414
627278002	AF66422
627278003	AF66423
627278004	AF66409
627278005	AF66415
627278006	AF66410
627278007	AF66411
627278008	AF66412
627278009	AF66413
1205446623	Method Blank (MB)

1205446624	627278001(AF66414) Sample Duplicate (DUP)
1205446625	Laboratory Control Sample (LCS)
1205446626	Laboratory Control Sample Duplicate (LCSD)

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

Data Summary:

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

Quality Control (QC) Information

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

Sample	Analyte	Value
1205446623 (MB)	Radium-228	Result: 2.55 pCi/L > MDA: 2.12 pCi/L <= RDL: 3.00 pCi/L

Duplication Criteria between LCS and LCSD
The Laboratory Control Sample and Laboratory Control Sample Duplicate (See Below) do not meet the duplication requirement; however, they both meet the spiked recovery requirement.

Sample	Analyte	Value
1205446625 (LCS) and 1205446626 (LCSD)	Radium-228	RPD 27.5* (0%-20%)

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
1205446624 (AF66414DUP)	Radium-228	Negative Result > 3 sigma value

Recounts
Sample 627278006 (AF66410) was re-eluted and recounted to verify sample result. The recount is reported.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2451862

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

GEL Sample ID#	Client Sample Identification
627278001	AF66414
627278002	AF66422
627278003	AF66423
627278004	AF66409
627278005	AF66415
627278006	AF66410
627278007	AF66411
627278008	AF66412
627278009	AF66413
1205446612	Method Blank (MB)
1205446613	627278001(AF66414) Sample Duplicate (DUP)
1205446614	627278001(AF66414) Matrix Spike (MS)
1205446615	Laboratory Control Sample (LCS)
1205446616	Laboratory Control Sample Duplicate (LCSD)

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

Data Summary:

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

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample
The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1205446613 (AF66414DUP)	Radium-226	RPD 200* (0.0%-100.0%) RER 2.44 (0-3)

Certification Statement

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

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 24 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

627278

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC	
AF66414	CCMAP-6	6/21/23	1159	WJK ML	2	P	G	GW	2		1	1	X	
AF66422	CCMLF-1	"	1327	"	"	"	"	"	"		"	"	"	
AF66423	CCMLF-1D	"	1438	"	"	"	"	"	"		"	"	"	
AF66409	CCMAP-2	6/20/23	0911	"	"	"	"	"	"		"	"	"	
AF66415	CCMAP-7	"	1017	"	"	"	"	"	"		"	"	"	
AF66410	CCMAP-3	"	1120	"	"	"	"	"	"		"	"	"	
AF66411	CCMAP-4	6/19/23	1309	"	"	"	"	"	"		"	"	"	
AF66412	CCMAP-4 DUP	"	1314	"	"	"	"	"	"		"	"	"	
AF66413	CCMAP-5	"	1450	"	"	"	"	"	"		"	"	"	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
JBrown	35594	6/23/23	0917		GEL	6/23/23	0917
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
	GEL	6-23-23	1520			6/23/23	15:20
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 627278
Received By: Stacy Boone	Date Received: JUNE 23, 2023
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other 21c 6c 3c

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): ___ CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP:___
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR-22 IR3-25 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC? SB	X		✓	Circle Applicable: No container count on COC Other (describe) SEE BELOW
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?			✓	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

AF66408
66416
66424
66446

NOT ON COC, 2EA

PM (or PMA) review: Initials KW Date 6/26/23 Page ___ of ___

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 21 July 2023

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

GEL Laboratories LLC
a member of The GEL Group INC

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

gel.com

June 19, 2023

Ms. Jeanette Gilmetti
Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina 29461

Re: ABS Lab Analytical
Work Order: 625517

Dear Ms. Gilmetti:

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

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

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. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 625517 GEL Work Order: 625517

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

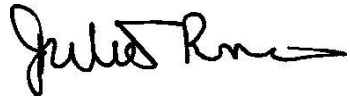
** Analyte is a surrogate compound

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, Julie Robinson.

Reviewed by 

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

Certificate of Analysis

Report Date: June 19, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66407	Project:	SOOP00119
Sample ID:	625517001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-JUN-23 08:59		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.17	0.330	1.00	mg/L		1	TSM	06/14/23	1650	2443166	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: June 19, 2023

Company :	Santee Cooper
Address :	P.O. Box 2946101 OCO3 Moncks Corner, South Carolina 29461
Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

Client Sample ID:	AF66439	Project:	SOOP00119
Sample ID:	625517002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-JUN-23 14:55		
Receive Date:	09-JUN-23		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		5.69	0.330	1.00	mg/L		1	TSM	06/14/23	1711	2443166	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	

Notes:

Column headers are defined as follows:

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

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

QC Summary

Report Date: June 19, 2023

Santee Cooper
P.O. Box 2946101
OCO3
Moncks Corner, South Carolina

Contact: **Ms. Jeanette Gilmetti**

Workorder: **625517**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Carbon Analysis										
Batch 2443166										
QC1205432039 625517002 DUP										
Total Organic Carbon Average		5.69		5.58	mg/L	1.92		(0%-20%)	TSM	06/14/23 17:31
QC1205432038 LCS										
Total Organic Carbon Average	10.0			9.79	mg/L		97.9	(80%-120%)		06/14/23 15:35
QC1205432037 MB										
Total Organic Carbon Average			U	ND	mg/L					06/14/23 15:25
QC1205432040 625517002 PS										
Total Organic Carbon Average	10.0	5.69		14.8	mg/L		91.5	(65%-120%)		06/14/23 17:51

Notes:

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **625517**

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

N1 See case narrative

R Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.

B The target analyte was detected in the associated blank.

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

J See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

Technical Case Narrative
Santee Cooper
SDG #: 625517

General Chemistry

Product: **Carbon, Total Organic**
Analytical Method: SM 5310 B
Analytical Procedure: GL-GC-E-093 REV# 21
Analytical Batch: 2443166

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

GEL Sample ID#	Client Sample Identification
625517001	AF66407
625517002	AF66439
1205432037	Method Blank (MB)
1205432038	Laboratory Control Sample (LCS)
1205432039	625517002(AF66439) Sample Duplicate (DUP)
1205432040	625517002(AF66439) Post Spike (PS)

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.

6/19/23 - TOC

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 10 / 23 - RAD Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

625517

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone: (843)761-8000 Ext. 5148
Fax: (843)761-4175

Customer Email/Report Recipient: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915/ JM02.09-G01.1/ 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOTAL RAD CALC	TOC	
AF66431	CGYP-7	6/7/23	0904	WJK ML	2	P	G	GW	2		1	1		
26	CGYP-2	"	1004	"	"	"	"	"	"		"	"		
27	CGYP-2 DUP	"	1009	"	"	"	"	"	"		"	"		
28	CGYP-3	"	1135	"	"	"	"	"	"		"	"		
29	CGYP-4	"	1227	"	"	"	"	"	"		"	"		
30	CGYP-6	"	1337	"	"	"	"	"	"		"	"		
AF66407	CBW-1	6/6/23	0859	"	3	"	"	"	2/3/1		1	1	1	
AF66439	PM-1	6/5/23	1455	"	3	"	"	"	2/3/1		1	1	1	

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/9/23	0946	[illegible]	GEL	6/9/23	0946
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
[illegible]	GEL	6/9/23	0946	[illegible]		6/9/23	14:35
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ **METALS (all)**

☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ **Wallboard Gypsum(*all below*)**
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ **Ultimate**
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ **Trans. Oil Qual.**
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SCOP	SDG/AR/COC/Work Order: 625517
Received By: Stacy Boone	Date Received: June 9, 2023
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services (Courier) Other
	19°c 19°c 1°c

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: See Tracking
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR3-22 IR3-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓	.		Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials ZW Date 6/12/23 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 19 June 2023

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 6/29/2023 11:08:16 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-236991-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

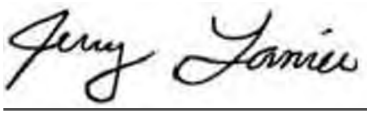
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
Jerry Lanier, Project Manager I
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Job ID: 680-236991-1

Laboratory: Eurofins Savannah

Narrative

Job Narrative
680-236991-1

Receipt

The samples were received on 6/27/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.0°C

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Job ID: 680-236991-1
Project/Site: 125915/JM02.09.G01.1/36500

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-236991-1	AF66411	Water	06/19/23 13:09	06/27/23 09:30
680-236991-2	AF66412	Water	06/19/23 13:14	06/27/23 09:30
680-236991-3	AF66413	Water	06/19/23 14:50	06/27/23 09:30
680-236991-4	AF66409	Water	06/20/23 09:11	06/27/23 09:30
680-236991-5	AF66415	Water	06/20/23 10:17	06/27/23 09:30
680-236991-6	AF66410	Water	06/20/23 11:20	06/27/23 09:30
680-236991-7	AF66414	Water	06/21/23 11:59	06/27/23 09:30
680-236991-8	AF66422	Water	06/21/23 13:27	06/27/23 09:30
680-236991-9	AF66423	Water	06/21/23 14:38	06/27/23 09:30
680-236991-10	AF66446	Water	06/22/23 09:46	06/27/23 09:30
680-236991-11	AF66424	Water	06/22/23 10:58	06/27/23 09:30
680-236991-12	AF66416	Water	06/22/23 12:55	06/27/23 09:30
680-236991-13	AF66408	Water	06/22/23 13:51	06/27/23 09:30

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Method	Method Description	Protocol	Laboratory
7470A	Mercury (CVAA)	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: South Carolina Public Service Authority
Job ID: 680-236991-1
Project/Site: 125915/JM02.09.G01.1/36500

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Job ID: 680-236991-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF66411 **Lab Sample ID: 680-236991-1**

No Detections.

Client Sample ID: AF66412 **Lab Sample ID: 680-236991-2**

No Detections.

Client Sample ID: AF66413 **Lab Sample ID: 680-236991-3**

No Detections.

Client Sample ID: AF66409 **Lab Sample ID: 680-236991-4**

No Detections.

Client Sample ID: AF66415 **Lab Sample ID: 680-236991-5**

No Detections.

Client Sample ID: AF66410 **Lab Sample ID: 680-236991-6**

No Detections.

Client Sample ID: AF66414 **Lab Sample ID: 680-236991-7**

No Detections.

Client Sample ID: AF66422 **Lab Sample ID: 680-236991-8**

No Detections.

Client Sample ID: AF66423 **Lab Sample ID: 680-236991-9**

No Detections.

Client Sample ID: AF66446 **Lab Sample ID: 680-236991-10**

No Detections.

Client Sample ID: AF66424 **Lab Sample ID: 680-236991-11**

No Detections.

Client Sample ID: AF66416 **Lab Sample ID: 680-236991-12**

No Detections.

Client Sample ID: AF66408 **Lab Sample ID: 680-236991-13**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66411
Date Collected: 06/19/23 13:09
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-1
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:03	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66412
Date Collected: 06/19/23 13:14
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-2
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:11	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66413
Date Collected: 06/19/23 14:50
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:12	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66409
Date Collected: 06/20/23 09:11
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-4
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:14	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66415
Date Collected: 06/20/23 10:17
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-5
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:15	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66410
Date Collected: 06/20/23 11:20
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-6
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:17	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66414
Date Collected: 06/21/23 11:59
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-7
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:18	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66422
Date Collected: 06/21/23 13:27
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-8
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:20	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66423
Date Collected: 06/21/23 14:38
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-9
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:22	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66446
Date Collected: 06/22/23 09:46
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-10
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:23	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66424
Date Collected: 06/22/23 10:58
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-11
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:25	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66416
Date Collected: 06/22/23 12:55
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-12
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:29	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66408
Date Collected: 06/22/23 13:51
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-13
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:31	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-785974/1-A
Matrix: Water
Analysis Batch: 786208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 785974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		06/28/23 13:39	06/29/23 10:00	1

Lab Sample ID: LCS 680-785974/2-A
Matrix: Water
Analysis Batch: 786208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 785974

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.390		ug/L		96	80 - 120		

Lab Sample ID: 680-236991-1 MS
Matrix: Water
Analysis Batch: 786208

Client Sample ID: AF66411
Prep Type: Total/NA
Prep Batch: 785974

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	1.013		ug/L		101	80 - 120		

Lab Sample ID: 680-236991-1 MSD
Matrix: Water
Analysis Batch: 786208

Client Sample ID: AF66411
Prep Type: Total/NA
Prep Batch: 785974

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	1.005		ug/L		101	80 - 120	1	20

Metals

Prep Batch: 785974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-236991-1	AF66411	Total/NA	Water	7470A	
680-236991-2	AF66412	Total/NA	Water	7470A	
680-236991-3	AF66413	Total/NA	Water	7470A	
680-236991-4	AF66409	Total/NA	Water	7470A	
680-236991-5	AF66415	Total/NA	Water	7470A	
680-236991-6	AF66410	Total/NA	Water	7470A	
680-236991-7	AF66414	Total/NA	Water	7470A	
680-236991-8	AF66422	Total/NA	Water	7470A	
680-236991-9	AF66423	Total/NA	Water	7470A	
680-236991-10	AF66446	Total/NA	Water	7470A	
680-236991-11	AF66424	Total/NA	Water	7470A	
680-236991-12	AF66416	Total/NA	Water	7470A	
680-236991-13	AF66408	Total/NA	Water	7470A	
MB 680-785974/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-785974/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-236991-1 MS	AF66411	Total/NA	Water	7470A	
680-236991-1 MSD	AF66411	Total/NA	Water	7470A	

Analysis Batch: 786208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-236991-1	AF66411	Total/NA	Water	7470A	785974
680-236991-2	AF66412	Total/NA	Water	7470A	785974
680-236991-3	AF66413	Total/NA	Water	7470A	785974
680-236991-4	AF66409	Total/NA	Water	7470A	785974
680-236991-5	AF66415	Total/NA	Water	7470A	785974
680-236991-6	AF66410	Total/NA	Water	7470A	785974
680-236991-7	AF66414	Total/NA	Water	7470A	785974
680-236991-8	AF66422	Total/NA	Water	7470A	785974
680-236991-9	AF66423	Total/NA	Water	7470A	785974
680-236991-10	AF66446	Total/NA	Water	7470A	785974
680-236991-11	AF66424	Total/NA	Water	7470A	785974
680-236991-12	AF66416	Total/NA	Water	7470A	785974
680-236991-13	AF66408	Total/NA	Water	7470A	785974
MB 680-785974/1-A	Method Blank	Total/NA	Water	7470A	785974
LCS 680-785974/2-A	Lab Control Sample	Total/NA	Water	7470A	785974
680-236991-1 MS	AF66411	Total/NA	Water	7470A	785974
680-236991-1 MSD	AF66411	Total/NA	Water	7470A	785974

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66411
Date Collected: 06/19/23 13:09
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:03

Client Sample ID: AF66412
Date Collected: 06/19/23 13:14
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:11

Client Sample ID: AF66413
Date Collected: 06/19/23 14:50
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:12

Client Sample ID: AF66409
Date Collected: 06/20/23 09:11
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:14

Client Sample ID: AF66415
Date Collected: 06/20/23 10:17
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:15

Client Sample ID: AF66410
Date Collected: 06/20/23 11:20
Date Received: 06/27/23 09:30

Lab Sample ID: 680-236991-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:17

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66414

Lab Sample ID: 680-236991-7

Date Collected: 06/21/23 11:59
Date Received: 06/27/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:18

Client Sample ID: AF66422

Lab Sample ID: 680-236991-8

Date Collected: 06/21/23 13:27
Date Received: 06/27/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:20

Client Sample ID: AF66423

Lab Sample ID: 680-236991-9

Date Collected: 06/21/23 14:38
Date Received: 06/27/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:22

Client Sample ID: AF66446

Lab Sample ID: 680-236991-10

Date Collected: 06/22/23 09:46
Date Received: 06/27/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:23

Client Sample ID: AF66424

Lab Sample ID: 680-236991-11

Date Collected: 06/22/23 10:58
Date Received: 06/27/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:25

Client Sample ID: AF66416

Lab Sample ID: 680-236991-12

Date Collected: 06/22/23 12:55
Date Received: 06/27/23 09:30

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:29

Lab Chronicle

Client: South Carolina Public Service Authority
Job ID: 680-236991-1
Project/Site: 125915/JM02.09.G01.1/36500

Client Sample ID: AF66408
Lab Sample ID: 680-236991-13
Date Collected: 06/22/23 13:51
Matrix: Water
Date Received: 06/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			785974	DW	EET SAV	06/28/23 13:39
Total/NA	Analysis	7470A		1	786208	BJB	EET SAV	06/29/23 10:31

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info. TA-SAV Contract Lab Due Date (Lab Only). 7 / 6 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone (843)761-8000 Ext. 5148
Fax. (843)761-4175

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg
AF66411	CCMAP-4	6/19/23	1309	WJK ML	1	P	G	GW	2	7470 RL= 0.2 ug/L	X
AF66412	CCMAP-4 DUP	"	1314	"	"	"	"	"	"		"
AF66413	CCMAP-5	"	1450	"	"	"	"	"	"		"
AF66409	CCMAP-2	6/20/23	0911	"	"	"	"	"	"		"
AF66415	CCMAP-7	"	1017	"	"	"	"	"	"		"
AF66410	CCMAP-3	"	1120	"	"	"	"	"	"		"
AF66414	CCMAP-6	6/21/23	1159	"	"	"	"	"	"		"
AF66422	CCMLF-1	"	1327	"	"	"	"	"	"		"
AF66423	CCMLF-1D	"	1438	"	"	"	"	"	"		"

680-236991 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
BJBrown	35594	6/26/23	1300	CMuo	142/140	6/27/23	0930
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AIM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ **Used Oil**
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ **GOFER**

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=$Na_2S_2O_3$ 6-Other (Specify)

Contract Lab Info. TA-SAV Contract Lab Due Date (Lab Only). 7 / 6 / 23 Send report to lcwillia@santeecooper.com & sjbrown@santeecooper.com

Chain of Custody

santee cooper
Santee Cooper
One Riverwood Drive
Moncks Corner, SC 29461
Phone (843)761-8000 Ext 5148
Fax (843)761-4175

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LINDA.WILLIAMS@santeecooper.com	___/___/___	125915 / JM02.09.G01.1 / 36500	(Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AF66446	POZ-8	6/22/23	0946	WJK ML	1	P	G	GW	2	7470 RL=0.2 ug/L	X			
AF66424	CCMLF-2	"	1058	"	"	"	"	"	"		"			
AF66416	CCMAP-8	"	1255	"	"	"	"	"	"		"			
AF66408	CCMAP-1	"	1351	"	"	"	"	"	"		"			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SJBrown	35594	6/26/23	1300	CMuo	142/140	6/27/23	0930
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

☐ METALS (all)		
☐ Ag	☐ Cu	☐ Sb
☐ Al	☐ Fe	☐ Se
☐ As	☐ K	☐ Sn
☐ B	☐ Li	☐ Sr
☐ Ba	☐ Mg	☐ Ti
☐ Be	☐ Mn	☐ Tl
☐ Ca	☐ Mo	☐ V
☐ Cd	☐ Na	☐ Zn
☐ Co	☐ Ni	☐ Hg
☐ Cr	☐ Pb	☐ CrVI

Nutrients
☐ TOC
☐ DOC
☐ TP/TPO4
☐ NH3-N
☐ F
☐ Cl
☐ NO2
☐ Br
☐ NO3
☐ SO4

MISC.
☐ BTEX
☐ Naphthalene
☐ THM/HAA
☐ VOC
☐ Oil & Grease
☐ E. Coli
☐ Total Coliform
☐ pH
☐ Dissolved As
☐ Dissolved Fe
☐ Rad 226
☐ Rad 228
☐ PCB

Gypsum
☐ Wallboard Gypsum(*all below*)
☐ AlM
☐ TOC
☐ Total metals
☐ Soluble Metals
☐ Purity (CaSO4)
☐ % Moisture
☐ Sulfites
☐ pH
☐ Chlorides
☐ Particle Size
☐ Sulfur

Coal
☐ Ultimate
☐ % Moisture
☐ Ash
☐ Sulfur
☐ BTUs
☐ Volatile Matter
☐ CHN
Other Tests:
☐ XRF Scan
☐ HGI
☐ Fineness
☐ Particulate Matter

Flyash
☐ Ammonia
☐ LOI
☐ % Carbon
☐ Mineral Analysis
☐ Sieve
☐ % Moisture

NPDES
☐ Oil & Grease
☐ As
☐ TSS

Oil
☐ Trans. Oil Qual.
☐ %Moisture
☐ Color
☐ Acidity
☐ Dielectric Strength
☐ IFT
☐ Dissolved Gases
☐ Used Oil
☐ Flashpoint
☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
☐ TX
☐ GOFER

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
Preservative code- 1=<4°C 2=HNO_3 3=H_2SO_4 4-HCl 5=NaOH 6=DI H2O 7=Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-236991-1

Login Number: 236991

List Source: Eurofins Savannah

List Number: 1

Creator: Munro, Caroline

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-236991-1
Project/Site: 125915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-23

Field Data Sheets

(Note: the color coding is to assist field personnel in determining when the well has stabilized enough to begin sample collection.)

Cross Generating Station
CCR Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
PM-1	83.24	8.29	4-24	1/24/2023	1018	26.35

Drawdown: 8.36 depth to GW (ft)

Ferric Iron +++ mg/L

Ferrous Iron +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
953	18.15	5.1	57	124	65.3	1.77
958	17.84	4.93	34	104	42.1	1.05
1003	17.45	4.72	39	101	15.3	0.99
1008	17.56	4.73	39	101	4	0.79
1013	17.64	4.82	35	100	9.4	0.72
1018	17.68	4.84	37	100	2.9	0.66

NPDES/CCR/Class 2 Landfill: Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, K, Li, Mg, Mo, Na, Pb, Sb, Se, Tl, Zn
dissolved As Ra 226/228 Nitrate, TOC Cl, F, SO4, TDS

CCR Only: As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, Li, Mo, Pb, Se, Tl, Zn, dissolved As
Ra 226/228 Cl, F, SO4, TDS

Comments/Conditions:

Samples were collected by Zach McHenry and Melanie Goings

Cross Generating Station
Background Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
CBW-1	85.80	9.29	14-24	1/24/2023	1146

Drawdown: 9.31 depth to GW (ft)

Ferric Iron: 0.19 mg/L

Ferrous Iron: 0.01 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
1112	19	4.34	212	181	0.9
1117	18.6	4.38	255	180	0
1122	18.53	4.35	286	180	0
1127	18.47	4.3	307	180	0
1132	18.39	4.33	319	180	0
1137	18.4	4.31	329	181	0
1140	18.33	4.25	338	181	0
1143	18.19	4.22	344	180	0
1146	18.2	4.23	347	181	0

CCR/Class 3 Landfill: As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, Li, Mo, Pb, Sb, Se, Tl, Zn, dissolved As
Ra 226/228 Nitrate, TOC Cl, F, SO4, TDS

CCR Only: As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, Li, Mo, Pb, Se, Tl, Zn, dissolved As
Ra 226/228 Cl, F, SO4, TDS

Comments/Conditions: Field data was lost when file wouldn't open. Field data redone on 11/

Samples were collected by Zach McHenry and Melanie Goings

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-3	82.61	4.16	5.0 - 10.0	1/31/2023	1117

Drawdown: 4.27 depth to GW (ft)

Ferric Iron: 0.08 mg/L

Ferrous Iron: 0.05 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
1046	18.34	6.49	226	772	0.8
1051	17.94	6.53	210	772	0
1056	17.59	6.51	185	772	0
1101	17.49	6.48	166	773	0
1106	17.53	6.49	152	771	0
1111	17.65	6.49	142	771	0
1114	17.75	6.5	137	769	0
1117	17.75	6.53	132	767	0

Class 2 Landfill Only:

As, Ba, B, Cd, Cr, Fe, Pb, Se, Zn, dissolved As Nitrate, TOC

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-4	82.73	3.71	9.5 - 14.5	1/30/2023	1126

Drawdown: 4.04 depth to GW (ft)

Ferric Iron: 0.11 mg/L

Ferrous Iron: 0.03 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
1025	18.02	6.51	157	983	52.9
1030	17.28	6.39	307	973	0.9
1035	17.02	6.34	406	989	0.8
1040	16.94	6.27	398	1010	0
1045	16.91	6.26	314	1010	0.4
1050	17.1	6.19	238	1040	1.9
1053	17.22	6.17	201	1050	4.4
1056	17.19	6.15	148	1060	10.9
1059	17.23	6.14	119	1070	13.6
1102	17.18	6.17	105	1060	16
1105	17.09	6.16	100	1070	10.3
1108	16.96	6.13	94	1080	2
1111	16.89	6.13	83	1080	0.2
1114	16.91	6.14	78	1100	0
1117	17.06	6.13	78	1100	1.3
1120	17	6.12	77	1110	3.6
1123	16.9	6.13	75	1120	1.5
1126	16.86	6.12	74	1130	0.5

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-6	83.84	5.18	12-22	1/30/2023	937

Drawdown: 5.28 depth to GW (ft)

Ferric Iron: +++ mg/L

Ferrous Iron: +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
857	19.62	6.67	201	864	57.1
902	18.28	6.54	151	863	62.8
907	18.3	6.45	138	862	75.2
912	18.27	6.39	97	866	107
917	18.29	6.26	79	919	299
922	18.46	6.15	23	1580	702
925	18.51	6.15	13	1770	587
928	18.44	6.19	2	1940	497
931	18.52	6.21	-5	1990	427
934	18.69	6.24	-10	2020	407
937	18.77	6.26	-14	2040	392

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-7	82.02	3.68	12-22	1/31/2023	940

Drawdown: 3.76 depth to GW (ft)

Ferric Iron: 0.15 mg/L

Ferrous Iron: 0.04 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
912	19.7	5.43	198	65	6
917	19.59	5.25	192	62	5.5
922	19.22	5.15	211	61	19.3
927	18.65	4.96	226	64	4.4
932	18.7	4.82	237	63	6.4
937	18.78	4.74	244	64	9.3
940	18.78	4.72	246	64	7.9

Comments/Conditions:
DUP at 945

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-8	83.13	4.46	44.5 - 55.5	1/30/2023	1410	59.02

Drawdown: 4.49 depth to GW (ft)

Ferric Iron: +++ mg/L

Ferrous Iron: +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1342	17.27	6.86	-66	2000	59.2	1.27
1347	17.14	6.79	-67	1930	48.1	0.66
1352	17.17	6.8	-73	1940	35.1	0.52
1357	17.27	6.8	-77	1950	38.4	0.45
1402	17.44	6.79	-78	1940	34	0.42
1407	17.47	6.8	-79	1950	34.1	0.4
1410	17.51	6.78	-79	1940	33	0.39

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1	80.862	3.32	10-15	1/26/2023	1119	18.4

Drawdown: 3.94 depth to GW (ft)

Ferric Iron: 0.05 mg/L

Ferrous Iron: 0.08 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1059	16.42	5.32	190	179	0	3.1
1104	16.13	5.26	208	177	0	1.37
1109	16.01	5.26	218	176	0	1.21
1114	15.86	5.27	224	174	2.6	1.11
1119	15.76	5.27	228	171	4.8	1.01

CCR CMA Only---Cobalt

Comments/Conditions:

Samples were collected by Zach McHenry, Melanie Goings, and Brian Brase

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1D	80.653	3.12	23 - 28	1/26/2023	1300	31.16

Drawdown: 3.27 depth to GW (ft)

Ferric Iron: 0.32 mg/L

Ferrous Iron: 0.11 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1208	15.33	6.5	202	197	30.2	5.99
1213	15.47	6.96	188	205	27.2	2.32
1218	15.48	7	181	206	27.1	2.17
1223	15.51	7.03	176	206	27.5	2.09
1228	15.49	7.05	170	207	17.6	2.06
1233	15.51	7.07	161	206	20.3	1.98
1236	15.5	7.07	152	205	16.9	1.93
1239	15.48	7.08	142	206	9.1	1.9
1242	15.48	7.07	126	207	9.4	1.8
1245	15.49	7.06	102	207	9.7	1.73
1248	15.5	7.07	85	206	9.7	1.62
1251	15.51	7.08	72	206	9.5	1.59
1254	15.48	7.08	62	205	4.2	1.47
1257	15.42	7.08	59	204	0	1.47
1300	15.35	7.08	52	204	0	1.36

CCR CMA Only---Cobalt

Comments/Conditions:

Samples were collected by Zach McHenry, Brian Brase, and Melanie Goings

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-2	84.08	6.73	9.5-19.5	2/7/2023	1522	22.68

Drawdown: 6.75 depth to GW (ft)

Ferric Iron: 0.04 mg/L

Ferrous Iron: 0.03 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1507	20.57	5.48	249	35	0	5.05
1512	20.67	5.4	272	34	0	2.41
1517	20.67	5.38	279	34	0	2.24
1522	20.68	5.39	280	34	0	2.13

CCR CMA Only---
Cobalt

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
NPDES Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CAP-13	80.77	3.67	4.5-19.5	1/31/2023	1249	22.08

Drawdown: 5.62 depth to GW (ft)

Ferric Iron +++ mg/L

Ferrous Iron +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1218	19.42	5.42	191	254	532	0.98
1223	19.22	5.34	153	249	497	0.6
1228	19.1	5.32	132	250	608	0.48
1233	19	5.32	114	251	92.3	0.43
1238	18.91	5.34	103	253	70.6	0.4
1243	18.91	5.35	97	254	62.6	0.38
1246	18.91	5.36	98	255	58.6	0.37
1249	18.91	5.37	94	255	55.5	0.37

NPDES Only:

Al, As, Ba, Ca, Cd, Cr, Fe, K, Mg, Na, dissolved As Cl, SO4, TDS

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-3	82.61	5.47	5.0 - 10.0	3/20/2023	928

Drawdown: 6.6 depth to GW (ft)

Ferric Iron: 0.1 mg/L

Ferrous Iron: 0.11 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
857	14.99	6.58	165	799	0
902	11.77	6.59	152	793	0
907	11.75	6.46	153	794	0
912	11.79	6.32	154	791	0
917	12.01	6.32	147	787	0
922	12.48	6.31	141	791	0
925	12.58	6.29	137	786	5.7
928	12.63	6.3	134	788	7.2

Class 2 Landfill Only:

As, Ba, B, Cd, Cr, Fe, Pb, Se, Zn, dissolved As Nitrate, TOC

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1	80.862	4.21	10-15	3/29/2023	924	18.66

Drawdown: 4.41 depth to GW (ft)

Ferric Iron: mg/L

Ferrous Iron: mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
856	17.3	5.76	162	121	0	2.61
901	17.48	5.9	114	118	0	1.07
906	17.02	5.9	104	115	0	1.19
911	16.12	5.86	99	118	0	0.82
916	16.2	5.83	97	118	0	0.66
921	16.41	5.8	96	118	0	0.62
924	16.5	5.78	98	119	0	0.62

CCR CMA Only---Cobalt

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
CCR Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
PM-1	83.24	7.85	4-24	6/5/2023	1455	26.37

Drawdown: 8.03 depth to GW (ft)

Ferric Iron +++ mg/L

Ferrous Iron +++ mg/L Spec Cond

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1407	19.47	5.16	50	161	11.1	1.78
1412	21.79	5.15	34	147	29.4	1.24
1417	22.98	5	44	141	17.8	1.03
1422	23.54	5.14	40	142	3.4	1.02
1427	25.57	5.18	39	143	10	1.14
1432	24.82	5.03	52	134	0	0.95
1437	23.75	5.01	52	132	0	1.19
1440	24.03	5.02	50	132	0	1.12
1443	23.98	4.98	53	132	0	0.9
1446	24.38	4.97	54	131	0	1
1449	24.82	5.03	49	130	0	0.82
1452	24.6	5.08	47	130	2.6	0.87
1455	24.77	5.08	47	130	0	0.91

NPDES/CCR/Class 2 Landfill: Al, As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, K, Li, Mg, Mo, Na, Pb, Sb, Se, Tl, Zn
dissolved As Ra 226/228 Nitrate, TOC Cl, F, SO4, TDS

CCR Only: As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, Li, Mo, Pb, Se, Tl, Zn, dissolved As
Ra 226/228 Cl, F, SO4, TDS

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
Background Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
CBW-1	85.80	9.64	14-24	6/6/2023	859

Drawdown: 9.69 depth to GW (ft)

Ferric Iron: 0.09 mg/L

Ferrous Iron: 0.04 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
844	21.57	4.53	155	251	0
849	21.59	4.35	139	238	0
854	21.59	4.27	147	242	0
859	21.52	4.34	149	247	0

CCR/Class 3 Landfill: As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, Li, Mo, Pb, Sb, Se, Tl, Zn, dissolved As
Ra 226/228 Nitrate, TOC Cl, F, SO4, TDS

CCR Only: As, Ba, Be, B, Ca, Cd, Co, Cr, Fe, Hg, Li, Mo, Pb, Se, Tl, Zn, dissolved As
Ra 226/228 Cl, F, SO4, TDS

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-3	82.61	6.22	5.0 - 10.0	6/13/2023	1032

Drawdown: 6.34 depth to GW (ft)

Ferric Iron: 0.11 mg/L

Ferrous Iron: 0.13 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
956	25.3	6.46	45	1080	0
1001	24.53	6.45	43	1040	153
1006	24.53	6.46	50	1030	25.7
1011	24.9	6.47	54	1020	48.9
1016	25.89	6.5	53	1020	12.1
1021	26.9	6.5	52	1020	7.9
1026	25.88	6.48	54	1020	9.8
1029	25.77	6.48	56	1010	9.6
1032	25.78	6.49	57	1000	9.3

Class 2 Landfill Only:

As, Ba, B, Cd, Cr, Fe, Pb, Se, Zn, dissolved As Nitrate, TOC

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-4	82.73	6.36	9.5 - 14.5	6/13/2023	1500

Drawdown: 6.81 depth to GW (ft)

Ferric Iron: 0.55 mg/L

Ferrous Iron: 0.4 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
1400	28.46	6.41	161	1410	408
1405	26.43	4.32	454	1530	309
1410	26.22	6.2	-4	1840	322
1415	26.22	6.16	-33	1950	269
1420	26.25	6.16	-27	2010	235
1425	26.75	6.16	-22	2050	218
1430	26.55	6.16	-18	2080	174
1443	26.58	6.18	-13	2150	78.2
1448	27.26	6.18	-11	2200	84.1
1451	27.28	6.19	-10	2210	74.1
1454	27.33	6.19	-10	2220	57.2
1457	27.14	6.2	-9	2230	54.1
1500	27.17	6.2	-8	2260	58.2

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-6	83.84	7.57	12-22	6/13/2023	919

Drawdown: 7.64 depth to GW (ft)

Ferric Iron: +++ mg/L

Ferrous Iron: +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
846	21.53	6.21	-13	2810	775
851	21.78	6.31	-70	2870	641
856	21.84	6.31	-75	2850	544
901	22.06	6.32	-78	2820	492
906	22.37	6.33	-78	2800	389
911	22.42	6.33	-78	2770	344
916	22.67	6.34	-79	2740	311
919	22.75	6.35	-79	2720	299

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
POZ-7	82.02	6.34	12-22	6/13/2023	1221

Drawdown: 6.41 depth to GW (ft)

Ferric Iron: 0.06 mg/L

Ferrous Iron: 0.17 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
1112	27.21	6.68	99	111	800
1117	25.74	6.26	168	85	147
1122	25.76	6.05	205	89	75.7
1127	25.58	5.97	214	104	69.1
1132	25.83	5.92	216	117	35.3
1137	25.93	5.88	217	125	30.6
1142	25.68	5.85	217	133	23.5
1145	25.73	5.84	217	135	21.8
1148	25.78	5.83	217	140	15.4
1151	25.61	5.83	216	145	16.7
1154	25.78	5.85	215	148	14.5
1157	25.86	5.83	217	152	14.5
1200	25.89	5.85	216	158	13.6
1203	25.7	5.88	215	165	15.4
1206	25.79	5.89	213	169	19
1209	26.18	5.9	211	174	17.8
1212	26.31	5.9	210	175	13.2
1215	26.37	5.9	209	179	11.2
1218	26.34	5.91	209	183	8.7
1221	26.47	5.93	207	187	3.6

Comments/Conditions:
DUP @ 1226

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-8	83.13	5.97	44.5 - 55.5	6/22/2023	946	58.69

Drawdown: 5.96 depth to GW (ft)

Ferric Iron: +++ mg/L

Ferrous Iron: +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
858	21.74	6.33	-54	2120	6.9	2.77
903	22.21	6.51	-86	2430	19.9	1.08
908	22.25	6.52	-90	2510	13.1	1.05
913	22.31	6.53	-91	2560	9.5	0.87
918	22.39	6.54	-91	2620	4.7	0.8
923	22.23	6.53	-88	2650	28.3	0.89
928	22.03	6.53	-92	2660	23.4	0.82
931	22.03	6.53	-93	2680	23.4	0.73
934	21.99	6.54	-93	2700	21.1	0.7
937	21.97	6.54	-94	2730	18.3	0.68
940	21.93	6.54	-94	2760	15.8	0.67
943	21.94	6.54	-94	2780	15	0.65
946	21.97	6.54	-94	2800	14.1	0.66

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1	80.862	4.46	10-15	6/21/2023	1327	15.38

Drawdown: 4.69 depth to GW (ft)

Ferric Iron: 0.16 mg/L

Ferrous Iron: 0.07 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1302	21.37	5.85	153	154	4	0.99
1307	21.13	5.87	145	157	18.9	0.75
1312	21.39	5.89	137	156	16.3	0.75
1317	21.32	5.89	136	153	9.6	0.66
1322	21.19	5.92	132	151	6.6	0.61
1327	21.03	5.94	130	151	7.6	0.6

CCR CMA Only---Cobalt

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1D	80.653	4.32	23 - 28	6/21/2023	1438	31.17

Drawdown: 4.67 depth to GW (ft)

Ferric Iron: 1.45 mg/L

Ferrous Iron: 1.19 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1350	21.4	6.68	-12	278	4.8	1.69
1355	21.21	7.01	-93	282	1.5	0.94
1400	20.98	7.11	-114	284	1.4	0.96
1405	20.96	7.15	-123	284	1.8	0.73
1410	20.73	7.17	-128	285	4	0.65
1415	20.75	7.19	-131	285	11.6	0.59
1420	20.83	7.2	-132	285	18.9	0.57
1423	20.91	7.2	-132	284	24	0.57
1426	20.94	7.21	-133	284	22.4	0.57
1429	20.94	7.22	-123	284	17.8	0.56
1432	20.91	7.21	-133	284	10.4	0.56
1435	20.87	7.22	-134	284	6.4	0.55
1438	20.87	7.21	-134	284	4.8	0.55

CCR CMA Only---Cobalt

Comments/Conditions:

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
for CCR ACM Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-2	84.08	7.49	9.5-19.5	6/22/2023	1058	22.66

Drawdown: 7.51 depth to GW (ft)

Ferric Iron: 0.26 mg/L

Ferrous Iron: 0.17 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1025	21.55	6.52	52	158	11	2.09
1030	21.58	6.4	60	130	8.4	1.26
1035	21.28	6.25	58	118	6.1	1.1
1040	21.11	6.15	54	109	6.2	1.07
1045	21.1	6.08	55	102	7.2	1.1
1050	21.08	5.98	61	98	5.8	1.16
1055	21.04	5.96	67	96	5.7	1.17
1058	21.07	5.97	70	96	5.8	1.19

CCR CMA Only---
Cobalt

Comments/Conditions:

** code is 5582

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
NPDES Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CAP-13	80.77	6.01	4.5-19.5	6/15/2023		22.06

Drawdown: 8.07 depth to GW (ft)

Ferric Iron +++ mg/L

Ferrous Iron +++ mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
843	20.48	5.09	61	333	13.3	2.02
848	21.51	5.16	16	312	26.1	1.17
853	22.18	5.18	10	302	12.7	0.96
858	22.65	5.17	10	298	3.3	0.88
903	23.06	5.19	12	296	4	0.86
908						

NPDES Only:

Al, As, Ba, Ca, Cd, Cr, Fe, K, Mg, Na, dissolved As Cl, SO4, TDS

Comments/Conditions:

*Well was sampled 6/15/23 but field parameters file was corrupted. Field parameters were

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-3	82.61	5.21	5.0 - 10.0	7/19/2023	1137	13.49

Drawdown: 5.22 depth to GW (ft)

Ferric Iron: 0.26 mg/L

Ferrous Iron: 0.24 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1117	29.93	6.39	-23	1100	4.3	1.28
1122	27.86	6.39	11	1040	1.7	0.86
1127	27.15	6.38	33	1010	0	0.72
1132	26.9	6.37	39	994	4.3	0.68
1137	26.63	6.38	38	983	5.7	0.66

Class 2 Landfill Only:

As, Ba, B, Cd, Cr, Fe, Pb, Se, Zn, dissolved As Nitrate, TOC Cl, SO4, TDS

Comments/Conditions:

Samples were collected by Justin Kirk and Brian Brase

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-3	82.61	6.21	5.0 - 10.0	10/10/2023	1015	13.49

Drawdown: 6.39 depth to GW (ft)

Ferric Iron: 0.25 mg/L

Ferrous Iron: 0.23 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
950	22.18	6.15	98	822	13.9	2.99
955	22.43	6.11	76	943	7.6	1.53
1000	22.64	6.1	73	954	2.1	1.17
1005	22.79	6.1	72	950	0.2	1.05
1010	22.93	6.1	71	950	0	0.99
1015	23.08	6.1	70	947	0	0.96

Class 2 Landfill Only:

As, Ba, B, Cd, Cr, Fe, Pb, Se, Zn, dissolved As Nitrate, TOC Cl, SO4, TDS

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase

Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-3	82.61	5.07	5.0 - 10.0	12/5/2023	1014	13.55

Drawdown: 5.22 depth to GW (ft)

Ferric Iron: 0.14 mg/L

Ferrous Iron: 0.05 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
943	18.53	6.53	232	942	0.4	2.6
948	17.77	6.35	204	980	0	1.96
953	17.87	6.32	173	975	0	1.34
958	17.96	6.3	148	968	0.6	1.11
1003	18.3	6.27	138	962	2.6	0.96
1008	18.36	6.28	130	965	6.8	0.82
1011	18.32	6.29	128	967	7.1	0.74
1014	18.02	6.29	127	967	6.8	0.79

Class 2 Landfill Only:

As, Ba, B, Cd, Cr, Fe, Pb, Se, Zn, dissolved As Nitrate, TOC Cl, SO4, TDS

Comments/Conditions:

Samples were collected by Zach McHenry and Brian Brase