

**2023 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
CLASS 3 LANDFILL
CROSS GENERATING STATION**

**by Santee Cooper
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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 3 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, Title 40 Code of Federal Regulations (CFR) Part 257, Subpart D dated 17 April 2015 (CCR Rule), specifically subsection § 257.90(e)(1) through (6).

The CGS Class 3 Landfill began operations and placement of CCR in December 2015 in accordance with permits and plans approved by South Carolina's Department of Health and Environmental Control (SCDHEC). The Class 3 Landfill is an existing CCR landfill that is located immediately adjacent to and abuts the eastern slope of the closed Class 2 Landfill. The Class 2 Landfill top deck and east and west slopes are covered by a high-density polyethylene (HDPE) liner that will also serve as the bottom liner of the Class 3 Landfill as it is built out. In addition to the federal CCR rule groundwater monitoring program discussed throughout, a SCDHEC-approved groundwater monitoring program is also being implemented to comply with the Class 3 Landfill SCDHEC Permit #LF3-00007.

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 3 Landfill continued to operate under a detection monitoring program in accordance with § 257.94. A successful alternate source demonstration (ASD) was certified in April 2018 and again in March 2023 which concluded the closed Class 2 Landfill, located immediately adjacent to and upgradient of the Class 3 Landfill, was responsible for the Appendix III SSIs.

Statistically significant increases (SSI) of chloride were identified in monitoring wells CLF1B-2 and CLF1B-4 during the January and June 2023 sampling events which is consistent with previous findings. SSIs were identified for boron in monitoring wells CLF1B-3 and CLF1B-5 and fluoride in monitoring well CLF1B-3 in the June 2023 sampling.

At the end of the current annual reporting period (December 31, 2023), the Class 3 Landfill remained in detection monitoring.

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 CGS Class 3 Landfill is subject to the groundwater monitoring and corrective action requirements set forth by the EPA in § 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 Groundwater Monitoring and Corrective Action Report.

5.2 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 CGS Class 3 Landfill as required by the Groundwater Monitoring and Corrective Action regulations. Groundwater sampling and analysis was conducted per the requirements of § 257.93, and the status of the groundwater monitoring program, set forth in § 257.94, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

SSIs of Appendix III constituents were initially identified downgradient of the Class 3 Landfill, and the notification was provided on January 15, 2018. Because this relatively new and fully lined landfill first received waste in 2015, an evaluation of alternate sources was conducted, and the successful ASD was certified in April 2018. The ASD concluded that the closed Class 2 Landfill, located immediately adjacent to and upgradient of the Class 3 Landfill, is responsible for the Appendix III SSIs.

In 2022, an SSI of chloride was identified in monitoring wells CLF1B-2 and CLF1B-4 during both the January and June 2022 sampling events which was consistent with historical findings. New SSIs of boron were identified in monitoring wells CLF1B-3 and CLF1B-5 and for fluoride in monitoring well CLF1B-3 for the June 2022 sampling event based on an intrawell statistical analysis. However, boron in monitoring well CLF1B-5 and fluoride in monitoring well CLF1B-3 are not SSIs when based on an interwell statistical analysis. Also of note, all analytical results for fluoride remained below the MCL of 4.0 mg/L for all Class 3 Landfill CCR wells. Again, groundwater conditions observed following construction of the Class 3 Landfill are generally consistent with the pre-construction groundwater conditions observed at the closed Class 2 Landfill and with the current successful ASD and are not necessarily indicative of a release from the Class 3 Landfill. However, because of the new SSIs in a few groundwater monitoring wells, an ASD was again conducted in March 2023 to reevaluate and substantiate that a source other than the Class 3 Landfill caused the statistically significant increases (SSIs) over background. The 2023 ASD incorporated additional lines of evidence, evaluated the possibility of additional contributing sources, and validated the findings of the initial ASD. The successful 2023 ASD concluded that the Class 2 Landfill continues to be the alternate source for SSIs of chloride, boron, and fluoride. Additionally, evidence exists that indicates a pre-existing temporary gypsum management may be a contributing alternative source. Since the subsequent ASD

evaluation continued to show the source of the Class 3 Landfill SSIs is not a release from the Class 3 Landfill, it remained in detection monitoring.

For both January and June sampling events in 2023, Appendix III constituent detections from downgradient well samples were compared to their respective GWPS using intrawell comparisons. No SSIs were identified in January, but one SSI was identified for boron at CLF1B-3. Again, this corresponds to observed increasing concentrations in downgradient wells as discussed in the 2018 and 2023 ASDs. Findings of the 2023 ASD conclude SSIs identified in 2022 were the result of physical and pre-existing alternative sources, specifically the CGS Class 2 Landfill, which began receiving waste 40 years ago, and possible residual impacts from temporary gypsum marketing storage areas which no longer exist. Based on calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells until 2043. Trends in concentrations will continue to be evaluated during subsequent sampling events. Based on these results, the Class 3 Landfill remains in detection monitoring.

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 (2) rounds of groundwater monitoring results (January and June) in accordance with § 257.94 and recorded the concentrations in the facility's operating record as required by § 257.94(f). 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 increases for Appendix III constituents in accordance with § 257.93(h)(2). Statistical results are summarized in Appendix A.
- Completed an additional ASD which provided additional lines of evidence and a more robust hydrogeology assessment to support and strengthen the successful April 2018 ASD for the Class 3 Landfill to address new SSIs within 90 days of completing the second 2022 statistical evaluation. This report is provided in Appendix C.
- 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.

- 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 was completed in November 2023.
- 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

No problems were encountered.

2.2.4 Actions to Resolve Problems

Not applicable.

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 and subsequent statistical analysis as required by § 257.94 and in accordance with the CGS GMP.
- Update the statistical upper tolerance limits for background wells PM-1 and CBW-1 in accordance with the Unified Guidance.
- Evaluate the success of the 2023 well redevelopment by reviewing turbidity, oxidation-reduction potential and other constituents.
- 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 an 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 3 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 wells for groundwater monitoring of constituent concentrations were 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 § 257.94(b) and § 257.94(d), 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 (e.g., detection), and monitoring data obtained for the groundwater monitoring program for the Class 3 Landfill is presented in Table 1 of this report. In addition, as required by § 257.95(d)(3), Table 1 includes the groundwater protection standards 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

As required by § 257.93(h) a statistical analysis for Appendix III SSIs was completed by January 15, 2018. Baseline analytical data collected from background monitoring wells 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. Constituents with analytical results exceeding the UTLs were identified as SSIs over background for the respective Appendix III constituent. This analysis indicated that statistically significant increases of boron, calcium, chloride, pH, sulfate, and total dissolved solids were present downgradient of the Class 3 Landfill. Statistical analysis was conducted within 90-days of completing the semiannual sampling and analysis events as described in § 257.93. As noted previously, one SSI was identified for boron at CLF1B-3 for only the June sampling event, which corresponds to observed increasing concentrations in downgradient wells as discussed in the 2018 and 2023 ASDs. Again, findings of the most recent ASD conclude SSIs identified in 2022 were the result of physical and pre-existing alternative sources, specifically the CGS Class 2 Landfill, which began receiving waste 40 years ago, and possible residual impacts from temporary gypsum marketing storage areas which no longer exist. Based on calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells until 2043. The success of the March 2023 ASD (Appendix C) means that the unit will continue in detection monitoring.

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 § 257.94 of the Rule. There are no applicable requirements from Sections § 257.95 through § 257.98.

Groundwater flow rate and direction are provided as Figures 2, 3, 4, and 5 for each synoptic water level 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 3 Landfill Detection Monitoring 2023

Well ID	Purpose	Date of Sample Event	Laboratory Sample ID Number	Appendix III Constituents										Field Parameters					
				Boron ug/L EPA 6010D	Calcium mg/L EPA 6020B	Chloride mg/L EPA 300.0	Fluoride mg/L EPA 300.0	Sulfate mg/L EPA 300.0	Total Dissolved Solids mg/L SM 2540C	pH SU	Depth to Groundwater Feet	Groundwater Elevation Feet	pH SU	Specific Conductivity uS	Temperature C	Oxidation Reduction Potential mv SM2580	Turbidity NTU	Dissolved Oxygen ppm	
Unit Method GW/PS US EPA MCL/RSL																			
Site Background Wells																			
PM-1	Background	1/24/2023	AF54600	11.4	12.6	12.3	<0.100	8.12	111	4.84	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	7.85	75.4	5.08	130	24.8	47.0	0	0.910	
PM-1	total samples			2	2	2	2	2	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	9.29	76.5	4.23	181	18.2	34.7	0	0.720	
CBW-1	Background	6/6/2023	AF66407	836	33.9	3.73	0.230	97.1	179	4.34	9.64	76.2	4.34	247	21.5	149	0	1.38	
CBW-1	total samples			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Class 3 Landfill Wells																			
CLF1B-1	Detection	1/26/2023	AF54593	14.2	188	33.9	<0.100	136	635	6.62	6.29	77.5	6.62	665	17.1	104	0	0.980	
CLF1B-1	Duplicate	1/26/2023	AF54594	14.0	193	37.3	<0.100	132	606	6.50	7.65	76.1	6.50	858	21.2	74.0	0	0.730	
CLF1B-1	Detection	6/12/2023	AF66432	11.0	171	33.6	<0.100	141	609	6.50	7.65	76.1	6.50	858	21.2	74.0	0	0.730	
CLF1B-1	Duplicate	6/12/2023	AF66433	<10.0	180	33.6	<0.100	123	595	6.50	7.65	76.1	6.50	858	21.2	74.0	0	0.730	
CLF1B-1	total samples			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
CLF1B-2	Detection	1/25/2023	AF54595	19.9	147	86.9	<0.100	14.5	580	6.77	4.66	77.4	6.77	577	19.2	42.0	0	0.760	
CLF1B-2	Detection	6/12/2023	AF66434	<10.0	146	89.8	<0.100	14.6	661	6.83	5.94	76.1	6.83	745	21.1	-32.0	0	0.670	
CLF1B-2	total samples			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
CLF1B-3	Detection	1/25/2023	AF54596	67.2	208	19.3	<0.100	246	638	6.61	5.23	77.5	6.61	679	18.9	31.0	7.00	0.420	
CLF1B-3	Detection	6/12/2023	AF66435	181	257	15.6	0.170	380	899	6.67	6.72	76.0	6.67	1130	22.6	-96.0	152	0.650	
CLF1B-3	total samples			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
CLF1B-4	Detection	1/24/2023	AF54597	21.5	133	93.5	<0.100	16.5	553	7.02	5.16	77.6	7.02	504	20.3	263	0	1.93	
CLF1B-4	Detection	6/12/2023	AF66436	25.6	133	98.3	<0.100	20.4	608	6.99	6.89	75.9	6.99	697	22.0	166	5.10	4.72	
CLF1B-4	total samples			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
CLF1B-5	Detection	1/24/2023	AF54598	23.7	289	157	<0.100	257	1222	6.58	3.46	77.6	6.58	1080	18.3	63.0	0	0.860	
CLF1B-5	Detection	6/12/2023	AF66437	25.2	293	167	<0.100	249	1280	6.66	5.26	75.8	6.66	1430	24.3	-43.0	35.9	0.650	
CLF1B-5	total samples			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	

Notes:

- All groundwater samples collected from the monitoring wells for Detection 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 & Calico, inc. (Certification # 231050001), and Pace Analytical Services LLC (Certification #990030).
- All Background and downgradient compliance wells have been sampled to meet §257.94.
- 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.
- Depth to groundwater is measured below the top of the casing (blow) 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

Well Name	Top of Casing Elevation (ft msl) ²	1st Event - 2/13/2023		2nd Event - 5/1/2023		3rd Event - 6/26/2023		4th Event - 11/14/2023	
		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

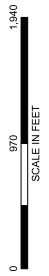


LEGEND

- ⊕ BACKGROUND WELL
- ⊕ CLASS 3 LANDFILL AREA 1B WELL
- 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



SANTEE COOPER
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA

**LOCATION OF CLASS 3 LANDFILL
GROUNDWATER MONITORING WELLS
FOR CCR COMPLIANCE**

OCTOBER 2023

FIGURE 1

GRAPHIC SCALE
 0 600 1200
 IN FEET

DATE: 3/27/2023
 DRAWN BY: J. CHASTAIN
 CHECKED BY: K. FERRI
 DATE: 1/24/2024
 APPROVED BY: K. FERRI
 DATE: 1/24/2024
 FILE NAME:
 LAYOUT FIG. 1 (POTENT MAP 2023-01-23)
 LAST SAVED BY: J. CHASTAIN
 DATE: 01/26/2024 8:58 AM
 PLOT DATE: 01/26/2024 8:59 AM

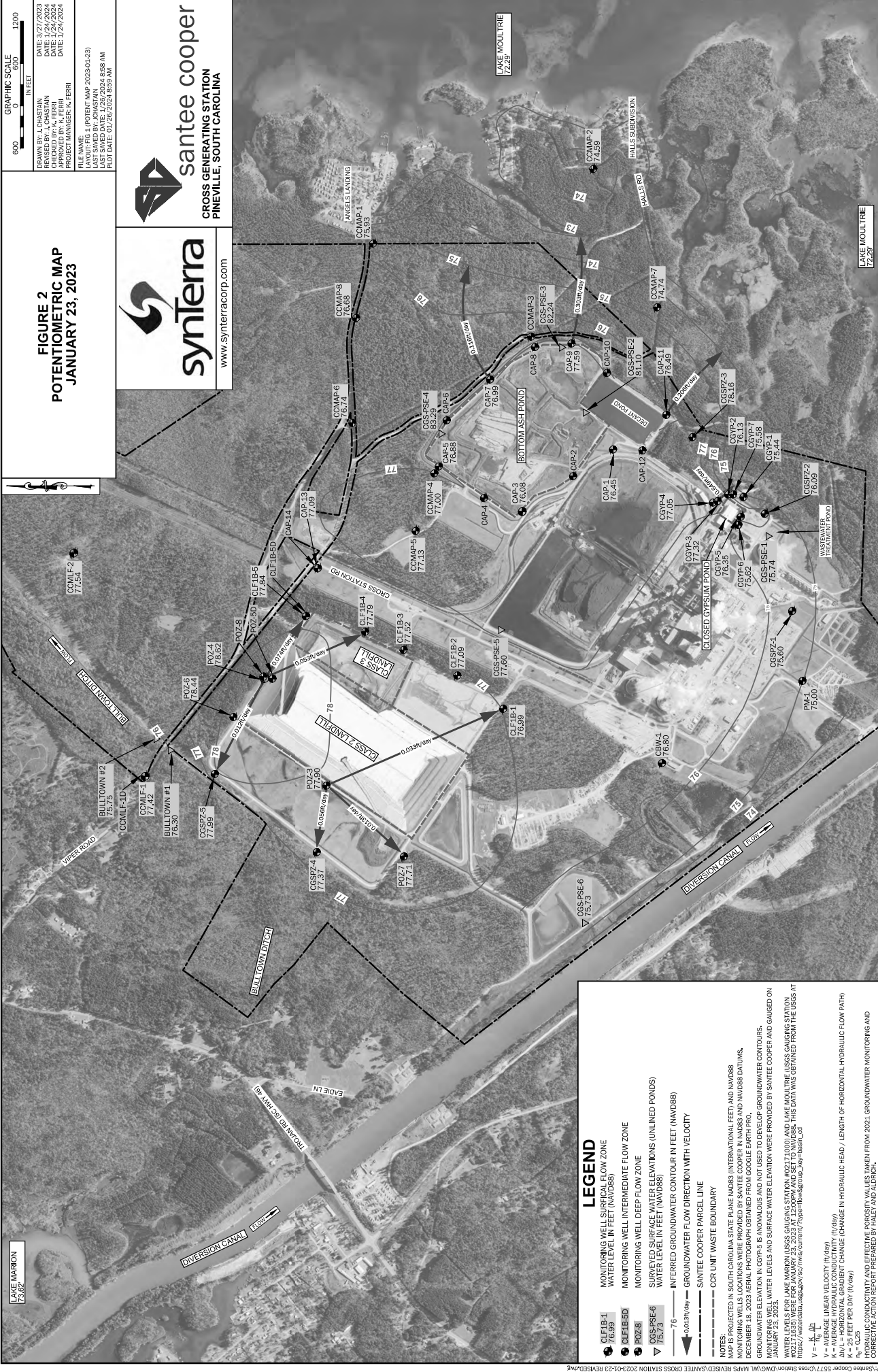
**FIGURE 2
 POTENTIOMETRIC MAP
 JANUARY 23, 2023**



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santee cooper
 CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA



LEGEND

- CLFIB-1 76.99
- CLFIB5D
- POZ-8 78.44
- CCMAP-6 76.74
- CCMAP-5 77.13
- CCMAP-4 77.00
- CCMAP-3 82.24
- CCMAP-2 74.59
- CCMAP-1 75.93
- CCMAP-8 76.68
- CCMAP-7 74.74
- CCMAP-11 76.49
- CCMAP-10 81.10
- CCMAP-9 77.55
- CCMAP-12 76.08
- CCMAP-13 77.09
- CCMAP-14 77.09
- CCMAP-15 77.84
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- CCMAP-196 77.84
- CCMAP-197 77.84
- CCMAP-198 77.84
- CCMAP-199 77.84
- CCMAP-200 77.84

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 COTW-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
 WATER LEVELS FOR LAKE MARION (USGS GAGING STATION #0211000) AND LAKE MOULTRIE (USGS GAGING STATION
 #0214355) WERE FOR JANUARY 23, 2023 AT 2:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT
https://waterdata.usgs.gov/sc/nwis/current/?type=flow&group_2_key=base_L&_lang=en
 $V = \frac{K}{L} \cdot \frac{H}{L}$
 V = AVERAGE LINEAR VELOCITY (ft./day)
 K = AVERAGE HYDRAULIC CONDUCTIVITY (ft./day)
 L = CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH
 K = 25 FEET PER DAY (ft./day)
 $n_p = 0.25$
 HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND
 POTENTIOMETRIC MAPS FOR PREPARED BY TALLEY AND ASSOCIATES.

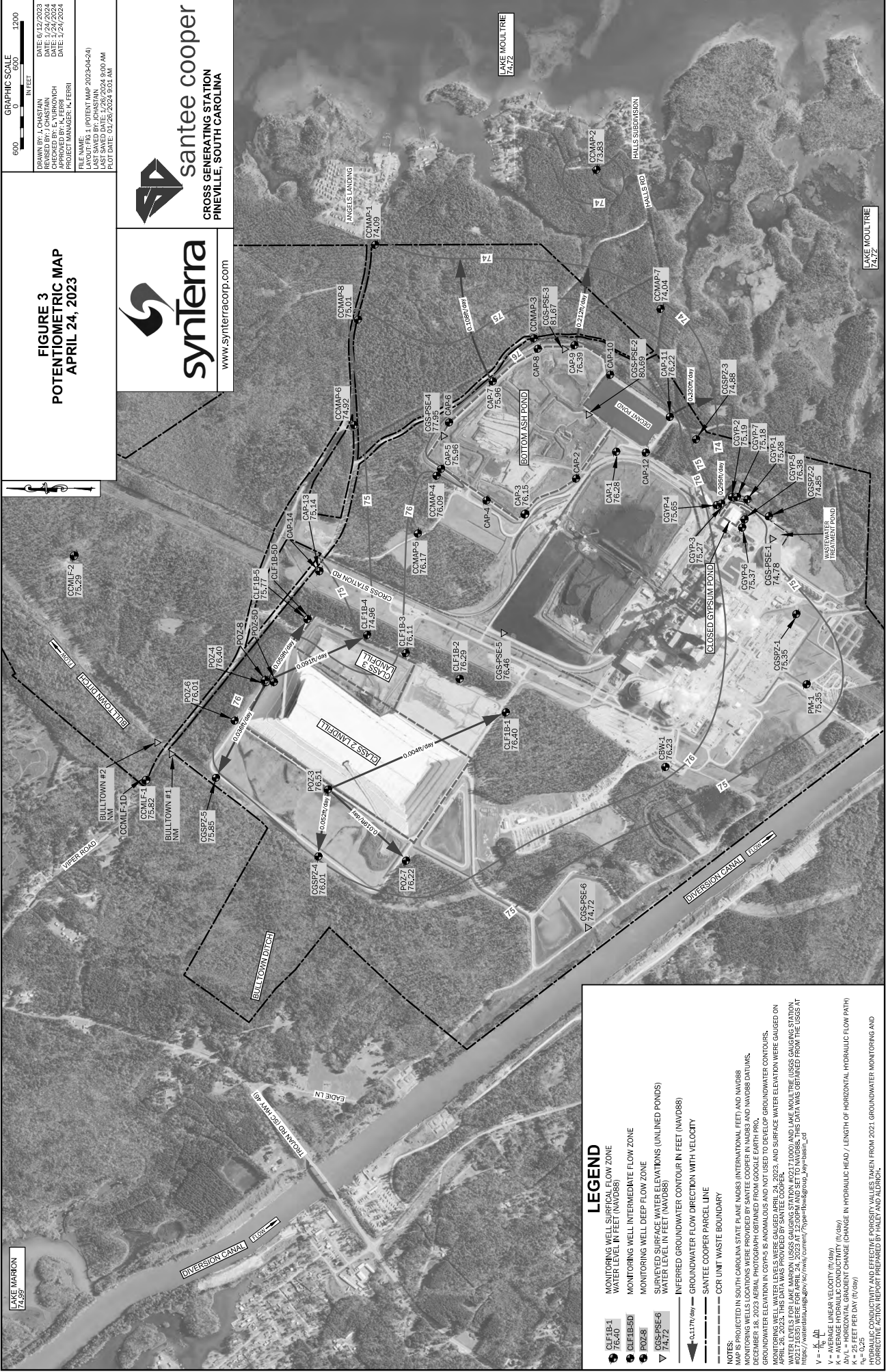
GRAPHIC SCALE
 600 9 1200
 IN FEET

DATE: 6/12/2023
 DRAWN BY: J. CHASTAIN
 CHECKED BY: E. VIKROVICH
 DATE: 1/24/2024
 APPROVED BY: J. FERRELL
 DATE: 1/24/2024
 TITLE NAME:
 LAYOUT FRG 1 (POTENTIAL MAP 2023-04-24)
 LAST SAVED BY: J. CHASTAIN
 DATE: 01/26/2024 9:00 AM
 PLOT DATE: 01/26/2024 9:01 AM

**FIGURE 3
 POTENTIOMETRIC MAP
 APRIL 24, 2023**



santee cooper
 CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA



LEGEND

- CLF-IB-1 MONITORING WELL SURFICIAL FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- CLF-IB-50 MONITORING WELL INTERMEDIATE FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- POZ-8 MONITORING WELL DEEP FLOW ZONE WATER LEVEL IN FEET (NAVD88)
- ▽ GSS-PSE-6 SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WATER LEVEL IN FEET (NAVD88)
- ◀ INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- ◀ GROUNDWATER FLOW DIRECTION WITH VELOCITY
- SANTEE COOPER PARCEL LINE
- CCR UNIT WASTE BOUNDARY

NOTES:
 1. DATA OBTAINED IN SOUTH CAROLINA STATE PLANE MASS INTERSECTIONAL FEET AND NAVD88 MONITORING WELLS LOCATIONS WERE PROVIDED BY Santee Cooper in accordance with a letter dated DECEMBER 18, 2023 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
 2. GROUNDWATER ELEVATION IN CCR-5 IS ANOMALOUS AND NOT USED TO DEVELOP GROUNDWATER CONTOURS.
 3. MONITORING WELL WATER LEVELS WERE GAUGED APRIL 24, 2023, AND SURFACE WATER ELEVATION WERE GAUGED ON WATER LEVELS FOR LAKE MARION (USGS GAGING STATION #02110000) AND LAKE MOULTRIE (USGS GAGING STATION #02115355) WERE FOR APRIL 24, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT https://waterdata.usgs.gov/nc/nwis/current/?parameter=flow&site=02110000_02115355
 $V = \frac{K}{L} \cdot \Delta H$
 V = AVERAGE LINEAR VELOCITY (ft./day)
 K = AVERAGE HYDRAULIC CONDUCTIVITY (ft./day)
 L = CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH
 K = 25 FEET PER DAY (ft./day)
 n_s = 0.25
 HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND COMPREHENSIVE GROUNDWATER REPORT PREPARED BY TALS AND ASSOCIATES.

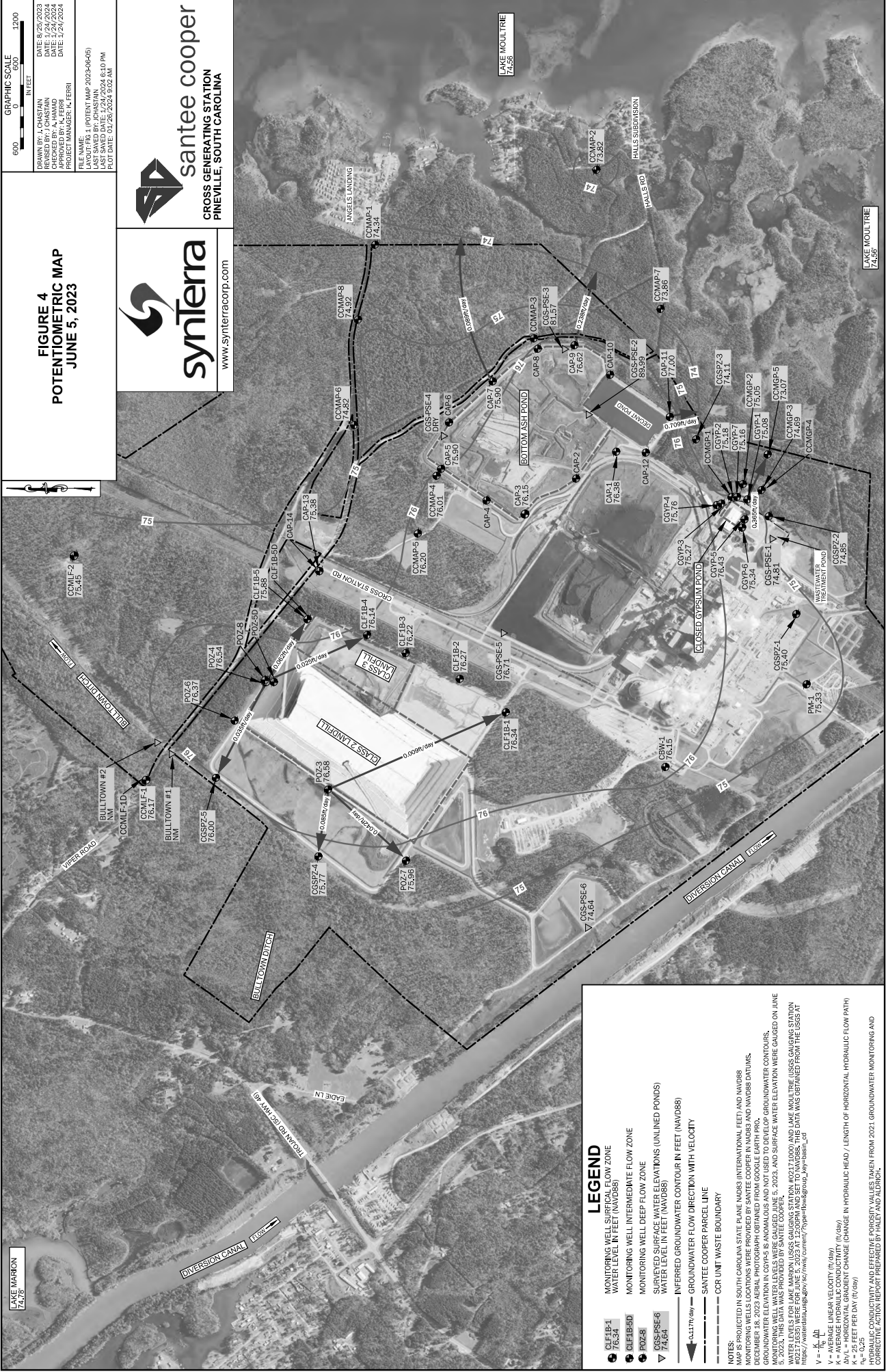
GRAPHIC SCALE
 600 9 1200
 IN FEET

DATE: 6/25/2023
 DRAWN BY: J. CHASTAIN
 CHECKED BY: A. HAMAD
 DATE: 1/24/2024
 APPROVED BY: J. FERRI
 DATE: 1/24/2024
 FILE NAME:
 LAYOUT FIG. 1 (POTENTIAL MAP 2023-06-05)
 LAST SAVED BY: J. CHASTAIN
 DATE: 6/25/2023 6:10 PM
 PLOT DATE: 01/26/2024 9:02 AM

**FIGURE 4
 POTENTIOMETRIC MAP
 JUNE 5, 2023**



santee cooper
 CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA



LEGEND


- CLFIB-1 76.54
- CLFIB-50 74.64
- POZ-8 76.54
- GSS-PSE-6 74.64
- 0.11 ft/day
- Santee Cooper Parcel Line
- CCR Unit Waste Boundary

NOTES:
 MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE (NAD83) (INTERNATIONAL FEET) AND NAVD88
 MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE (NAD83) (INTERNATIONAL FEET) AND NAVD88
 DECEMBER 18, 2023 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO
 GROUNDWATER ELEVATION IN COG-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
 WATER LEVELS FOR LAKE MARION (USGS GAGING STATION #02110000) AND LAKE MOULTRIE (USGS GAGING STATION
 #02116355) WERE FOR JUNE 6, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT
https://waterdata.usgs.gov/nc/nwis/current/?type=flow&group_key=mean_low
 $V = \frac{K}{L} \cdot H$
 $V =$ AVERAGE LINEAR VELOCITY (ft/day)
 $K =$ AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
 $L =$ CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH
 $n_p = 0.25$
 $K = 25$ FEET PER DAY (ft/day)
 HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND
 POTENTIOMETRIC MAPS FOR THIS PROJECT.


**FIGURE 5
POTENTIOMETRIC MAP
NOVEMBER 7, 2023**

GRAPHIC SCALE
600 9 1200
IN FEET

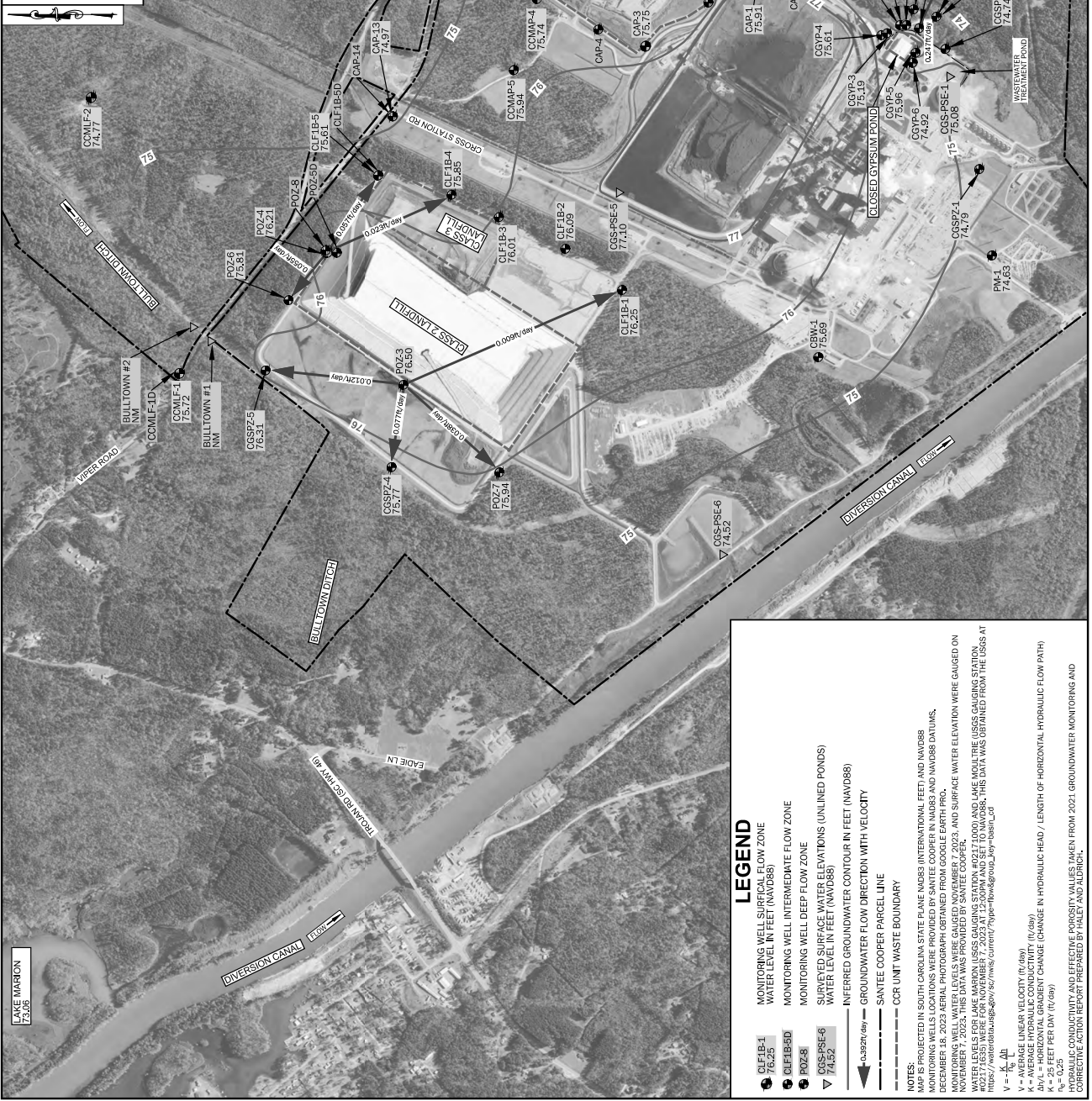
DATE: 12/19/2023
DRAWN BY: J. CHASTAIN
CHECKED BY: K. FERRI
DATE: 1/24/2024
APPROVED BY: K. FERRI
DATE: 1/24/2024
FILE NAME: POTENTIOMETRIC MAP
LAYOUT FIG. 1 (POTENT MAP 2023-11-07)
LAST SAVED BY: J. CHASTAIN
DATE: 01/26/2024 9:03 AM
PLOT DATE: 01/26/2024 9:03 AM



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santee cooper
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA



LEGEND

- CLF1B-1
76.29
MONITORING WELL SURFACE ELEVATION
WATER LEVEL IN FEET (NAVD88)
- CLF1B50
MONITORING WELL INTERMEDIATE FLOW ZONE
- POZ-8
MONITORING WELL DEEP FLOW ZONE
- ▽ GSS-PSE-6
74.52
SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS)
WATER LEVEL IN FEET (NAVD88)
- 0.0320 ft/day
INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- Santee Cooper Parcel Line
- Santee Cooper Waste Boundary

NOTES:
MONITORING WELLS LOCATED IN SOUTH CAROLINA STATE PLANE MDSB (INTERSECTION FEET AND INCHES)
MONITORING WELLS LOCATIONS WERE PROVIDED BY SANTEE COOPER IN MARCH AND NOVEMBER 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.
SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WERE OBTAINED FROM THE USGS AT
W021716351 WERE FOR NOVEMBER 7, 2023 AT 12:00PM AND SET TO NAVD88. THIS DATA WAS OBTAINED FROM THE USGS AT
https://waterdata.usgs.gov/nwis/current/?type=flow&group_key=bsn1_cd

$V = \frac{K}{L} \cdot \Delta H$
V = AVERAGE LINEAR VELOCITY (ft./day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft./day)
L = CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH
K = 25 FEET PER DAY (ft./day)
 $n_p = 0.25$

HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND
POTENTIOMETRIC MAPS FOR THE PINEVILLE WASTEWATER TREATMENT PLANT.

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. 132892-100-001-02

SUBJECT: Statistical Evaluation of the October 2022 Groundwater Detection Monitoring Data, Cross Generating Station, Class 3 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93 and §257.94 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the October 2022 detection monitoring event for the Cross Generating Station (CGS) Class 3 Landfill. Data for this groundwater sampling event were validated on December 15, 2022 by Santee Cooper.

BACKGROUND

The CGS Class 3 Landfill began receiving waste in December 2015. After completion of baseline sampling, the initial statistical analysis for the CGS Class 3 Landfill identified statistically significant increases (SSIs) above the Groundwater Protection Standards (GWPS) for Appendix III constituents in downgradient monitoring wells. Subsequently, an alternate source demonstration (ASD) completed in April 2018 concluded the closed Class 2 Landfill, which is immediately adjacent to the Class 3 Landfill, is the source for the Appendix III SSIs (boron, calcium, chloride, pH, sulfate, and total dissolved solids [TDS]). As a result, the Class 3 Landfill remained in detection monitoring. Intrawell statistical evaluations have been conducted for the Appendix III constituents since the ASD.

Recent analytical testing results were evaluated to determine if SSIs exist above the GWPS of Appendix III groundwater monitoring constituents. Using intrawell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to background values.

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 SSI of Appendix III parameters compared to background groundwater quality of the CCR Unit. The intrawell evaluation compares the most recent values from each compliance well against a background dataset composed of its own historical data.

To statistically evaluate the analytical results, the background upper prediction limit (UPL), which is a type of prediction interval method, was selected to evaluate the Appendix III data, and additionally, the lower prediction limit (LPL) was selected to evaluate the pH. The prediction interval method is one of the options outlined in the Rule. A prediction interval procedure establishes a concentration limit for each constituent from the distribution of the background data, with a specified confidence level (e.g., 95 percent). The upper endpoint of a concentration limit is termed the UPL, and the lower endpoint of a concentration limit is called the LPL. Depending on the background data distribution, parametric or non-

parametric prediction limits procedures are used to evaluate groundwater monitoring data using this method. Parametric prediction limits use normally distributed data or normalized data via transformation of the sample background data.

If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the prediction limit. If all the background data are non-detect, a maximum reporting limit (RL) may serve as an approximate UPL. We note that depending on the available sample size, UPLs generated from non-parametric or maximum reporting limits may not achieve the same target statistical confidence limits of the parametric UPLs.

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 January 2021. The background dataset will be updated again after the 2023 first semiannual sampling event, 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, 55 percent of trends analyzed are identified as stable or decreasing in the compliance wells, whereas 13 percent of compliance wells with a SSI also demonstrated increasing trends for boron and chloride. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSI. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX III DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix III constituent detections from downgradient well samples were compared to their respective GWPS (Table I) using intrawell comparisons. SSIs for the following were identified:

- Boron SSIs for CLF1B-3 and CLF1B-5
- Chloride SSIs for CLF1B-2 and CLF1B-4

Even though boron in CLF1B-5 showed a SSI for the intrawell statistical evaluation, the analytical concentration is not a SSI when evaluated using interwell statistical analysis. Fluoride was not considered a SSI during the October 2022 event.

As noted in the 2018 ASD, groundwater flow velocity in the uppermost aquifer near the Class 2 and Class 3 Landfills is approximately 30 feet per year. The distance between the eastern edge of the Class 2 Landfill and the Class 3 Landfill monitoring well network varies from 500 to 800 feet, representing between approximately 17 and 27 years for a release from the Class 2 Landfill to reach the Class 3 Landfill monitoring wells. The Class 2 Landfill began receiving waste over 40 years ago. Appendix III constituent leaching was expected to subside when closure (June 2016) and water management improvements (January 2020) were completed for the Class 2 Landfill. However, based on the calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells until 2043.

South Carolina Public Service Authority (Santee Cooper)

March 14, 2023

Page 3

Historical trends in concentrations will continue to be evaluated during subsequent sampling events. To further support the 2018 ASD findings and evaluate the fluoride SSI from the June 2022 groundwater monitoring event, another ASD is in progress for the Class 3 Landfill. Based on these results, the Class 3 Landfill will continue in detection monitoring.

Enclosures:

Table I – CGS Class 3 Landfill October 2022 Detection Monitoring Data

\\haleyaldrich.com\share\grn_common\131539 - Santee Cooper\Cross Generating Station\Statistical Analysis\2022-10\Class 3 Landfill\2023_0314_HAI_CGS_Class 3 Landfill Statistical Evaluation_F.docx

TABLE



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TECHNICAL MEMORANDUM

August 21, 2023

File No. 132892-100-001-02

SUBJECT: Statistical Evaluation of the January 2023 Groundwater Detection Monitoring Data, Cross Generating Station, Class 3 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93 and §257.94 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the January 2023 detection monitoring event for the Cross Generating Station (CGS) Class 3 Landfill. Data for this groundwater sampling event were validated on May 23, 2023 by Santee Cooper.

BACKGROUND

The CGS Class 3 Landfill began receiving waste in December 2015. After completion of baseline sampling, the initial statistical analysis for the CGS Class 3 Landfill identified statistically significant increases (SSIs) above the Groundwater Protection Standards (GWPS) for Appendix III constituents in downgradient monitoring wells. Subsequently, alternate source demonstrations (ASDs) completed in April 2018 and March 2023 concluded the closed Class 2 Landfill and former temporary gypsum marketing areas, which are adjacent to the Class 3 Landfill, are the source for the Appendix III SSIs (boron, calcium, chloride, pH, sulfate, and total dissolved solids [TDS]) as opposed to the Class 3 Landfill. As a result, the Class 3 Landfill remained in detection monitoring. Intrawell statistical evaluations have been conducted for the Appendix III constituents since the 2018 ASD.

Recent analytical testing results were evaluated to determine if SSIs exist above the GWPS of Appendix III groundwater monitoring constituents. Using intrawell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to background values.

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 SSI of Appendix III parameters compared to background groundwater quality of the CCR Unit. The intrawell evaluation compares the most recent values from each compliance well against a background dataset composed of its own historical data.

To statistically evaluate the analytical results, the background upper prediction limit (UPL), which is a type of prediction interval method, was selected to evaluate the Appendix III data, and additionally, the lower prediction limit (LPL) was selected to evaluate the pH. The prediction interval method is one of the options outlined in the Rule. A prediction interval procedure establishes a concentration limit for each constituent from the distribution of the background data, with a specified confidence level (e.g., 95 percent). The upper endpoint of a concentration limit is termed the UPL, and the lower endpoint of a

concentration limit is called the LPL. Depending on the background data distribution, parametric or non-parametric prediction limits procedures are used to evaluate groundwater monitoring data using this method. Parametric prediction limits use normally distributed data or normalized data via transformation of the sample background data.

If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the prediction limit. If all the background data are non-detect, a maximum reporting limit (RL) may serve as an approximate UPL. We note that depending on the available sample size, UPLs generated from non-parametric or maximum reporting limits may not achieve the same target statistical confidence limits of the parametric UPLs.

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 January 2023 and updated in the Chemstat output. The background dataset will be updated in the summary table again after four additional data points are collected (first 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, 55 percent of trends analyzed are identified as stable or decreasing in the compliance wells, whereas 13 percent of compliance wells demonstrated increasing trends for one or more Appendix III constituents. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSI. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX III DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix III constituent detections from downgradient well samples were compared to their respective GWPS (Table I) using intrawell comparisons. No SSIs were identified.

The 2018 and 2023 ASDs state that impacts from the Class 2 Landfill, which began receiving waste over 40 years ago, and historic temporary gypsum marketing areas are likely contributing to the ongoing Appendix III constituent concentrations observed in downgradient monitoring wells. Based on calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells until 2043.

Trends in concentrations will continue to be evaluated during subsequent sampling events. Based on these results, the Class 3 Landfill will continue in detection monitoring.

Enclosures:

Table I – CGS Class 3 Landfill January 2023 Detection Monitoring Data

TABLE

TABLE I
CGS CLASS 3 LANDFILL
JANUARY 2023 DETECTION 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 (I/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	January 2023 Concentration (mg/L)	Detect?	Intrawell Analysis	
																					Background Limit (Upper Prediction Limit)	SSI
CCR Appendix-III: Boron, Total (mg/L)																						
CBW-1	2/2/22	9%	0.015-0.04	0.0215	0.02015	0.03191	0.032	0.0000392	0.006181	0.2871	NA	mg/L	N	0	0	No	No	Decreasing				
PM-1	12/22	45%	0.015-0.02	0.0186	0.015	0.04256	0.049	0.0000866	0.009306	0.4997	NA	mg/L	N	0	0	Yes	No	Stable				
CLFIB-1	5/22	77%	0.015-0.015	0.0147	0.015	0.00001367	0.016	0.000001367	0.001169	0.07964	NA	mg/L	N	0	0	Yes	No	NA	0.0142	Y	0.016	No
CLFIB-2	19/22	14%	0.015-0.015	0.018	0.0165	0.02019	0.0398	0.0000269	0.005186	0.2886	NA	mg/L	N	0	0	Yes	No	Stable	0.0199	Y	0.040	No
CLFIB-3	22/22	0%	-	0.0497	0.04085	0.118	0.14	0.0009706	0.03115	0.6274	NA	mg/L	N	0	0	Yes	No	Increasing	0.0672	Y	0.140	No
CLFIB-4	22/22	0%	-	0.0206	0.0195	0.02719	0.0292	0.00001453	0.003812	0.1854	NA	mg/L	N	0	0	No	No	Stable	0.0215	Y	0.029	No
CLFIB-5	18/22	18%	0.015-0.015	0.0177	0.01625	0.02437	0.026	0.00001065	0.003263	0.184	NA	mg/L	N	0	0	Yes	No	Increasing	0.0237	Y	0.026	No
CCR Appendix-III: Calcium, Total (mg/L)																						
CBW-1	22/22	0%	-	27.2	27.25	29.88	42.2	17.73	4.21	0.1548	NA	mg/L	N	0	0	Yes	No	Increasing				
PM-1	23/23	0%	-	16.9	15.9	26.9	37	41.5	6.442	0.3819	NA	mg/L	N	0	0	No	No	Decreasing				
CLFIB-1	21/21	0%	-	176	175	189	191	64.53	8.033	0.04573	NA	mg/L	N	0	0	No	No	Stable	188	Y	201.22	No
CLFIB-2	21/21	0%	-	138	135	152	210	338	18.38	0.1337	NA	mg/L	N	0	0	Yes	No	Stable	147	Y	210.00	No
CLFIB-3	20/20	0%	-	181	184	230.7	244	1691	41.12	0.2277	NA	mg/L	N	0	0	Yes	No	Increasing	208	Y	321.98	No
CLFIB-4	21/21	0%	-	108	103	140	180	565.7	23.78	0.2199	NA	mg/L	N	0	0	Yes	No	Increasing	133	Y	187.27	No
CLFIB-5	22/22	0%	-	240	256	288.5	290	1582	39.78	0.1659	NA	mg/L	N	0	0	No	No	Increasing	289	Y	369.16	No
CCR Appendix-III: Chloride (mg/L)																						
CBW-1	23/23	0%	-	2.98	2.96	3.746	3.79	0.1389	0.3726	0.1249	NA	mg/L	N	0	0	No	No	Increasing				
PM-1	23/23	0%	-	12.6	12.7	13.4	13.5	0.3155	0.5617	0.04463	NA	mg/L	N	0	0	No	No	Stable				
CLFIB-1	22/22	0%	-	38.2	38.8	42.17	42.4	8.131	2.852	0.07473	NA	mg/L	N	0	0	No	No	Stable	33.9	Y	47.63	No
CLFIB-2	22/22	0%	-	75.5	75.9	89.23	90.2	132.7	11.52	0.1525	NA	mg/L	N	0	0	Yes	No	Increasing	86.9	Y	113.75	No
CLFIB-3	22/22	0%	-	26.6	23.55	33.94	81.2	160.1	12.65	0.4755	NA	mg/L	N	0	0	Yes	No	Stable	19.3	Y	81.20	No
CLFIB-4	22/22	0%	-	66.9	53.75	99.88	100	435.1	20.86	0.312	NA	mg/L	N	0	0	No	No	Increasing	93.5	Y	100.00	No
CLFIB-5	23/23	0%	-	129	120	173.4	180	745.6	27.31	0.2117	NA	mg/L	N	0	0	No	No	Increasing	157	Y	218.71	No
CCR Appendix-III: Fluoride (mg/L)																						
CBW-1	20/21	5%	0.1-0.1	0.212	0.2	0.29	0.3	0.002486	0.00986	0.2353	4	mg/L	N	0	0	No	No	Decreasing				
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				
CLFIB-1	11/21	48%	0.1-0.1	0.12	0.11	0.17	0.19	0.00067	0.02588	0.2157	4	mg/L	N	0	0	Yes	No	Stable	0.1	N	0.19	No
CLFIB-2	6/21	71%	0.1-0.1	0.108	0.1	0.14	0.16	0.0002662	0.01632	0.1509	4	mg/L	N	0	0	Yes	No	NA	0.1	N	0.16	No
CLFIB-3	13/21	38%	0.1-0.1	0.123	0.12	0.15	0.2	0.0006514	0.02572	0.2093	4	mg/L	N	0	0	Yes	No	Stable	0.1	N	0.20	No
CLFIB-4	3/21	86%	0.1-0.1	0.103	0.1	0.12	0.13	0.00006143	0.007838	0.0762	4	mg/L	N	0	0	Yes	No	NA	0.1	N	0.13	No
CLFIB-5	3/21	86%	0.1-0.1	0.104	0.1	0.12	0.15	0.0001348	0.01161	0.1118	4	mg/L	N	0	0	Yes	No	NA	0.1	N	0.15	No
CCR Appendix-III: pH, Field (pH units)																						
CBW-1	23/23	0%	-	4.31	4.31	4.498	4.5	0.01566	0.1251	0.02905	NA	pH units	N	0	0	No	No	Stable				
PM-1	28/28	0%	-	5.11	5.18	5.47	5.58	0.05755	0.2399	0.04691	NA	pH units	N	0	0	No	No	Stable				
CLFIB-1	22/22	0%	-	6.62	6.615	6.818	6.84	0.01653	0.1286	0.01943	NA	pH units	N	0	0	No	No	Stable	6.62	Y	6.14, 7.09	No
CLFIB-2	22/22	0%	-	6.89	6.885	7.08	7.09	0.01522	0.1234	0.01791	NA	pH units	N	0	0	No	No	Stable	6.77	Y	6.45, 7.34	No
CLFIB-3	22/22	0%	-	6.69	6.695	6.82	6.94	0.0135	0.1162	0.01737	NA	pH units	N	0	0	No	No	Stable	6.61	Y	6.27, 7.12	No
CLFIB-4	22/22	0%	-	7.1	7.055	7.364	7.38	0.01947	0.1395	0.01964	NA	pH units	N	0	0	No	No	Decreasing	7.02	Y	6.6, 7.62	No
CLFIB-5	23/23	0%	-	6.6	6.64	6.76	6.83	0.05918	0.2433	0.03687	NA	pH units	N	0	0	Yes	No	Decreasing	6.58	Y	6.47, 6.83	No
CCR Appendix-III: Sulfate (mg/L)																						
CBW-1	23/23	0%	-	79.7	79.8	89.91	115	104.8	10.24	0.1285	NA	mg/L	N	0	0	Yes	No	Stable				
PM-1	23/23	0%	-	12.2	9.98	24.97	26.5	31.25	5.59	0.4586	NA	mg/L	N	0	0	No	No	Decreasing				
CLFIB-1	22/22	0%	-	140	136	153.9	159	91.66	9.574	0.06836	NA	mg/L	N	0	0	No	No	Stable	136	Y	173.10	No
CLFIB-2	22/22	0%	-	14.5	13.8	19.44	22.4	5.811	2.411	0.1659	NA	mg/L	N	0	0	Yes	No	Stable	14.5	Y	22.40	No
CLFIB-3	22/22	0%	-	176	175.5	348.5	355	8916	94.43	0.3377	NA	mg/L	N	0	0	No	No	Increasing	246	Y	493.24	No
CLFIB-4	22/22	0%	-	18	16.2	30.88	34.3	35.16	5.929	0.3288	NA	mg/L	N	0	0	Yes	No	Stable	16.5	Y	34.30	No
CLFIB-5	23/23	0%	-	183	203	276.6	291	6211	78.81	0.4318	NA	mg/L	N	0	0	No	No	Increasing	257	Y	442.72	No

TABLE I
CGS CLASS 3 LANDFILL
JANUARY 2023 DETECTION 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	January 2023 Concentration (mg/L)	Detect?	Intrawell Analysis	
																					Background Limit (Upper Prediction Limit)	SSI
GNW-1	22/23	4%	40-40	125	132	176.1	181.2	1091	33.03	0.2654	NA	mg/L	N	0	0	Yes	No	Stable				
PM-1	26/27	4%	40-40	130	130	200	206	1531	39.13	0.3004	NA	mg/L	N	0	0	No	No	Stable				
CLFIB-1	22/22	0%	-	586	582.8	647.9	651.7	1176	34.29	0.05847	NA	mg/L	N	0	0	No	No	Stable	635	Y	696.35	No
CLFIB-2	22/22	0%	-	489	485.9	579.6	597.5	3765	61.36	0.1255	NA	mg/L	N	0	0	No	No	Increasing	580	Y	684.02	No
CLFIB-3	22/22	0%	-	802	629.6	835.2	535.5	1057000	1028	1.283	NA	mg/L	N	0	0	Yes	No	Stable	637.5	Y	5355.00	No
CLFIB-4	22/22	0%	-	398	382	552.5	553.8	8016	89.53	0.2248	NA	mg/L	N	0	0	No	No	Increasing	552.5	Y	675.85	No
CLFIB-5	23/23	0%	-	931	935	1174	1222	35340	188	0.2018	NA	mg/L	N	0	0	Yes	No	Increasing	1222	Y	1523.24	No



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TECHNICAL MEMORANDUM

December 12, 2023

File No. 132892-100-001-02

SUBJECT: Statistical Evaluation of the June 2023 Groundwater Detection Monitoring Data, Cross Generating Station, Class 3 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93 and §257.94 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the June 2023 detection monitoring event for the Cross Generating Station (CGS) Class 3 Landfill. Data for this groundwater sampling event were validated on September 13, 2023 by Santee Cooper.

BACKGROUND

The CGS Class 3 Landfill began receiving waste in December 2015. After completion of baseline sampling, the initial statistical analysis for the CGS Class 3 Landfill identified statistically significant increases (SSIs) above the Groundwater Protection Standards (GWPS) for Appendix III constituents in downgradient monitoring wells. Subsequently, alternate source demonstrations (ASDs) completed in April 2018 and March 2023 concluded the closed Class 2 Landfill and former temporary gypsum marketing areas, which are adjacent to the Class 3 Landfill, are the source for the Appendix III SSIs (boron, calcium, chloride, pH, sulfate, and total dissolved solids [TDS]) as opposed to the Class 3 Landfill. As a result, the Class 3 Landfill remained in detection monitoring. Intrawell statistical evaluations have been conducted for the Appendix III constituents since the 2018 ASD.

Recent analytical testing results were evaluated to determine if SSIs exist above the GWPS of Appendix III groundwater monitoring constituents. Using intrawell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to background values.

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 SSI of Appendix III parameters compared to background groundwater quality of the CCR Unit. The intrawell evaluation compares the most recent values from each compliance well against a background dataset composed of its own historical data.

To statistically evaluate the analytical results, the background upper prediction limit (UPL), which is a type of prediction interval method, was selected to evaluate the Appendix III data, and additionally, the lower prediction limit (LPL) was selected to evaluate the pH. The prediction interval method is one of the options outlined in the Rule. A prediction interval procedure establishes a concentration limit for each constituent from the distribution of the background data, with a specified confidence level (e.g., 95 percent). The upper endpoint of a concentration limit is termed the UPL, and the lower endpoint of a

concentration limit is called the LPL. Depending on the background data distribution, parametric or non-parametric prediction limits procedures are used to evaluate groundwater monitoring data using this method. Parametric prediction limits use normally distributed data or normalized data via transformation of the sample background data.

If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the prediction limit. If all the background data are non-detect, a maximum reporting limit (RL) may serve as an approximate UPL. We note that depending on the available sample size, UPLs generated from non-parametric or maximum reporting limits may not achieve the same target statistical confidence limits of the parametric UPLs.

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 the summary table again after four additional data points are collected (first 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, 55 percent of trends analyzed are identified as stable or decreasing in the compliance wells, whereas 45 percent of compliance wells demonstrated increasing trends for one or more Appendix III constituents. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSI. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX III DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix III constituent detections from downgradient well samples were compared to their respective GWPS (Table I) using intrawell comparisons. One SSI was identified for boron at CLF1B-3 which corresponds to observed increasing concentrations in downgradient wells as discussed in the 2018 and 2023 ASDs. Findings of the most recent ASD conclude SSIs identified in 2022 were the result of physical and pre-existing alternative sources, specifically the CGS Class 2 Landfill, which began receiving waste 40 years ago, and possible residual impacts from temporary gypsum marketing storage areas which no longer exist. Based on calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells until 2043.

Trends in concentrations will continue to be evaluated during subsequent sampling events. Based on these results, the Class 3 Landfill will continue in detection monitoring.

Enclosures:

Table I – CGS Class 3 Landfill June 2023 Detection Monitoring Data

TABLE

Appendix B – Laboratory Analytical Results

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	
Dissolved 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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

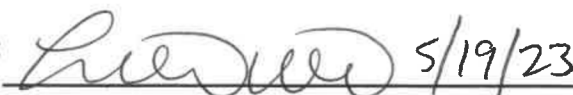
Sample # AF54600 **Location:** GW Well PM-1 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM
Loc. Code PM-1 **Time:** 10:18

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

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	
Dissolved 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

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 Exceeded; J-Value is Estimated; M-Matrix Interference; F1-MS and/or MSD failure

Analysis Validated:


Linda Williams - Manager Analytical Services

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54593 **Location:** GW Well CLF1B-1 **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-1 **Time:** 09:38

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	311	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	311	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	14.2	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	127	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	130	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	188	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	180	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	33.9	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	1.98	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	1.9	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	665	uS	01/26/2023	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	6.29	Feet	01/26/2023	ZDM/BSB	
Dissolved Oxygen	0.980	ppm	01/26/2023	ZDM/BSB	
Dissolved Organic Carbon	3.81	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.47	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	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Potassium Dissolved	<1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Lithium	12.5	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	14.6	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	3.05	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	3.01	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	77.8	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	76.7	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	23.3	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	22.8	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54593 **Location:** GW Well CLF1B-1 **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-1 **Time:** 09:38

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	104	mv	01/26/2023	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	6.62	SU	01/26/2023	ZDM/BSB	
Radium 226	0.358	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	1.06	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.42	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	136	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	635.0	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	17.12	C	01/26/2023	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	2.93	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	0	NTU	01/26/2023	ZDM/BSB	
Zinc	25.3	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	25.7	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:



 Linda Williams - Manager Analytical Services

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54594 **Location:** GW Well CLF1B-1 **Date:** 01/26/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-1 **DUP** **Time:** 09:43

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	313	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	313	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	14.0	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	135	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	125	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	178	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	37.3	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	2.25	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	2.0	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
Dissolved Organic Carbon	3.61	mg/L	02/02/2023	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	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	12.6	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Lithium Dissolved	15.7	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	3.25	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	2.96	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	91.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	84.7	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	26.0	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	23.7	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	02/17/2023	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
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	0.354	pCi/L	02/22/2023	GEL	EPA 903.1 Mod

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54594 Location: GW Well CLF1B-1 Date: 01/26/2023 Sample Collector: ZDM/MDG
Loc. Code CLF1B-1 DUP Time: 09:43

Analysis	Result	Units	Test Date	Analyst	Method
Radium 228	1.08	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.43	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	132	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	606.2	mg/L	02/02/2023	KCWELLS	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	2.44	mg/L	01/31/2023	GEL	SM 5310B
Zinc	96.1	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Zinc Dissolved	61.4	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54595 **Location:** GW Well CLF1B-2 **Date:** 01/25/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-2 **Time:** 11:00

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	258	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	258	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	19.9	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	177	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	186	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	147	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	156	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	86.9	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	1.85	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	1.9	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	577	uS	01/25/2023	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	4.66	Feet	01/25/2023	ZDM/BSB	
Dissolved Oxygen	0.760	ppm	01/25/2023	ZDM/BSB	
Dissolved Organic Carbon	2.84	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.38	Feet	02/17/2023	ZDMCHENR	
Iron	165	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	105	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	2.25	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	2.45	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	85.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	89.3	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	10.6	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	11.8	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54595 **Location:** GW Well CLF1B-2 **Date:** 01/25/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-2 **Time:** 11:00

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	42.0	mv	01/25/2023	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	6.77	SU	01/25/2023	ZDM/BSB	
Radium 226	0.638	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	1.37	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.01	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	14.5	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	580.0	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	19.24	C	01/25/2023	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	1.12	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	0	NTU	01/25/2023	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, "ROGERSNALLC"-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: 
 Linda Williams - Manager Analytical Services

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54596 **Location:** GW Well CLF1B-3 **Date:** 01/25/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-3 **Time:** 09:54

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	252	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	252	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	67.2	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	64.5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	67.3	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	208	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	202	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	19.3	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	19.1	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	17.6	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	679	uS	01/25/2023	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	5.23	Feet	01/25/2023	ZDM/BSB	
Dissolved Oxygen	0.420	ppm	01/25/2023	ZDM/BSB	
Dissolved Organic Carbon	3.43	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.52	Feet	02/17/2023	ZDMCHENR	
Iron	2140	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	174	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	6.7	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	5.53	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	5.20	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	547	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	504	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	9.88	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	9.02	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552


Sample # AF54596 **Location:** GW Well CLF1B-3 **Date:** 01/25/2023 **Sample Collector:** ZDM/MDG
Loc. Code CLF1B-3 **Time:** 09:54

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	31.0	mv	01/25/2023	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	6.61	SU	01/25/2023	ZDM/BSB	
Radium 226	0.364	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	0.906	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.27	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	246	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	637.5	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	18.85	C	01/25/2023	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	2.09	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	7.00	NTU	01/25/2023	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54597 **Location:** GW Well CLF1B-4 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM
Loc. Code CLF1B-4 **Time:** 15:40

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	02/02/2023	GEL	SM2320B
Alkalinity	197	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	197	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	21.5	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	56.6	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	57.5	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	133	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	136	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	93.5	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.	504	uS	01/24/1934	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	5.16	Feet	01/24/1934	ZDM/BSB	
Dissolved Oxygen	1.63	ppm	01/24/1934	ZDM/BSB	
Dissolved Organic Carbon	2.54	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.58	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	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	3.21	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	3.30	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	<5	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	<5	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	12.6	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	12.9	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54597 **Location:** GW Well CLF1B-4 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM
Loc. Code CLF1B-4 **Time:** 15:40

Analysis	Result	Units	Test Date	Analyst	Method
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	263	mv	01/24/1934	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	7.02	SU	01/24/1934	ZDM/BSB	
Radium 226	0.518	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	-0.247	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.518	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	16.5	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	552.5	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	20.29	C	01/24/1934	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	1.04	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	0	NTU	01/24/1934	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: 

 Linda Williams - Manager Analytical Services

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF54598 **Location:** GW Well CLF1B-5 **Date:** 01/24/2023 **Sample Collector:** MDG/CDM
Loc. Code CLF1B-5 **Time:** 13:27

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	<6.67	mg/L	02/02/2023	GEL	SM2320B
Alkalinity	286	mg/L	02/02/2023	GEL	SM 2320B
Bicarbonate Alkalinity	286	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	23.7	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Barium	109	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Barium Dissolved	108	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	289	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Calcium Dissolved	283	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	157	mg/L	01/28/2023	KCWELLS	EPA 300.0
Cobalt	2.24	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Cobalt Dissolved	2.2	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Spec. Cond.	1080	uS	01/24/2023	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	3.46	Feet	01/24/2023	ZDM/BSB	
Dissolved Oxygen	0.860	ppm	01/24/2023	ZDM/BSB	
Dissolved Organic Carbon	3.00	mg/L	02/02/2023	GEL	SM 5310B
Elevation	77.63	Feet	02/17/2023	ZDMCHENR	
Iron	928	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Iron - Dissolved	617	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	5.9	ug/L	03/08/2023	SJHATCHE	EPA 6010D
Magnesium	5.01	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Magnesium Dissolved	4.99	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese	169	ug/L	02/17/2023	EUROFINS SAV	EPA 6020B
Manganese Dissolved	164	ug/l	02/17/2023	EUROFINS SAV	EPA 6020B
Molybdenum	<5.00	ug/L	03/02/2023	SJHATCHE	EPA 6010D
Sodium	21.1	mg/l	02/17/2023	EUROFINS SAV	EPA 6020B
Sodium Dissolved	21.1	mg/L	02/17/2023	EUROFINS SAV	EPA 6020B

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

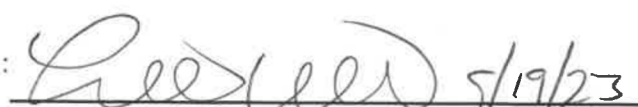
Sample # AF54598 Location: GW Well CLF1B-5 Date: 01/24/2023 Sample Collector: MDG/CDM
Loc. Code CLF1B-5 Time: 13:27

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	01/28/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	01/28/2023	KCWELLS	EPA 300.0
Oxidation Reduction Potential	63.0	mv	01/24/2023	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	6.58	SU	01/24/2023	ZDM/BSB	
Radium 226	0.507	pCi/L	02/22/2023	GEL	EPA 903.1 Mod
Radium 228	-0.766	pCi/L	02/23/2023	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.507	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	257	mg/L	01/28/2023	KCWELLS	EPA 300.0
Sulfide	<0.1	mg/L	01/31/2023	GEL	EPA 9034
Total Dissolved Solids	1222	mg/L	02/02/2023	KCWELLS	SM 2540C
Temp	18.31	C	01/24/2023	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	1.63	mg/L	01/31/2023	GEL	SM 5310B
Turbidity	0	NTU	01/24/2023	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: 
Linda Williams - Manager Analytical Services

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
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
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
Selenium	<10.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Zinc	13.3	ug/L	07/26/2023	LCWILLIA	EPA 6020B
Boron	18.4	ug/L	07/05/2023	SKJACOBS	EPA 6010D
Total Organic Carbon	5.69	mg/L	06/14/2023	GEL	SM 5310B
Chloride	12.4	mg/L	06/06/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	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
pH	5.08	SU	06/05/2023	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:  Final Validation Date: 8/28/23
Linda Williams - Manager, Analytical Services

SANTEE COOPER ANALYTICAL SERVICES
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
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
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
Selenium	<10.0	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Lead	2.55	ug/L	07/06/2023	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Boron	836	ug/L	07/05/2023	SKJACOBS	EPA 6010D
Total Organic Carbon	2.17	mg/L	06/14/2023	GEL	SM 5310B
Chloride	3.73	mg/L	06/13/2023	KCWELLS	EPA 300.0
Nitrate	1.49	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
pH	4.34	SU	06/06/2023	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF66432 Location: GW Well CLF1B-1 Date: 06/12/2023 Sample Collector: WJK/ML
Loc. Code CLF1B-1 Time: 09:11

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/07/2023	SKJACOBS	EPA 6020B
Barium	119	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	1.7	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	52.4	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Boron	11.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Total Organic Carbon	2.33	mg/L	06/20/2023	GEL	SM 5310B
Chloride	33.6	mg/L	06/15/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	141	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	608.8	mg/L	06/14/2023	KCWELLS	SM 2540C
pH	6.50	SU	06/12/2023	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552
Sample # AF66433 **Location:** GW Well CLF1B-1 **Date:** 06/12/2023 **Sample Collector:** WJK/ML

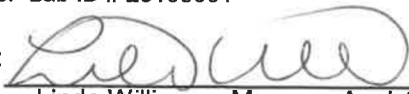
Loc. Code CLF1B-1 **DUP** **Time:** 09:16

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/07/2023	SKJACOBS	EPA 6020B
Barium	126	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Calcium	180	mg/L	08/03/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	1.7	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	52.8	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Boron	<10.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Zinc	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Total Organic Carbon	2.30	mg/L	06/22/2023	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	33.6	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	123	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	595.0	mg/L	06/14/2023	KCWELLS	SM 2540C

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

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF66434 **Location:** GW Well CLF1B-2 **Date:** 06/12/2023 **Sample Collector:** WJK/ML
Loc. Code CLF1B-2 **Time:** 10:14

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/07/2023	SKJACOBS	EPA 6020B
Barium	171	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	2.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	268	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Boron	<10.0	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Total Organic Carbon	1.06	mg/L	06/21/2023	GEL	SM 5310B
Chloride	89.8	mg/L	06/15/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	14.6	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	661.2	mg/L	06/14/2023	KCWELLS	SM 2540C
pH	6.83	SU	06/12/2023	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF66435 **Location:** GW Well CLF1B-3 **Date:** 06/12/2023 **Sample Collector:** WJK/ML
Loc. Code CLF1B-3 **Time:** 11:06

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Arsenic Dissolved	<5.0	ug/L	08/07/2023	SKJACOBS	EPA 6020B
Barium	70.9	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	10.9	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	8410	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	08/03/2023	SKJACOBS	EPA 6020B
Boron	181	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Total Organic Carbon	2.98	mg/L	06/21/2023	GEL	SM 5310B
Chloride	15.6	mg/L	06/15/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	380	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	898.8	mg/L	06/14/2023	KCWELLS	SM 2540C
pH	6.67	SU	06/12/2023	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:  Final Validation Date: 8/28/23
 Linda Williams - Manager, Analytical Services

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF66436 **Location:** GW Well CLF1B-4 **Date:** 06/12/2023 **Sample Collector:** WJK/ML
Loc. Code CLF1B-4 **Time:** 12:12

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	55.5	ug/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	<50.0	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	25.6	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Total Organic Carbon	<1	mg/L	06/21/2023	GEL	SM 5310B
Chloride	98.3	mg/L	06/15/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	20.4	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	607.5	mg/L	06/20/2023	NTCHIN	SM 2540C
pH	6.99	SU	06/12/2023	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

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AF66437 **Location:** GW Well CLF1B-5 **Date:** 06/12/2023 **Sample Collector:** WJK/ML
Loc. Code CLF1B-5 **Time:** 13:36

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	114	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Cobalt	3.9	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/01/2023	SKJACOBS	EPA 6020B
Iron	2050	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	25.2	ug/L	07/26/2023	LCWILLIA	EPA 6010D
Total Organic Carbon	1.69	mg/L	06/21/2023	GEL	SM 5310B
Chloride	167	mg/L	06/15/2023	KCWELLS	EPA 300.0
Nitrate	<0.10	mg/L	06/15/2023	KCWELLS	EPA 300.0
Sulfate	249	mg/L	06/15/2023	KCWELLS	EPA 300.0
Total Dissolved Solids	1280	mg/L	06/14/2023	KCWELLS	SM 2540C
pH	6.66	SU	06/12/2023	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



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 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

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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: 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

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: 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

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: 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

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: 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

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: 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

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: 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

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: 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

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 24, 2023

Page 1 of 2

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			U	0.258	pCi/L	65.6		(0% - 100%)	LXP1	02/22/23	11:38
	Uncertainty			+/-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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 608830

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

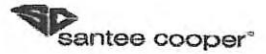
Miscellaneous Information

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.



Chain of Custody

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:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LCWILLIA @santecooper.com

125915 / JM02.08.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	TOC / DOC	TOTAL BICARB ALK	SULFIDE	*TOTAL CHL. RAD 226/228
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	MDS CDM	6	G+ P	G	GW	*		2	1	2	
AF54597	CLFIB-4		1540							* PRESERVATIVES: TOC H2SO4				
AF54598	CLFIB-5		1327							SULFIDE FINE 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
<i>SJBrown</i>	35594	1/27/23	0958	<i>GEL</i>	GEL	1/27/23	0958
<i>SJB</i>	666	1/28/23	1545	<i>Theresa Tate</i>	GEL	1/27/23	1555

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

RAD 2/27/23

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



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

Chain of Custody

Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02.08.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	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: • Method # • Reporting limit • Misc. sample info • Any other notes	2	1	1	2	
										TOC H2SO4 SULFIDE ZINC ACETATE, NaOH RAD HNO3 <4°C					
										ALK - TOTAL, BICARB + CARB					
										* SULFIDE HAS SHORT HOLD.					

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	1/27/23	0958	<i>GEL</i>	GEL	1/27/23	0958
<i>GEL</i>	661	1-27-23	1555	<i>Thyasa Jackson</i>	GEL	1-27-23	1555

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOOP</u>		SDG/AR/COC/Work Order: <u>608826/608830</u> <u>S.R.</u>	
Received By: <u>Thyasia Tatum</u>		Date Received: <u>1-27-23</u>	
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other	
		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
Suspected Hazard Information		Yes	No
A) Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sample Receipt Criteria		Yes	No
1 Shipping containers received intact and sealed?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2 Chain of custody documents included with shipment?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4 Daily check performed and passed on IR temperature gun?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5 Sample containers intact and sealed?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6 Samples requiring chemical preservation at proper pH?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7 Do any samples require Volatile Analysis?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8 Samples received within holding time?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9 Sample ID's on COC match ID's on bottles?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10 Date & time on COC match date & time on bottles?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11 Number of containers received match number indicated on COC?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12 Are sample containers identifiable as GEL provided by use of GEL labels?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13 COC form is properly signed in relinquished/received sections?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Comments (Use Continuation Form if needed):			

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

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



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
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: 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
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 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
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 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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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 Lc/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: 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
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 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
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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
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 13, 2023

Company : Santee Cooper
Address : P.O. Box 2946101
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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
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 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	Lc/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: 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
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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QC Summary

Report Date: February 13, 2023

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

Contact:
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	FLT B										
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

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QC Summary

Workorder: 609427

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Paramname	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

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QC Summary

Workorder: 609427

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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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 609427

Page 4 of 4

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

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.



Chain of Custody

609427/609440

Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LCWILLIA @santecooper.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	TOC/DOC	TOTAL ALK BICARB CARB	SULFIDE	RAD 226/228	TOTAL GCLC
AF 54602	POZ-4	1/30/23	1126	ZDM BSB	6	G P	G	SW	*	* SULFIDE HAS SHORT HOLD	2	1	1	2	
AF 54604	POZ-6		0937												
7	POZ-8		1410												
AF 54603	POZ-5D	1/30/23	1308		1	G	G	GW	3/1	→ THIS SAMPLE NEEDS TOC ONLY.	1				
AF 54570	CAP-13	1/31/23	1249		6	G P	G		*	* PRESERVATIVES TOC H2SO4	2	1	1	2	
AF 54601	POZ-3		1117							SULFIDE ZINC ACETATE, NaOH RAD #NO3 <4°C					
05	POZ-7		0940												
06	POZ-7 DUP		0945							ALKAL-TOTAL, BICARB, CARB					

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	2/3/23	0947	<i>[Signature]</i>	GEL	2/3/23	0947
<i>[Signature]</i>	666	2/3/23	1520	<i>[Signature]</i>	GEL	2/3/23	1530

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

SAMPLE RECEIPT & REVIEW FORM

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

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

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

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials 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



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 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

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: 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

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: 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

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: 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

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 3, 2023

Page 1 of 2

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		+/-1.42							
		+/-1.70									
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		+/-0.446							
		+/-0.547									
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		+/-11.1							
		+/-0.547									

- 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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 609440

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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

609427/609440

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	TOC/DOC	TOTAL ALK BICARB CARB	SULFIDE	RAD 226/228	TOTAL GCLC
AF 54602	POZ-4	1/30/23	1126	ZDM BSB	6	G P	G	GW	*	* SULFIDE HAS SHORT HOLD	2	1	1	2	
AF 54604	POZ-6		0937												
↓ 7	POZ-8		1410												
AF 54603	POZ-5D	1/30/23	1308		1	G	G	GW	3/1	→ THIS SAMPLE NEEDS TOC ONLY.	1				
AF 54570	CAP-13	1/31/23	1249		6	G	G		*	* PRESERVATIVES TOC H2SO4	2	1	1	2	
AF 54601	POZ-3		1117							SULFIDE ZINC ACETATE, NaOH RAD #U03 <4°C					
↓ 05	POZ-7		0940												
↓ 06	POZ-7 DUP		0945							ALKAL-TOTAL, BICARB, CARB					

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	2/3/23	0947	<i>[Signature]</i>	GEL	2/3/23	0947
<i>[Signature]</i>	GEL	2/3/23	1520	<i>[Signature]</i>	GEL	2/3/23	1530

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb,Hg) <input type="checkbox"/> TX <input type="checkbox"/> 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)

SAMPLE RECEIPT & REVIEW FORM

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

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

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

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials 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



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

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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: 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
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 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

GEL LABORATORIES LLC

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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

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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 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

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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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: 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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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: 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 Lc/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: 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

GEL LABORATORIES LLC

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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: 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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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: 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

GEL LABORATORIES LLC

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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	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

GEL LABORATORIES LLC

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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

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: 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
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 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

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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QC Summary

Report Date: February 13, 2023

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

Contact:
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

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QC Summary

Workorder: 609445

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Paramname	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	mg/L	N/A					
QC1205317756	609445007 DUP										
Alkalinity, Total as CaCO3			191	191	mg/L	0.131		(0%-20%)		02/10/23	13:42

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QC Summary

Workorder: 609445

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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.

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QC Summary

Workorder: 609445

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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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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

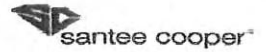
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

RAD 3/10/23

609445/609452

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 13 / 22

Send report to lcwillia@santecooper.com & sjbrown@santecooper.com



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

See 2/4/23 60945

Chain of Custody

Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LCWILLIA @santecooper.com

125915 / JMO2.08.GP1.1 / 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	TOC/DOC	TOTAL ALK BICARB, GARB	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
<i>[Signature]</i>	35594	2/3/23	0947	<i>[Signature]</i>	GEL	2/2/23	0947
<i>[Signature]</i>	GEL	2/3/23	1520	<i>[Signature]</i>	GEL	2/3/23	1520

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> 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)

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SDG</u>	SDG/AR/COC/Work Order: <u>609445 / 609452</u>
Received By: <u>JW</u>	Date Received: <u>2/3/23</u>
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other

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

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

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials HUM 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



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
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



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

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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: 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

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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: 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

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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: 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

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: 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

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: 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

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: 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 |

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 13, 2023

Page 1 of 2

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

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 609452

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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

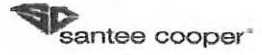
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

RAD 3/10/23

609445/609452

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 13 / 22

Send report to lcwillia@santecooper.com & sjbrown@santecooper.com



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

See 2/4/23 60945

Chain of Custody

Customer Email/Report Recipient: Date Results Needed by: Project/Task/Unit #: Rerun request for any flagged QC

LCWILLIA @santecooper.com / / 125915 / JMO2.08.GR1.1 / 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	TOC/DOC	TOTAL BICARB/GARB	SULFIDE	RAD 226/228	TOTAL GALS
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
<i>[Signature]</i>	35594	2/3/23	0947	<i>[Signature]</i>	GEL	2/3/23	0947
<i>[Signature]</i>	GEL	2/3/23	1520	<i>[Signature]</i>	GEL	2/3/23	1520

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> 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)

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SDG</u>		SDG/AR/COC/Work Order: <u>609445/609452</u>		
Received By: <u>JW</u>		Date Received: <u>2/3/23</u>		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other		
Suspected Hazard Information	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
A) Shipped as a DOT Hazardous?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___		
B) Did the client designate the samples to be received as radioactive?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.		
C) Did the RSO classify the samples as radioactive?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3		
D) Did the client designate samples are hazardous?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	COC notation or hazard labels on containers equal client designation.		
E) Did the RSO identify possible hazards?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:		
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: _____
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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



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 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

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: 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
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: 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

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: 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
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: 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

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

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Company : Santee Cooper
Address : P.O. Box 2946101
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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 Lc/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
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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
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Company : Santee Cooper
Address : P.O. Box 2946101
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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

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Company : Santee Cooper
Address : P.O. Box 2946101
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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

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

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Company : Santee Cooper
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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 Lc/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: 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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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: 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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Report Date: February 20, 2023

Company : Santee Cooper
Address : P.O. Box 2946101
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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
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Company : Santee Cooper
 Address : P.O. Box 2946101
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 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
Address : P.O. Box 2946101
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Moncks Corner, South Carolina 29461
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
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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
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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
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: 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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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: 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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Report Date: February 20, 2023

Company : Santee Cooper
Address : P.O. Box 2946101
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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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Report Date: February 20, 2023

Company : Santee Cooper
Address : P.O. Box 2946101
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Moncks Corner, South Carolina 29461
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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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: 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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Report Date: February 20, 2023

Company : Santee Cooper
Address : P.O. Box 2946101
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Moncks Corner, South Carolina 29461
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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Report Date: February 20, 2023

Company : Santee Cooper
Address : P.O. Box 2946101
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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 Lc/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
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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
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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 Lc/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: 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
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: 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

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QC Summary

Report Date: February 20, 2023

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

Contact:
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	FLT B										
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

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QC Summary

Workorder: 610529

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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

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QC Summary

Workorder: 610529

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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		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

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QC Summary

Workorder: 610529

Page 4 of 4

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.										
NI	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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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



Customer Email/Report Recipient: LCWILLIA@santeecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02.09.GW.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	TOC/DOC	TOTAL, BICARB ALK CARB	SULFIDE	RAD 226/228	TOTAL CALC.
AF54575	CCMAT - 3	2/8/23	0930	ZDM BSB	6	G/P	G	GW	*		X	X	X	X	
76	- 4		1229							PRESERVATIVES TOC H2SO4					
77	- 4D		1234							SULFIDE ZINC ACETATE, NaOH RAD HNO3					
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
<i>Sjbrown</i>	35594	2/10/23	0943	<i>[Signature]</i>	GEL	2/10/23	0943
<i>[Signature]</i>	<i>[Signature]</i>	2/10/23	1535	<i>[Signature]</i>	GEL	2/10/23	15:25

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

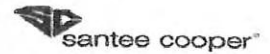
<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

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
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.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	TOC/DOC	TOTAL BICARB ALK CARB	SULFIDE	RAD 2/16/23	TOTAL CALC.
AF54574	CCMAP-2	2/7/23	1417	EDM BSB	6	G+	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		0912												

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	25574	2/10/23	0943	<i>[Signature]</i>	GEL	2/10/23	0943
<i>[Signature]</i>	<i>[Signature]</i>	2/10/23	1525	<i>[Signature]</i>	GEL	2/10/23	15:25

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 61052a/610542	JR
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?		<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	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?		<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			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?	<input checked="" type="checkbox"/>			Temperature Device Serial #: IR2-20 Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8	Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			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?	<input checked="" type="checkbox"/>			
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials **STW** Date **2/11/23** Page **1** of **1**

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



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@santecooper.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

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

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@santecooper.com

From: Heather Millar <Heather.Millar@gel.com>
Sent: Saturday, February 11, 2023 1:30 PM
To: Sherri Brown <sherri.brown@santecooper.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



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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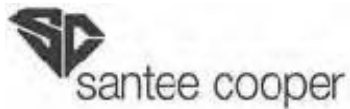
From: Sherri Brown <sherri.brown@santecooper.com>
Sent: Saturday, February 11, 2023 12:02 PM
To: Heather Millar <Heather.Millar@gel.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: RE: GEL WOs: 610529 and 610542 Missing Sample
Importance: High

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

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@santecooper.com



From: Heather Millar <Heather.Millar@gel.com>
Sent: Saturday, February 11, 2023 10:47 AM
To: Sherri Brown <sherri.brown@santecooper.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



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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From: Sherri Brown <sherri.brown@santecooper.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

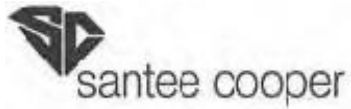
[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

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@santecooper.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



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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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



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
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



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

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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

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: 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

GEL LABORATORIES LLC

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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: 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

GEL LABORATORIES LLC

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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: 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

GEL LABORATORIES LLC

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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: 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

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: 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

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: 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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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: 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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Company : Santee Cooper
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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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Company : Santee Cooper
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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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Company : Santee Cooper
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 Moncks Corner, South Carolina 29461
 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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Company : Santee Cooper
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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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Certificate of Analysis

Report Date: March 14, 2023

Company : Santee Cooper
 Address : P.O. Box 2946101
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 Moncks Corner, South Carolina 29461
 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

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Certificate of Analysis

Report Date: March 14, 2023

Company : Santee Cooper
 Address : P.O. Box 2946101
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 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 |

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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

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Company : Santee Cooper
 Address : P.O. Box 2946101
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 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

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Report Date: March 14, 2023

Company : Santee Cooper
 Address : P.O. Box 2946101
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 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

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QC Summary

Report Date: March 14, 2023

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

Contact:
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

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QC Summary

Workorder: 610542

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.com

Chain of Custody



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

Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: / / Project/Task/Unit #: 125915 / JM02.09.GW.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 CARB	SULFIDE	RAD 226/228	TOTAL CALC.
AF54575	CCMAT - 3	2/8/23	0930	ZDM RSB	6	G/P	G	GW	*		X	X	X	X	
76	- 4		1229							PRESERVATIVES TOC H2SO4					
77	- 4D		1234							SULFIDE ZINC ACETATE, NaOH RAD HNO3					
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
<i>SJBrown</i>	35594	2/10/23	0943	<i>ALL</i>	GEL	2/10/23	0943
<i>ALL</i>	<i>666</i>	2/10/23	1525	<i>LCWILLIA</i>	GEL	2/10/23	15:25

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

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



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	TOC/DOC	TOTAL BICARB ALK CARB	SULFIDE	RAD 224/223	TOTAL CALC.
AF54574	CCMAP-2	2/7/23	1417	EDM BSB	6	G+	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		0912												

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	35374	2/10/23	0943	<i>[Signature]</i>	GEL	2/10/23	0943
<i>[Signature]</i>	<i>[Signature]</i>	2/10/23	1525	<i>[Signature]</i>	GEL	2/10/23	15:25

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

METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOOP</u>	SDG/AR/COC/Work Order: <u>61052a/610542</u> <u>JR</u>
Received By: <u>Thyasia Tatum</u>	Date Received: <u>2/10/23</u>
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>○</u> 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?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Preservation Method: <u>○</u> Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: <u>10</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Temperature Device Serial #: <u>IR2-20</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No container count on COC Other (describe) <u>ID: AF54579 NOT RECEIVED</u>
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials SM Date 2/11/23 Page 1 of 1

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



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 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 CaCO ₃		7.80	1.45	4.00	mg/L		MS3	02/18/23	1329	2385420		1
Bicarbonate alkalinity (CaCO ₃)		7.80	1.45	4.00	mg/L							
Carbonate alkalinity (CaCO ₃)	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

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 20, 2023

Page 1 of 2

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

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			(90%-110%)		02/18/23	12:42
QC1205323659	610529021	MS									
Alkalinity, Total as CaCO3	167	7.67		179	mg/L			(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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 610889

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q											
Q											
N1											
R											
B											
e											
J											

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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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

Chain of Custody



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

Customer Email/Report Recipient: LCWILLIA@santecooper.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)
A-F54579	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
<i>sjbrown</i>	35594	2/14/23	0940	<i>[Signature]</i>	GEL	2/14/23	0940
<i>[Signature]</i>	GEL	2/14/23	15:00	<i>Thomasa Tatum</i>	GEL	2/14/23	15:00

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI			<input type="checkbox"/> Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	<input type="checkbox"/> MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	<input type="checkbox"/> Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture <input type="checkbox"/> NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	<input type="checkbox"/> Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

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 <input type="checkbox"/> FedEx Ground <input type="checkbox"/> UPS <input type="checkbox"/> Field Services <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Other <input type="checkbox"/>

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

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: <u>20</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Temperature Device Serial #: <u>IR2-20</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
					Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
					Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

JM

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



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
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



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

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 13, 2023

Page 1 of 2

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 610893

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.com

Chain of Custody

santecooper
Santee Cooper
One Riverwood Drive
Monks 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 @santecooper.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	RAD 226/228	TOTAL-RAD CALC
AF55969	C3LF LEACH	2/8/23	1141	MDS 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
<i>Sjbrown</i>	35594	2/14/23	0940	<i>[Signature]</i>	GEL	2/14/23	0940
<i>[Signature]</i>	GEL	2/14/23	1530	<i>Thyrcia Tatum</i>	GEL	2/14/23	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: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input checked="" type="checkbox"/> Rad 226 <input checked="" type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP SDG/AR/COC/Work Order: 610888/610893/610889 J.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: 20

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

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



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

GEL LABORATORIES LLC

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

QC Summary

Report Date: April 21, 2023

Page 1 of 2

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

Contact:
Workorder: 615744

Parname	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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 615744

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

Chain of Custody



Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: / / Project/Task/Unit #: 125915 / JM02-09.G61.1 / 36500 Rerun request for any flagged QC: Yes No

Analysis Group

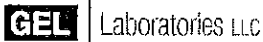
Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments	RAD 226/228	TOTAL RAD CALC
AF58977	CGYP-7	3/20/23	1037	EDM BSP	2	P	G	GW	2	• Method # • Reporting limit • Misc. sample info • Any other notes	X	X
78	CGYP-7D		1042									
79	POZ-3		0928									

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sj Brown</i>	35594	3/24/23	1030	<i>[Signature]</i>	GEL	3/24/23	1030
<i>[Signature]</i>	GEL	3/24/23	1135	<i>[Signature]</i>	GEL	3/24/23	1635

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)



SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOC</u>		SDG/AR/COC/Work Order: <u>615 744</u>		
Received By: <u>QG</u>		Date Received: <u>3/24/23</u>		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other		
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___		
B) Did the client designate the samples are to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation.		
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0.0</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3		
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation.		
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:		
Sample Receipt Criteria		Yes	NA	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius <u>TEMP: 4°C</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Temperature Device Serial #: <u>IR3-23</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				

PM (or PMA) review: Initials JMM Date 3/27/23 Page 1 of 1

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

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

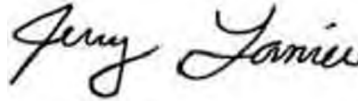
Eurofins Savannah

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
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah



Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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.

Eurofins Savannah

Client Sample Results

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

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 Sample Results

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

Date Collected: 01/26/23 09:38

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		02/20/23 13:43	02/21/23 14:07	1

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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- 10
- 11
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- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
- 3
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- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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- 13
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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- 4
- 5
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- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

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

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 Sample Results

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

Date Collected: 02/01/23 13:44

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		02/20/23 13:43	02/21/23 14:52	1

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

- 1
- 2
- 3
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- 11
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- 13
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

- 1
- 2
- 3
- 4
- 5
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- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
- 3
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- 10
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- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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) - 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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

- 1
- 2
- 3
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- 5
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- 11
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- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 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

- 1
- 2
- 3
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- 11
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- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
- 3
- 4
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- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
- 2
- 3
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- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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) - 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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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

Eurofins Savannah

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits	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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits	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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method: 6020B - Metals (ICP/MS) (Continued)

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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
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
 Matrix: Water
 Analysis Batch: 764211

Client Sample ID: AF54604
 Prep Type: Total Recoverable
 Prep Batch: 763857

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Calcium	459000		5000	473100	4	ug/L		278	75 - 125	9	20

Lab Sample ID: MB 680-763871/1-A
 Matrix: Water
 Analysis Batch: 764050

Client Sample ID: Method Blank
 Prep Type: Total Recoverable
 Prep Batch: 763871

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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
 Matrix: Water
 Analysis Batch: 764050

Client Sample ID: Lab Control Sample
 Prep Type: Total Recoverable
 Prep Batch: 763871

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-763871/2-A
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
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
Matrix: Water
Analysis Batch: 764050

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 763876

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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
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	
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	

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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 MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
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	

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	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	

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-19 MSD

Matrix: Water

Analysis Batch: 764050

Client Sample ID: AF54563

Prep Type: Dissolved

Prep Batch: 763871

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	
	Result	Qualifier		Result	Qualifier				Limits	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

Matrix: Water

Analysis Batch: 764211

Client Sample ID: AF54563

Prep Type: Dissolved

Prep Batch: 763871

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	
	Result	Qualifier		Result	Qualifier				Limits	RPD	Limit
Calcium	1200000		5000	1157000	4	ug/L		-937	75 - 125	1	20

Lab Sample ID: 680-230663-25 MS

Matrix: Water

Analysis Batch: 764050

Client Sample ID: AF54586

Prep Type: Dissolved

Prep Batch: 763876

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD	
	Result	Qualifier		Result	Qualifier				Limits	RPD	Limit
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

Matrix: Water

Analysis Batch: 764050

Client Sample ID: AF54586

Prep Type: Dissolved

Prep Batch: 763876

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	
	Result	Qualifier		Result	Qualifier				Limits	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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-230663-25 MSD
 Matrix: Water
 Analysis Batch: 764050

Client Sample ID: AF54586
 Prep Type: Dissolved
 Prep Batch: 763876

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	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
 Matrix: Water
 Analysis Batch: 764337

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 764131

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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
 Matrix: Water
 Analysis Batch: 764337

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 764131

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Mercury	2.50	2.431		ug/L		97	80 - 120

Lab Sample ID: MB 680-764146/1-A
 Matrix: Water
 Analysis Batch: 764393

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 764146

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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
 Matrix: Water
 Analysis Batch: 764393

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 764146

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Mercury	2.50	2.394		ug/L		96	80 - 120

Lab Sample ID: MB 680-764263/1-A
 Matrix: Water
 Analysis Batch: 764393

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 764263

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.200	U	0.200		ug/L		02/21/23 09:23	02/21/23 16:46	1

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 680-764263/2-A				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				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				Client Sample ID: AF54594							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				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				Client Sample ID: AF54594							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				Prep Batch: 764263							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	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				Client Sample ID: Method Blank							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				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				Client Sample ID: Lab Control Sample							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				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				Client Sample ID: AF54601							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				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				Client Sample ID: AF54601							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764393				Prep Batch: 764264							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	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				Client Sample ID: Method Blank							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764458				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		

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 680-764295/2-A				Client Sample ID: Lab Control Sample						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 764458				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				Client Sample ID: AF54565						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 764458				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				Client Sample ID: AF54565							
Matrix: Water				Prep Type: Total/NA							
Analysis Batch: 764458				Prep Batch: 764295							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	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				Client Sample ID: Method Blank						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 764851				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				Client Sample ID: Lab Control Sample						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 764851				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				Client Sample ID: AF54595						
Matrix: Water				Prep Type: Dissolved						
Analysis Batch: 764393				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				Client Sample ID: AF54595							
Matrix: Water				Prep Type: Dissolved							
Analysis Batch: 764393				Prep Batch: 764146							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	0.200	U	1.00	0.9367		ug/L		94	80 - 120	5	20

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	

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QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	

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QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

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QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Lab Chronicle

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

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	Batch 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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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	Batch 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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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	Batch 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
 Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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	Batch 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	Batch 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



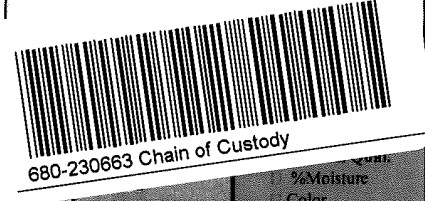
Chain of Custody

Customer Email/Report Recipient: LCWILLIA @santecooper.com Date Results Needed by: / / Project/Task/Unit #: 125915 / JMO2.09.GW.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	Analysis Group			
											TOTAL METALS - SEE BELOW	DISSOLVED METALS	Si	DISSOLVED Si
AF54593	CLFIB-1	1/26/23	0938	ZDM BSB	2	P	G	GW	2	Si - 6010	X	X		
94	CLFIB-1 DUP		0943							ALL OTHERS - 6020				
82	CCMLF-1		1119							Hg-7470				
83	CCMLF-1D		1300											
AF54595	CLFIB-2	1/25/23	1100	ZDM MDG						*SEE SHEET FOR RLS				
96	CLFIB-3		0954							WHERE APPLICABLE				
AF54572	CBW-1	1/24/23	1146	MDG CDM									X	X
97	CLFIB-4		1540											
98	CLFIB-5		1327											
600	PM-1		1018										X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	2/15/23	1430	<i>JA</i>	7A	2/16/23	1100

Sample Receiving (Internal Use Only)
 TEMP (°C): 18.1 Initial:
 Correct pH: Yes No
 Preservative Lot#:



<input checked="" type="checkbox"/> Ag <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> As <input type="checkbox"/> B <input checked="" type="checkbox"/> Ba <input checked="" type="checkbox"/> Be <input checked="" type="checkbox"/> Ca <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Co <input checked="" type="checkbox"/> Cr	<input type="checkbox"/> Cu <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> K <input type="checkbox"/> Li <input checked="" type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input checked="" type="checkbox"/> Na <input checked="" type="checkbox"/> Ni <input checked="" type="checkbox"/> Pb	<input checked="" type="checkbox"/> Sb <input checked="" type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Tl <input type="checkbox"/> V <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Hg <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	<input type="checkbox"/> Ultima <input type="checkbox"/> % M <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> AS <input type="checkbox"/> TSS	<input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)



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

Chain of Custody

Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LCWILLIA@santecooper.com _____ / _____ / _____ 125915 / 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	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
<i>Sjbrown</i>	35594	2/15/23	1430	<i>OK</i>	<i>JA</i>	2/16/23	1100

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

<input type="checkbox"/> METALS (all) <input checked="" type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input checked="" type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input checked="" type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input checked="" type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Na <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input checked="" type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)



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Chain of Custody

Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LCWILLIA @santecooper.com _____ / _____ / _____ 125915 / JM02.08.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	Analysis Group	
											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	1544							Hg-7470		
AF54571	CAP-14		1405							ALL OTHERS 6020		
AF54599	CLFIB-5D	1/24/23	1438	BSB CDM	1							
										* SEE SHEET FOR RLS		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35594	2/15/23	1430	<i>JA</i>	72	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: _____

<input type="checkbox"/> METALS (all) <input checked="" type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input checked="" type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input checked="" type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input checked="" type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Na <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input checked="" type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)



Santee Cooper
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Fax: (843)761-4175

Chain of Custody

Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LCWILLIA @santecooper.com _____ / _____ / _____ 125915 / JMD2.09 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	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		1410											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	2/15/23	1430	<i>TA</i>	<i>TA</i>	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: _____

<input type="checkbox"/> METALS (all) <input checked="" type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input checked="" type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input checked="" type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input checked="" type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Na <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input checked="" type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> C1 <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> pH <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)



Chain of Custody

Customer Email/Report Recipient: LCWILLIA @santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JMD2.09 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	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
<i>sjbrown</i>	35594	2/15/23	1430	<i>ZDM</i>	72	2-16-23	1100

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

<input type="checkbox"/> METALS (all) <input checked="" type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input checked="" type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input checked="" type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input checked="" type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Na <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input checked="" type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Napthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-llimestone, 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)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-230663-1

Login Number: 230663

List Number: 1

Creator: Sims, Robert D

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.	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
Project/Site: 125915/JM02.09 G01.1/36500

Job ID: 680-230663-1

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

- 1
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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

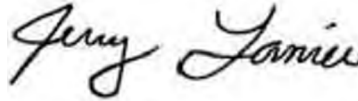
Eurofins Savannah

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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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

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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

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Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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.

Eurofins Savannah

Client Sample Results

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

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

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Client Sample Results

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

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 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

- 1
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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
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	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	LCS	LCS	Unit	D	%Rec	%Rec
		Added	Result				Qualifier
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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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	

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

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QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

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

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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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



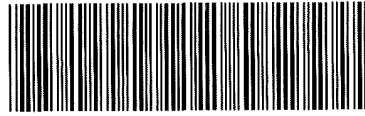


Chain of Custody

Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JMB2.07.601.1 / 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	TOTAL METALS - SEE BELOW	NONAL DISSOLVED METALS - SEE BELOW
AF54575	CCMAP - 3	2/8/23	0930	ZDM BSB	2	P	G	GW	2	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
<i>S. Brown</i>	35574	2/15/23	1530				

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

<input type="checkbox"/> METALS (all) <input checked="" type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input checked="" type="checkbox"/> Al <input checked="" type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input checked="" type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input checked="" type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input checked="" type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input checked="" type="checkbox"/> Na <input checked="" type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input checked="" type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> YX <input type="checkbox"/> GOFER
---	--	--	---	---	--	--

[Signature] 2/16/23 100
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=HNO₃ 3=H₂SO₄ 4=HCl 5=Na₂S₂O₃ 6=Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-230711-1

Login Number: 230711

List Number: 1

Creator: Johnson, Corey M

List Source: Eurofins Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 $<6\text{mm}$ (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
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230711-1

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

- 1
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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

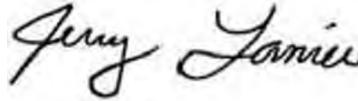
Eurofins Savannah

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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2/27/2023 9:07:27 AM

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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.

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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

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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



Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

Client Sample ID: AF54572

Lab Sample ID: 680-230959-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , 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
SiO ₂ , Silica	22500		500		ug/L	1		6010D	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
- 2
- 3
- 4
- 5
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- 8
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- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
- 2
- 3
- 4
- 5
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- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

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

- 1
- 2
- 3
- 4
- 5
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- 7
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- 13
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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

Eurofins Savannah

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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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	Batch 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	Batch 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	Batch 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



Chain of Custody

Customer Email/Report Recipient: LCWILLIA@santeecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02.09.G-01 / 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			
AF54572	CBW-1	2/24/23	1146	MDC 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	POZ-4	2/30/23	1126										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sj Brown</i>	35594	2/21/23	1300	<i>[Signature]</i>	22223	1050	7A

Sample Receiving (Internal Use Only)
 TEMP (°C): 1 Initial:
2.12.1
 Correct pH: Yes No
 Preservative Lot#:
 Date/Time/Injt for preservative:

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	<input type="checkbox"/> Ultimate <input type="checkbox"/> % <input type="checkbox"/> A <input type="checkbox"/> S <input type="checkbox"/> BTU <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	<input type="checkbox"/> IPI <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> 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)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-230959-1

Login Number: 230959

List Number: 1

Creator: Sims, Robert D

List Source: Eurofins Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 $<6\text{mm}$ (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
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-230959-1

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

- 1
- 2
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ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 4/27/2023 5:32:51 PM Revision 1

JOB DESCRIPTION

12915/JM02.09.G01.1/36500

JOB NUMBER

680-232605-1

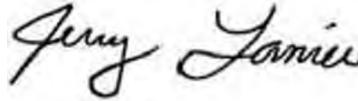
Eurofins Savannah

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
4/27/2023 5:32:51 PM
Revision 1

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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

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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



Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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.

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Client Sample Results

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

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58978

Lab Sample ID: 680-232605-2

Date Collected: 03/20/23 10:42

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	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
 Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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 Sample Results

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

Client Sample ID: AF58980

Lab Sample ID: 680-232605-4

Date Collected: 03/20/23 12:20

Matrix: Water

Date Received: 03/27/23 11:00

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	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

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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	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	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	Limits	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	Limits
Mercury	2.50	2.360		ug/L		94	80 - 120

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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	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	Limits	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	Limits			
Mercury			2.50	2.485		ug/L		99	80 - 120			

QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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

Eurofins Savannah

QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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

Lab Sample ID: 680-232605-1

Date Collected: 03/20/23 10:37

Matrix: Water

Date Received: 03/27/23 11:00

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

Lab Sample ID: 680-232605-2

Date Collected: 03/20/23 10:42

Matrix: Water

Date Received: 03/27/23 11:00

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

Lab Sample ID: 680-232605-3

Date Collected: 03/20/23 09:28

Matrix: Water

Date Received: 03/27/23 11:00

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

Eurofins Savannah

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

Lab Sample ID: 680-232605-4

Date Collected: 03/20/23 12:20

Matrix: Water

Date Received: 03/27/23 11:00

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Analyst</u>	<u>Lab</u>	<u>Prepared or Analyzed</u>
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



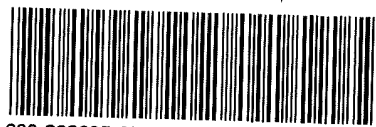


Santee Cooper
One Riverwood Drive
Monks Corner, SC 29461
Phone (843)761-8000 Ext. 5148
Fax (843)761-4175

Chain of Custody

Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02.09.601.1 / 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-74-TI B, L, 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				
 680-232605 Chain of Custody														
										PLEASE RETURN COOLER.				

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sj Brown</i>	35594	3/27/23	8:10	<i>Will Hodge</i>	COURIER	3/27/23	8:10
<i>Will Hodge</i>	Courier	3-27-23	11:00	<i>[Signature]</i>		3/27/23	11:00

Sample Receiving (Internal Use Only)
TEMP (°C): _____ Initial: _____
Correct pH: Yes No
Preservative Lot#: 20.1/20.1 24/3.4
Date/Time/Init for preservative: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input checked="" type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI			Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: Project Name: 12915/JM02.09 G01. 1/36500 Site:		Sampler: Lab PM Lanier, Jerry A E-Mail: Jerry.Lanier@et.eurofins.com State of Origin: South Carolina Page 1 of 1 Job #: 680-232605-1	COC No: 680-732222.1 Carrier Tracking No(s): Accreditations Required (See note) NELAP - Florida, State - South Carolina, State Program ...
Due Date Requested: 4/4/2023 TAT Requested (days): PO #: WO #: Project #: 68008190 SSOW#		Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 6010D/3010A_2% 5 ICP Metals Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Total Number of Containers	
Sample Identification - Client ID (Lab ID) AF-58977 (680-232605-1) AF-58978 (680-232605-2) AF-58979 (680-232605-3)	Sample Date: 3/20/23 Sample Time: 10:37 Eastern 10:42 Eastern 09:28 Eastern	Sample Type (C=Comp, G=grab) Matrix (W=Water, S=Solid, O=Other) Preservation Code:	Special Instructions/Note: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) Other:
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1 Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks:			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:			
Received by: _____ Date/Time: _____ Received by: <i>Sara Woodington</i> Date/Time: MAR 31 2023 0910 Received by: _____ Date/Time: _____ Company: _____ Company: _____ Company: _____			



Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-232605-1

Login Number: 232605

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	

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
 Project/Site: 12915/JM02.09.G01.1/36500

Job ID: 680-232605-1

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.

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 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:

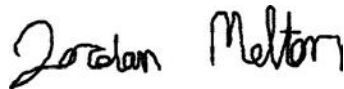
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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



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

GEL LABORATORIES LLC

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

QC Summary

Report Date: November 3, 2023

Page 1 of 2

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		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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 641316

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.com

Chain of Custody

641316
641317



Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LINDA WILLIAMS @santecooper.com

/ /

125915 / JMO2.09.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	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	• Method # • Reporting limit • Misc. sample info • Any other notes	2	X	1
AF 80266	CGYP-7 DUP		1128										
AF 80267	POZ-3		1515										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	36851	10/13/23	0944	<i>[Signature]</i>	GEL	10/13/23	0944
<i>[Signature]</i>	GEL	10/13/23	1610	<i>[Signature]</i>	GEL	10/13/23	1610

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOCP</u>		SDG/AR/COC/Work Order: <u>641316/641317</u>	
Received By: <u>QG</u>		Date Received: <u>10/18/23</u>	
Carrier and Tracking Number		FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other	
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
B) Did the client designate the samples to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation	
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>5</u> <u>SPM/mR/hr</u> 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
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments (Use Continuation Form if needed):			

JR

n/a

TEMP: 3°C

PM (or PMA) review: Initials glw Date 10/16/23 Page 1 of 1

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



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 Lc/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: 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 Lc/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: 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

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: 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

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: 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

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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: 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 Lc/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: 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 Lc/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

Page 1 of 2

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

Contact:
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

GEL LABORATORIES LLC

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QC Summary

Workorder: 626523

Page 2 of 2

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.
- NI 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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.



Chain of Custody

626523

Customer Email/Report Recipient: LCWILLIA@santecooper.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	NO3/NO2	Analysis Group	
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		
AF66442	POZ-5D		1009									1		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	6/16/23	1026	<i>[Signature]</i>	GEL	6/16/23	1026
<i>[Signature]</i>	<i>GEL</i>	6/16/23	1610	<i>[Signature]</i>	GEL	6/16/23	920

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input checked="" type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	---	--	--	---	--	---

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SCOR</u>		SDGAR/COC/Work Order: <u>626523</u>	
Received By: <u>QG</u>		Date Received: <u>6/16/23</u>	
Carrier and Tracking Number		FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other <u>42</u>	
Suspected Hazard Information		Yes	No
*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.			
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
B) Did the client designate the samples to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation	
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>00</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation	
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below: <input type="checkbox"/> PCB's <input type="checkbox"/> Flammable <input type="checkbox"/> Foreign Soil <input type="checkbox"/> RCRA <input type="checkbox"/> Asbestos <input type="checkbox"/> Beryllium <input type="checkbox"/> Other:	
Sample Receipt Criteria		Yes	NA
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Client contacted and provided COC COC created upon receipt	
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Preservation Method: Wet Ice Ice Packs Dry Ice <u>None</u> Other: *all temperatures are recorded in Celsius TEMP: <u>4°C</u>	
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Temperature Device Serial #: <u>IR4-23</u> Secondary Temperature Device Serial # (If Applicable):	
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Sample ID's and Containers Affected:	
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		If Preservation added, Lot#: _____ If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:	
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		ID's and tests affected:	
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		ID's and containers affected:	
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)	
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: No container count on COC Other (describe)	
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Not relinquished Other (describe)	
Comments (Use Continuation Form if needed):			

JR

PM (or PMA) review: Initials RW Date 6/19/23 Page ____ of ____

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

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:

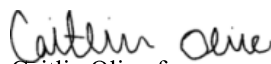
GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 04, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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 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

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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: 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

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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: 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

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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: 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

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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: 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

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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: 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

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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: 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

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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: 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

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QC Summary

Report Date: September 1, 2023

Page 1 of 2

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

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QC Summary

Workorder: 632243

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.



Chain of Custody

032243

Customer Email/Report Recipient: LINDA.WILLIAMS @santecooper.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	RAD 226	RAD 228	TOTAL RAD CALS
AF71896	CCMGP-5	8/1/23	0953	WJK FB	2	F	G	GW	2	• Method # • Reporting limit • Misc. sample info • Any other notes	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
<i>[Signature]</i>	86951	8/4/23	1007	<i>[Signature]</i>	GEL	8/4/23	1007
<i>[Signature]</i>	GEL	8/4/23	12:00	<i>[Signature]</i>	GEL	8/4/23	1200

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb,Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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SAMPLE RECEIPT & REVIEW FORM

Client: SOOP 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?		<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	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?		<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: <u>4°C</u> <u>1/20 R</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>			
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

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



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

GEL LABORATORIES LLC

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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 |

GEL LABORATORIES LLC

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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

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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: 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

GEL LABORATORIES LLC

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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

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: 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

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: 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

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: 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

GEL LABORATORIES LLC

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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: 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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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: 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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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: 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

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: 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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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: 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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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: 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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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: 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

GEL LABORATORIES LLC

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QC Summary

Report Date: July 17, 2023

Page 1 of 2

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

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QC Summary

Workorder: 626517

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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

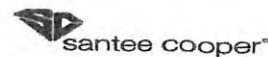
Contract Lab Info: GEL

Contract Lab Due Date (Lab Only): 7 / 18 / 23 - RAD

Send report to lcwillia@santecooper.com & sjbrown@santecooper.com

Chain of Custody

626517/6520



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 @santecooper.com

 / /

125915 / JM02.08.G02.3 / 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 <ul style="list-style-type: none">Method #Reporting limitMisc. sample infoAny 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	6919		3	P/G			2/3		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
<i>SJBrown</i>	35594	6/16/23	1026	<i>[Signature]</i>	GEL	6/16/23	1026
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	<i>GEL</i>	6/16/23	140	<i>[Signature]</i>	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: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> % Carbon <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	--	--	---	---	--	--



Chain of Custody

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	Analysis Group		
											RAD 226/228	TOTAL RAD CHC	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
<i>SJBrown</i>	35594	6/16/23	1026	<i>[Signature]</i>	GEL	6/16/23	1826
<i>[Signature]</i>	<i>GEL</i>	6/16/23	1610	<i>[Signature]</i>	GEL	6/16/23	920

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> % Carbon <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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SAMPLE RECEIPT & REVIEW FORM

Client: <u>SCAP</u>		SDG/AR/COC/Work Order: <u>626517/6520</u>	
Received By: <u>QG</u>		Date Received: <u>6/16/23</u>	
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other <u>462</u>	
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
A) Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No COC notation on radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>00</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No COC notation on hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. <input type="checkbox"/> PCB's <input type="checkbox"/> Flammable <input type="checkbox"/> Foreign Soil <input type="checkbox"/> RCRA <input type="checkbox"/> Asbestos <input type="checkbox"/> Beryllium Other: _____	
Sample Receipt Criteria		Yes	No
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments (Use Continuation Form if needed): 			

JR

PM (or PMA) review: Initials RW Date 6/19/23 Page ____ of ____

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

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:

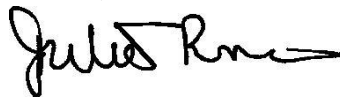
GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 08, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

Page 1 of 2

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

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	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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 648208

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

Chain of Custody

648208



Customer Email/Report Recipient: LINDA WILLIAMS @santeecooper.com / Date Results Needed by: / Project/Task/Unit #: 125915 / JM02.09.GB1.1 / 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	RAD 226/228	TOTAL RAD CALC
AF 84383	CGYP-7	12/5/23	1326	ZM BB	2	P	G	GW	2	• Method # • Reporting limit • Misc. sample info • Any other notes	X	X
AF 84384	CGYP-7 DUP		1331									
AF 84385	POE-3		1014									

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	36851	12/8/23	10:08	<i>[Signature]</i>	GEL	12/8/23	10:08
<i>[Signature]</i>	GEL	12/8/23	3:20	<i>[Signature]</i>	GEL	12/8/23	3:20

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	--	--	--	---	--	--

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP		SDG/AR/COC/Work Order: 648208		
Received By: Thyasia Tatum		Date Received: 12/19/23		
Carrier and Tracking Number		Circle Applicable: <input type="checkbox"/> FedEx Express <input type="checkbox"/> FedEx Ground <input type="checkbox"/> UPS <input type="checkbox"/> Field Services <input checked="" type="checkbox"/> Courier <input type="checkbox"/> Other		
		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
Suspected Hazard Information	Yes	No		
A) Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation of hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____	
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR2-23</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				

TEMP **ICHEM - 10°C**
Gchem - 2°C

PM (or PMA) review: Initials **JTW** Date **12/19/23** Page **1** of **1**

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

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 Lc/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: 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 Lc/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: 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

Page 1 of 2

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

Contact:
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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 626520

Page 2 of 2

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.
- NI 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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.com

Chain of Custody

626517/6520



Customer Email/Report Recipient: LINDA.WILLIAM @santecooper.com Date Results Needed by: / / Project/Task/Unit #: 125915 / JM02.08.G02.3 / 3650 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	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	6919		3	P/G			2/3		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
<i>SJBrown</i>	35594	6/16/23	1026	<i>[Signature]</i>	GEL	6/16/23	1026
<i>[Signature]</i>	<i>GEL</i>	6/16/23	140	<i>[Signature]</i>	GEL	6/16/23	1600

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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Chain of Custody



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	Analysis Group		
											RAD 226/228	TOTAL RAD CHC	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
<i>SJBrown</i>	35594	6/16/23	1026	<i>[Signature]</i>	GEL	6/16/23	1826
<i>[Signature]</i>	<i>GEL</i>	6/16/23	1610	<i>[Signature]</i>	GEL	6/16/23	920

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI			Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> % Carbon <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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SAMPLE RECEIPT & REVIEW FORM

Client: <u>SCAP</u>		SDG/AR/COC/Work Order: <u>626517/6520</u>	
Received By: <u>QG</u>		Date Received: <u>6/16/23</u>	
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other <u>462</u>	
Suspected Hazard Information		Yes	No
		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No COC notation on radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>00</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No COC notation on hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. <input type="checkbox"/> PCB's <input type="checkbox"/> Flammable <input type="checkbox"/> Foreign Soil <input type="checkbox"/> RCRA <input type="checkbox"/> Asbestos <input type="checkbox"/> Beryllium Other: _____	
Sample Receipt Criteria		Yes	No
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Client contacted and provided COC COC created upon receipt	
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Preservation Method: <u>Wet Ice</u> Ice Packs Dry Ice <u>None</u> Other: *all temperatures are recorded in Celsius TEMP: <u>4°C</u>	
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Temperature Device Serial #: <u>IR4-23</u> Secondary Temperature Device Serial # (If Applicable): _____	
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Sample ID's and Containers Affected:	
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		If Preservation added, Lot#: _____ If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected: _____	
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		ID's and tests affected:	
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		ID's and containers affected:	
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)	
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: No container count on COC Other (describe)	
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Circle Applicable: Not relinquished Other (describe)	
Comments (Use Continuation Form if needed):			

JR

PM (or PMA) review: Initials RW Date 6/19/23 Page ___ of ___

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

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:

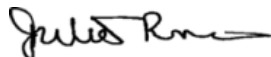
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

Page 1 of 2

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	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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 649122

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

Chain of Custody

649122



Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LINDA.WILLIAMS@santeecooper.com _____ / _____ / _____ 1259115 / JM=2.07.GP1.1 / 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 226/228	TOTAL RAD CALC	Analysis Group	
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
<i>[Signature]</i>	36851	12/15/23	0923	<i>[Signature]</i>	GEL	12/15/23	1923
<i>[Signature]</i>	GEL	12/15/23	1610	<i>[Signature]</i>	GEL	12/15/23	1810

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particulate Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	--	--	---	---	--	--

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SDGP</u>		SDG/AR/COC/Work Order: <u>649122</u>			
Received By: <u>QG</u>		Date Received: <u>12/15/23</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Carrier</u> Other			
		<u>Ala</u>			
Suspected Hazard Information		Yes	No		
*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.					
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
B) Did the client designate the samples are to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>CPM</u> mR/HR Classified as: Rad 1 Rad 2 Rad 3			
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation			
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:			
Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	/	/	/	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: <u>Wet Ice</u> Ice Packs Dry ice <u>None</u> Other: *all temperatures are recorded in Celsius TEMP: <u>2°C</u>
4	Daily check performed and passed on IR temperature gun?	/	/	/	Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	/	/	/	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) <u>only received 1 container for AP85752</u> <u>*100 649122</u>
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

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 6/22/2023 1:09:54 PM

JOB DESCRIPTION

125915/JM02.08.G02.3/36500

JOB NUMBER

680-236600-1

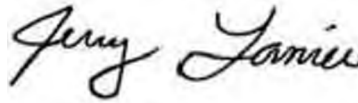
Eurofins Savannah

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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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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.

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Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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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

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Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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.
α	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/JM02.08.G02.3/36500

Job ID: 680-236600-1

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.

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

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		Client Sample ID: Method Blank									
Matrix: Water		Prep Type: Total/NA									
Analysis Batch: 785049		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		Client Sample ID: Lab Control Sample									
Matrix: Water		Prep Type: Total/NA									
Analysis Batch: 785049		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		Client Sample ID: AF66402									
Matrix: Water		Prep Type: Total/NA									
Analysis Batch: 785049		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		Client Sample ID: AF66402									
Matrix: Water		Prep Type: Total/NA									
Analysis Batch: 785049		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

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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
 Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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
 Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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



6/22/2023

Chain of Custody

Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JMO2.08.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										

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Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35594	6/19/23	1300	<i>[Signature]</i>	71	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#:



<p><input type="checkbox"/> METALS (all)</p> <table style="width: 100%;"> <tr><td><input type="checkbox"/> Ag</td><td><input type="checkbox"/> Cu</td><td><input type="checkbox"/> Sb</td></tr> <tr><td><input type="checkbox"/> Al</td><td><input type="checkbox"/> Fe</td><td><input type="checkbox"/> Se</td></tr> <tr><td><input type="checkbox"/> As</td><td><input type="checkbox"/> K</td><td><input type="checkbox"/> Sn</td></tr> <tr><td><input type="checkbox"/> B</td><td><input type="checkbox"/> Li</td><td><input type="checkbox"/> Sr</td></tr> <tr><td><input type="checkbox"/> Ba</td><td><input type="checkbox"/> Mg</td><td><input type="checkbox"/> Ti</td></tr> <tr><td><input type="checkbox"/> Be</td><td><input type="checkbox"/> Mn</td><td><input type="checkbox"/> Tl</td></tr> <tr><td><input type="checkbox"/> Ca</td><td><input type="checkbox"/> Mo</td><td><input type="checkbox"/> V</td></tr> <tr><td><input type="checkbox"/> Cd</td><td><input type="checkbox"/> Na</td><td><input type="checkbox"/> Zn</td></tr> <tr><td><input type="checkbox"/> Co</td><td><input type="checkbox"/> Ni</td><td><input type="checkbox"/> Hg</td></tr> <tr><td><input type="checkbox"/> Cr</td><td><input type="checkbox"/> Pb</td><td><input type="checkbox"/> CrVI</td></tr> </table>	<input type="checkbox"/> Ag	<input type="checkbox"/> Cu	<input type="checkbox"/> Sb	<input type="checkbox"/> Al	<input type="checkbox"/> Fe	<input type="checkbox"/> Se	<input type="checkbox"/> As	<input type="checkbox"/> K	<input type="checkbox"/> Sn	<input type="checkbox"/> B	<input type="checkbox"/> Li	<input type="checkbox"/> Sr	<input type="checkbox"/> Ba	<input type="checkbox"/> Mg	<input type="checkbox"/> Ti	<input type="checkbox"/> Be	<input type="checkbox"/> Mn	<input type="checkbox"/> Tl	<input type="checkbox"/> Ca	<input type="checkbox"/> Mo	<input type="checkbox"/> V	<input type="checkbox"/> Cd	<input type="checkbox"/> Na	<input type="checkbox"/> Zn	<input type="checkbox"/> Co	<input type="checkbox"/> Ni	<input type="checkbox"/> Hg	<input type="checkbox"/> Cr	<input type="checkbox"/> Pb	<input type="checkbox"/> CrVI	<p>Nutrients</p> <p><input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4</p>	<p>MISC.</p> <p><input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB</p>	<p>Gypsum</p> <p><input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur</p>	<p>Ultimate</p> <p><input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN</p> <p>Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter</p>	<p>LOI</p> <p><input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture</p> <p>NPDES</p> <p><input type="checkbox"/> Oil & Grease <input type="checkbox"/> AS <input type="checkbox"/> TSS</p>	<p>Acidity Dielectric Strength IFT Dissolved Gases Used Oil Flashpoint Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX GOFER</p>
<input type="checkbox"/> Ag	<input type="checkbox"/> Cu	<input type="checkbox"/> Sb																																		
<input type="checkbox"/> Al	<input type="checkbox"/> Fe	<input type="checkbox"/> Se																																		
<input type="checkbox"/> As	<input type="checkbox"/> K	<input type="checkbox"/> Sn																																		
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<input type="checkbox"/> Ba	<input type="checkbox"/> Mg	<input type="checkbox"/> Ti																																		
<input type="checkbox"/> Be	<input type="checkbox"/> Mn	<input type="checkbox"/> Tl																																		
<input type="checkbox"/> Ca	<input type="checkbox"/> Mo	<input type="checkbox"/> V																																		
<input type="checkbox"/> Cd	<input type="checkbox"/> Na	<input type="checkbox"/> Zn																																		
<input type="checkbox"/> Co	<input type="checkbox"/> Ni	<input type="checkbox"/> Hg																																		
<input type="checkbox"/> Cr	<input type="checkbox"/> Pb	<input type="checkbox"/> CrVI																																		

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)



Chain of Custody

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	WJK ML	1	P	G	GW	2	747D RLC 0.2 ug/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											

Page 31 of 33

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Signature</i>	35594	6/19/23	1300	<i>Signature</i>	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=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-236600-1

Login Number: 236600

List Number: 1

Creator: Sims, Robert D

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.	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
Project/Site: 125915/JM02.08.G02.3/36500

Job ID: 680-236600-1

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

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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

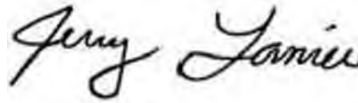
Eurofins Savannah

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



Generated
10/20/2023 9:13:29 AM

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

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

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
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

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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

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Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

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.
α	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: 680-241786-1

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.

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This Detection Summary does not include radiochemical test results.

Eurofins Savannah

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

Lab Sample ID: 680-241786-1

Date Collected: 10/10/23 11:23

Matrix: Water

Date Received: 10/17/23 09:42

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

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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: AF80266

Lab Sample ID: 680-241786-2

Date Collected: 10/10/23 11:28

Matrix: Water

Date Received: 10/17/23 09:42

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

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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: AF80267

Lab Sample ID: 680-241786-3

Date Collected: 10/10/23 10:15

Matrix: Water

Date Received: 10/17/23 09:42

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

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QC Sample Results

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

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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

Matrix: Water

Date Received: 10/17/23 09:42

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

Matrix: Water

Date Received: 10/17/23 09:42

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

Matrix: Water

Date Received: 10/17/23 09:42

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



Chain of Custody

Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LINDA.WILLIAMS @santeecooper.com

 / /

125915 / JMO2.09.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 µg/L	x		
66	CGYP-7 DUP		1128										
67	POZ-3		1015										



Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>S. Brown</i>	35594	10/16/23	1200	<i>C. M...</i>	<i>10/17/23</i>	<i>0942</i>	

Sample Receiving (Internal Use Only)
 TEMP (°C): _____ Initial: _____
 Correct pH: Yes No
 Preservative Lot#: 18.1/18.4
 Date/Time/Init for preservative: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	---	--	--	---	--	---

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-241786-1

Login Number: 241786

List Number: 1

Creator: Munro, Caroline

List Source: Eurofins Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 <math><6\text{mm}</math> (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
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-241786-1

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 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

* Accreditation/Certification renewal pending - accreditation/certification considered valid.



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

Page 1 of 2

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

Contact:
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.

GEL LABORATORIES LLC

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

QC Summary

Workorder: 625517

Page 2 of 2

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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.com

Chain of Custody

625517



Customer Email/Report Recipient: LCWILLIA@santecooper.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	Analysis Group		
											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
<i>SJBrown</i>	35594	6/9/23	0846	<i>DUP</i>	GEL	6/9/23	0916
<i>DUP</i>	682	6/9/23	1435	<i>SLB</i>		6/9/23	14:35

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GORER
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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

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 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:

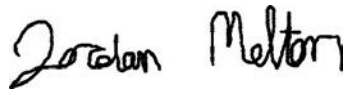
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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



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

GEL LABORATORIES LLC

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

QC Summary

Report Date: November 3, 2023

Page 1 of 2

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					0.166	pCi/L				10/24/23	08:47
			U		+/-0.981						
			Uncertainty								
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					0.176	pCi/L				11/02/23	08:31
			U		+/-0.345						
			Uncertainty								
QC1205547811	641316001	MS									
Radium-226				134	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

GEL LABORATORIES LLC

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QC Summary

Workorder: 641316

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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



Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LINDA WILLIAMS @santeecooper.com

/ /

125915 / JMO2.09.GØ1.1 / 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 226/228	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		1515										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	36851	10/13/23	0944	<i>[Signature]</i>	GEL	10/13/23	0944
<i>[Signature]</i>	GEL	10/13/23	1610	<i>[Signature]</i>	GEL	10/13/23	1610

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb,Hg) <input type="checkbox"/> TX <input type="checkbox"/> 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, 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)

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOCP</u>		SDG/AR/COC/Work Order: <u>641316/641317</u>		
Received By: <u>QG</u>		Date Received: <u>10/18/23</u>		
Carrier and Tracking Number		FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other		
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___		
B) Did the client designate the samples to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation		
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>5</u> <u>SPM/mR/hr</u> 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	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry Ice None Other: _____ *all temperatures are recorded in Celsius TEMP: <u>3°C</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Bincoros or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				

JR

n/a

PM (or PMA) review: Initials glw Date 10/16/23 Page 1 of 1

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



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

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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: 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 |

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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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: 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

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: 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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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: 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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Report Date: July 7, 2023

Company : Santee Cooper
 Address : P.O. Box 2946101
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 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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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: 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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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: 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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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: 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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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: 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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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: 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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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: 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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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: 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

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QC Summary

Report Date: July 7, 2023

Page 1 of 2

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

Contact:
Workorder: 625513

Parname	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		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

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QC Summary

Workorder: 625513

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

Chain of Custody

625513



Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LCWILLIA @santecooper.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
<i>SJBrown</i>	35594	6/9/23	09:46	<i>AD</i>	GEL	6/9/23	09:46
<i>AD</i>	GEL	6/9/23	14:35	<i>HR</i>		6/9/23	14:35

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> % Carbon <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input checked="" type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb,Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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6/19/23 - TOC

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 7 / 10 / 23 -RAD Send report to lcwillia@santecooper.com & sjbrown@santecooper.com



Chain of Custody

Customer Email/Report Recipient: Date Results Needed by: Project/Task/Unit #: Rerun request for any flagged QC

LCWILLIA @santecooper.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	RAD 226/228	TOTAL RAD CALC	TDC
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
<i>SJBrown</i>	35594	6/9/23	0946	<i>DUP</i>	GEL	6/9/23	0946
<i>DLW</i>	6616	6/9/23	1436	<i>LSR</i>		6/9/23	14:35

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO <input type="checkbox"/> NH ₄ -N <input type="checkbox"/> NO ₂ <input type="checkbox"/> NO ₃ <input type="checkbox"/> NO ₃ -N <input type="checkbox"/> SO ₄	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gas/SL <input type="checkbox"/> Sulfide <input type="checkbox"/> Cyanide <input type="checkbox"/> Volatile <input type="checkbox"/> H ₂ S <input type="checkbox"/> H ₂ O ₂ <input type="checkbox"/> Total Acids <input type="checkbox"/> Soluble Acids <input type="checkbox"/> Phosphate (PO ₄) <input type="checkbox"/> Silicate <input type="checkbox"/> Chloride <input type="checkbox"/> Fluoride <input type="checkbox"/> Sulfate	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> % Ash <input type="checkbox"/> % Sulfur <input type="checkbox"/> % BTU <input type="checkbox"/> % Volatile Matter <input type="checkbox"/> % CHN Other Tests: <input type="checkbox"/> % Free Swell <input type="checkbox"/> % H ₂ O ₂ <input type="checkbox"/> % Fineness <input type="checkbox"/> % Particulate Matter	Hyash <input type="checkbox"/> Ammonia <input type="checkbox"/> H ₂ O ₂ <input type="checkbox"/> % Carbon <input type="checkbox"/> % Moisture <input type="checkbox"/> % Ash <input type="checkbox"/> % Sulfur <input type="checkbox"/> % BTU <input type="checkbox"/> % Volatile Matter <input type="checkbox"/> % CHN <input type="checkbox"/> % Free Swell <input type="checkbox"/> % H ₂ O ₂ <input type="checkbox"/> % Fineness <input type="checkbox"/> % Particulate Matter
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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

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:

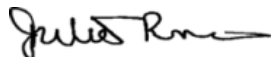
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

Page 1 of 2

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		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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 649122

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

Chain of Custody

649122



Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LINDA.WILLIAMS @santeecooper.com _____ / _____ / _____ 1259115 / JM=2.07.GP1.1 / 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 226/228	TOTAL RAD CALC	Analysis Group	
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
<i>[Signature]</i>	36851	12/15/23	0923	<i>[Signature]</i>	GEL	12/15/23	1923
<i>[Signature]</i>	GEL	12/15/23	1610	<i>[Signature]</i>	GEL	12/15/23	1810

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particulate Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	--	--	---	---	--	---

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SDGP</u>		SDG/AR/COC/Work Order: <u>649122</u>
Received By: <u>QG</u>		Date Received: <u>12/15/23</u>
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Carrier</u> Other
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation
C) Did the RSO classify the samples as radioactive?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>CPM</u> mR/hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation
E) Did the RSO identify possible hazards?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____
Sample Receipt Criteria		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: <u>Wet Ice</u> Ice Packs Dry ice <u>None</u> Other: _____ *all temperatures are recorded in Celsius TEMP: <u>2°C</u>
4	Daily check performed and passed on IR temperature gun?	Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	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) <u>only received 1 container for AP85752</u>
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

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

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

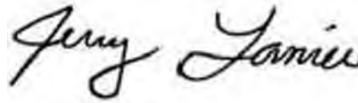
Eurofins Savannah

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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12/15/2023 11:58:21 AM
Revision 1

Authorized for release by
Jerry Lanier, Project Manager I
Jerry.Lanier@et.eurofinsus.com
(912)250-0281

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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

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

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
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

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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

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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.
α	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.G011/36500

Job ID: 680-244036-1

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.

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This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Client Sample ID: AF84383

Lab Sample ID: 680-244036-1

Date Collected: 12/05/23 13:26

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 12:11	1

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

Client Sample ID: AF84385

Lab Sample ID: 680-244036-3

Date Collected: 12/05/23 10:14

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 12:20	1

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QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

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

QC Association Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

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

Lab Sample ID: 680-244036-1

Date Collected: 12/05/23 13:26

Matrix: Water

Date Received: 12/08/23 10:03

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

Lab Sample ID: 680-244036-2

Date Collected: 12/05/23 13:31

Matrix: Water

Date Received: 12/08/23 10:03

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

Lab Sample ID: 680-244036-3

Date Collected: 12/05/23 10:14

Matrix: Water

Date Received: 12/08/23 10:03

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

Chain of Custody



Customer Email/Report Recipient: LINDA WILLIAMS @santecooper.com Date Results Needed by: / / Project/Task/Unit #: 125715 / JM02 09-GP11 / 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											



Page 15 of 17

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Skrvy</i>	35574	12/6/23	1200	<i>Zolt</i>		12/8/23	1603

Sample Receiving (Internal Use Only)
TEMP (°C): 13.9/13.7 Initial:
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/EPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> Petroleum <input type="checkbox"/> Color <input type="checkbox"/> Viscosity <input type="checkbox"/> Density <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Heavy Metal <input type="checkbox"/> (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> PAH <input type="checkbox"/> GOWFA
--	--	--	--	---	--	--

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)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-244036-1

Login Number: 244036

List Source: Eurofins Savannah

List Number: 1

Creator: Stewart, Rendaisha

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 $<6\text{mm}$ (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
Project/Site: 125915/JM02 09.G011/36500

Job ID: 680-244036-1

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

- 1
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ANALYTICAL REPORT

PREPARED FOR

Attn: Linda Williams
South Carolina Public Service Authority
Santee Cooper
PO BOX 2946101
Moncks Corner, South Carolina 29461-2901

Generated 8/16/2023 10:58:28 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-238944-1

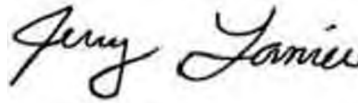
Eurofins Savannah

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
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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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.

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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

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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.
α	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

Detection Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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.

Eurofins Savannah

Client Sample Results

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

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	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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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

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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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 Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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

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

QC Sample Results

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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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 LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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 MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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 LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
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

QC Sample Results

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



QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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

Eurofins Savannah

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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

Matrix: Water

Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch 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

Matrix: Water

Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch 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

Matrix: Water

Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch 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

Matrix: Water

Date Received: 08/10/23 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch 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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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	Batch 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	Batch 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	Batch 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	Batch 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
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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

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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: LUNDA.WILLIAMS@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JMo2.09.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
AF71896	CCMGP-5	8/1/23	0953	WJK BB	1	P	G	GW	2	Hg-7470 ALLOTHERS 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								

Page 26 of 29

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	8/9/23	1300	<i>TA</i>	TA	8-10-23	1025

Sample Receiving (Internal Use Only)
 TEMP (°C) 26.2/26.3 Initial:
 Correct pH: Yes No
 Preservative Lot#:



<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input checked="" type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input checked="" type="checkbox"/> Se <input checked="" type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input checked="" type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input checked="" type="checkbox"/> Be <input type="checkbox"/> Mn <input checked="" type="checkbox"/> Tl <input checked="" type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input checked="" type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input checked="" type="checkbox"/> Co <input type="checkbox"/> Ni <input checked="" type="checkbox"/> Hg <input checked="" type="checkbox"/> Cr <input checked="" type="checkbox"/> Pb <input type="checkbox"/> CrVI			Nutrients <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum Gypsum (see below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input checked="" type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input checked="" type="checkbox"/> Purity (CaSO4) <input checked="" type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	<input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Oil <input type="checkbox"/> % Carbon <input type="checkbox"/> % Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input checked="" type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	<input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil Flashpoint Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

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 Number: 1

Creator: Sims, Robert D

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.	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
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-238944-1

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 *

- 1
- 2
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- 10
- 11
- 12
- 13
- 14

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

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

Page 1 of 2

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

Contact:
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:

GEL LABORATORIES LLC

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

QC Summary

Workorder: 641317

Page 2 of 2

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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
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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.

Chain of Custody

641316
641317



Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LINDA WILLIAMS @santecooper.com

____/____/____

125915 / JMO2.09.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 226/228	TOTAL RAD CAL	F, Cl, SO4
AF 80266	CGYP-7 DUP		1128										
AF 80267	POZ-3		1015										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	36851	10/13/23	0944	<i>[Signature]</i>	GEL	10/13/23	0944
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	GEL	10/13/23	1610	<i>[Signature]</i>	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: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOCP</u>		SDG/AR/COC/Work Order: <u>641316/641317</u>			
Received By: <u>QG</u>		Date Received: <u>10/13/23</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other			
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.			
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
B) Did the client designate the samples me to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation.			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> GPM/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: <u>Wet Ice</u> Ice Packs Dry Ice None Other: *all temperatures are recorded in Celsius TEMP: <u>3°C</u>
4	Daily check performed and passed on IR temperature gun?	/	/	/	Temperature Device Serial #: <u>JR1-23</u> Secondary Temperature Device Serial #: (If Applicable):
5	Sample containers intact and sealed?	/	/	/	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	/	/	/	Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	/	/	/	If Yes, are Bincres 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 glw Date 10/14/23 Page 1 of 1

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



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

GEL LABORATORIES LLC

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

QC Summary

Report Date: July 21, 2023

Page 1 of 2

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:

GEL LABORATORIES LLC

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

QC Summary

Workorder: 627344

Page 2 of 2

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.									
NI		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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.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@santecooper.com Date Results Needed by: / / Project/Task/Unit #: 125915 / JMO2.09.G01.1 / 36500 Run 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	RAP 226	RAP 228	TOTAL RAD CALC.
AF66446	POZ-S	6/22/23	0946	WJK ML	2	P	G	GW	2		1	1	X
AF66424	CCMLF-2		1058										
AF66416	CCMAP-S		1255										
AF66408	CCMAP-1		1351										
										SAMPLES SENT 6/23			
										CHAIN LEFT BEHIND			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35594	6/26/23	0710	<i>Se</i>	GEL	6/23/23	0917
<i>Se</i>	GEL	6/23/23	1520	<i>SL</i>	GEL	6/23/23	1520
				<i>JHR</i>		6/23/23	

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO ₃) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input checked="" type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Silica <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Diethylene Strength <input type="checkbox"/> IPT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> 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)

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 1027278 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?		<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ IF UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u> </u> CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Preservation Method: Wet Ice Ice Packs Dry ice None Other: _____ *all temperatures are recorded in Celsius TEMP: _____
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Temperature Device Serial #: IR2-22 IR3-23 Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?		<input checked="" type="checkbox"/>		If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA freezer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected: _____
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		ID's and tests affected: _____
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		ID's and containers affected: _____
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: No container count on COC Other (describe) SEE BELOW
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		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

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

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 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:

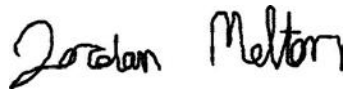
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- B Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
- U Analyte was analyzed for, but not detected above 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



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

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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	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
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: 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
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: 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

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: 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

GEL LABORATORIES LLC

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

QC Summary

Report Date: December 1, 2023

Page 1 of 2

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

Contact:
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

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QC Summary

Workorder: 644996

Page 2 of 2

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

GEL LABORATORIES LLC

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QC Summary

Report Date: December 1, 2023

Page 1 of 2

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

Contact:
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

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QC Summary

Workorder: 644996

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

Technical Case Narrative
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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

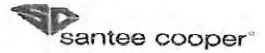
Additional Comments

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.

Chain of Custody



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@santecooper.com 11, 27, 23 125915, JMO2.09.GA.1 + 35600 36500 Yes No Total 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		
AF81444	CCMGP-1	11/8/23	929	ZM/ML	3	P	G	GW	1/2	Rad 226/228 + Total Calc	2	1
AF81445	CCMGP-1 dup		934							7470 RLO 2ug/L		
AF81446	CCMGP-2		1229									
AF81447	CCMGP-3		1039									
AF81448	CCMGP-4		1135									
AF81449	CCMGP-5	11/7/23	1406	ZM ML								

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	35466	11/10/23	0847	<i>[Signature]</i>	GEL	11/10/23	0847
<i>[Signature]</i>	GEL	11/10/23	1510	<i>[Signature]</i>	GEL	11/10/23	1510

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans, Oil Qual. <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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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)

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

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 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:

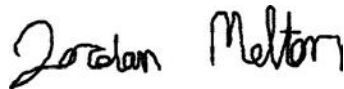
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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



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

GEL LABORATORIES LLC

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

QC Summary

Report Date: November 3, 2023

Page 1 of 2

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

Contact:
Workorder: 641316

Parname	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		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

GEL LABORATORIES LLC

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QC Summary

Workorder: 641316

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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@santecooper.com & sjbrown@santecooper.com

Chain of Custody

641316
641317



Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LINDA WILLIAMS @santecooper.com

/ /

125915 / JMO2.09.GØ1.1 / 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	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	• Method # • Reporting limit • Misc. sample info • Any other notes	2	X	1
AF 80266	CGYP-7 DUP		1128										
AF 80267	POZ-3		1515										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	36851	10/13/23	0944	<i>[Signature]</i>	GEL	10/13/23	0944
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	GEL	10/13/23	1610	<i>[Signature]</i>	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: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, 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)

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOCP</u>		SDG/AR/COC/Work Order: <u>641316 / 641317</u>		
Received By: <u>QG</u>		Date Received: <u>10/18/23</u>		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> Other		
		<u>n/a</u>		
Suspected Hazard Information		Yes	No	
		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___		
B) Did the client designate the samples to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation		
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>5</u> <u>SPM/mR/hr</u> 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	
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)		
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Circle Applicable: Client contacted and provided COC COC created upon receipt		
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Preservation Method: Wet Ice Ice Packs Dry Ice None Other: *all temperatures are recorded in Celsius TEMP: <u>3°C</u>		
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable):		
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)		
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Sample ID's and Containers Affected: If Preservation added, Lot#:		
7	Do any samples require Volatile Analysis?	If Yes, are Bincoros or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)		
		Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)		
		Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:		
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		ID's and tests affected:		
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		ID's and containers affected:		
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)		
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Circle Applicable: No container count on COC Other (describe)		
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Circle Applicable: Not relinquished Other (describe)		
Comments (Use Continuation Form if needed):				

JR

PM (or PMA) review: Initials glw Date 10/16/23 Page 1 of 1

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

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:

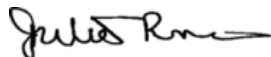
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

Page 1 of 2

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 649122

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
UI											
BD											
h											
R											
^											
N/A											
ND											
M											
NJ											
FA											
UJ											
Q											
K											
UL											
L											
NI											
Y											
**											
M											
J											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

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

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

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

**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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.

Chain of Custody

649122



Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC

LINDA.WILLIAMS @santeecooper.com _____ / _____ / _____ 1259115 / JM=2.07.GP1.1 / 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		
AF85222	WAP-27	12/11/23	1319	ZM ML	2	G	G	GW	2	• Method # • Reporting limit • Misc. sample info • Any other notes	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
<i>[Signature]</i>	36851	12/15/23	0923	<i>[Signature]</i>	GEL	12/15/23	1923
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	GEL	12/15/23	1610	<i>[Signature]</i>	GEL	12/15/23	1810

Sample Receiving (Internal Use Only)

TEMP (°C): _____ Initial: _____

Correct pH: Yes No

Preservative Lot#:

Date/Time/Init for preservative:

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particulate Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
--	--	--	---	---	--	---

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SDGP</u>		SDG/AR/COC/Work Order: <u>649122</u>		
Received By: <u>QG</u>		Date Received: <u>12/15/23</u>		
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Carrier</u> Other		
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.		
A) Shipped as a DOT Hazardous?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___		
B) Did the client designate the samples are to be received as radioactive?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation		
C) Did the RSO classify the samples as radioactive?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> <u>CPM</u> mR/HR Classified as: Rad 1 Rad 2 Rad 3		
D) Did the client designate samples are hazardous?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation		
E) Did the RSO identify possible hazards?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____		
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice <u>None</u> Other: _____ *all temperatures are recorded in Celsius TEMP: <u>2°C</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Temperature Device Serial #: <u>IR1-23</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and tests affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID's and containers affected: _____
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Circle Applicable: No container count on COC Other (describe) <u>only received 1 container for AP85752</u>
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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

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

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:

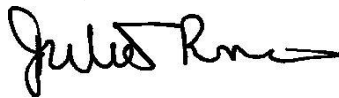
GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 23, 2023. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

GEL LABORATORIES LLC

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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 |

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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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

GEL LABORATORIES LLC

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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: 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

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: 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

GEL LABORATORIES LLC

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QC Summary

Report Date: July 21, 2023

Page 1 of 2

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

Contact:
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:

GEL LABORATORIES LLC

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

QC Summary

Workorder: 627278

Page 2 of 2

Parname	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.									
NI		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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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.



Chain of Custody

627278

Customer Email/Report Recipient: LINDA.WILLIAMS@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02-09.001.1 / 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				
AF66422	CCMLF-1		1327										
AF66423	CCMLF-1D		1428										
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
<i>SJB</i>	35594	6/23/23	0917	<i>WJK</i>	GEL	6/23/23	0917
<i>WJK</i>	GEL	6/23/23	1520	<i>STB</i>		6/23/23	15:20

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

<input type="checkbox"/> METALS (all)			Nutrients	MISC.	Gypsum	Coal	Flyash	Oil
<input type="checkbox"/> Ag	<input type="checkbox"/> Cu	<input type="checkbox"/> Sb						
<input type="checkbox"/> Al	<input type="checkbox"/> Fe	<input type="checkbox"/> Se	<input type="checkbox"/> TOC	<input type="checkbox"/> BTEX	<input type="checkbox"/> Wallboard	<input type="checkbox"/> Ultimate	<input type="checkbox"/> Ammonia	<input type="checkbox"/> Trans. Oil Qual.
<input type="checkbox"/> As	<input type="checkbox"/> K	<input type="checkbox"/> Sn	<input type="checkbox"/> DOC	<input type="checkbox"/> Naphthalene	<input type="checkbox"/> Gypsum(all below)	<input type="checkbox"/> % Moisture	<input type="checkbox"/> LOI	<input type="checkbox"/> %Moisture
<input type="checkbox"/> B	<input type="checkbox"/> Li	<input type="checkbox"/> Sr	<input type="checkbox"/> TP/TPO4	<input type="checkbox"/> THM/HAA	<input type="checkbox"/> AIM	<input type="checkbox"/> Ash	<input type="checkbox"/> % Carbon	<input type="checkbox"/> Color
<input type="checkbox"/> Ba	<input type="checkbox"/> Mg	<input type="checkbox"/> Ti	<input type="checkbox"/> NH3-N	<input type="checkbox"/> VOC	<input type="checkbox"/> TOC	<input type="checkbox"/> Sulfur	<input type="checkbox"/> Mineral Analysis	<input type="checkbox"/> Acidity
<input type="checkbox"/> Be	<input type="checkbox"/> Mn	<input type="checkbox"/> Tl	<input type="checkbox"/> F	<input type="checkbox"/> Oil & Grease	<input type="checkbox"/> Total metals	<input type="checkbox"/> BTUs	<input type="checkbox"/> Sieve	<input type="checkbox"/> Dielectric Strength
<input type="checkbox"/> Ca	<input type="checkbox"/> Mo	<input type="checkbox"/> V	<input type="checkbox"/> Cl	<input type="checkbox"/> E. Coli	<input type="checkbox"/> Soluble Metals	<input type="checkbox"/> Volatile Matter	<input type="checkbox"/> Used Oil	<input type="checkbox"/> IFT
<input type="checkbox"/> Cd	<input type="checkbox"/> Na	<input type="checkbox"/> Zn	<input type="checkbox"/> NO2	<input type="checkbox"/> Total Coliform	<input type="checkbox"/> Purity (CaSO4)	<input type="checkbox"/> CHN	<input type="checkbox"/> % Moisture	<input type="checkbox"/> Dissolved Gases
<input type="checkbox"/> Co	<input type="checkbox"/> Ni	<input type="checkbox"/> Hg	<input type="checkbox"/> Br	<input type="checkbox"/> pH	<input type="checkbox"/> % Moisture	Other Tests:	<input type="checkbox"/> NPDES	<input type="checkbox"/> Flashpoint
<input type="checkbox"/> Cr	<input type="checkbox"/> Pb	<input type="checkbox"/> CrVI	<input type="checkbox"/> NO3	<input type="checkbox"/> SO4	<input type="checkbox"/> Sulfites	<input type="checkbox"/> XRF Scan	<input type="checkbox"/> Oil & Grease	<input type="checkbox"/> Metals in oil
			<input type="checkbox"/> SO4		<input type="checkbox"/> pH	<input type="checkbox"/> HGI	<input type="checkbox"/> As	<input type="checkbox"/> (As, Cd, Cr, Ni, Pb)
					<input type="checkbox"/> Chlorides	<input type="checkbox"/> Fineness	<input type="checkbox"/> TSS	<input type="checkbox"/> Hg
					<input type="checkbox"/> Particle Size	<input type="checkbox"/> Particulate Matter		<input type="checkbox"/> TX
					<input type="checkbox"/> Sulfur			<input type="checkbox"/> GOFER

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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u> 5 </u> CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 < 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice None Other: _____ *all temperatures are recorded in Celsius TEMP: _____
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: 1802 183-25 Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____ If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Brewer) Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and containers affected: _____
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: _____
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC? SB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe) SEE BELOW
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

AF66408
66416
66424
66446

NOT ON COC, 2EA

PM (or PMA) review: Initials KJW Date 6/26/23 Page 1 of 1

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



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

Page 1 of 2

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

Contact:
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.

GEL LABORATORIES LLC

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

QC Summary

Workorder: 625517

Page 2 of 2

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).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
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



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

Main Chain of Custody table with columns: 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, RAD 226/228, TOTAL RAD CALC, TOC.

Handwritten transfer log table with columns: 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:

Checklist grid for METALS (all), Nutrients, MISC., Gypsum, Coal, Flyash, and Oil. Includes sub-sections like Ultimate, Other Tests, and NPDES.

SAMPLE RECEIPT & REVIEW FORM

Client: SCOOP		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 <u>Courier</u> Other		
		<div style="display: flex; justify-content: space-around; font-size: 1.2em;"> 19°C 19°C 1°C </div>		
Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
A) Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___	
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u> </u> CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or hazard labels on containers equal client designation.	
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____	
Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet ice Ice Packs Dry ice None Other: _____ *all temperatures are recorded in Celsius
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR3-23</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				

TEMP: See Tracking

PM (or PMA) review: Initials Date 6/12/23 Page 1 of 1

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

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

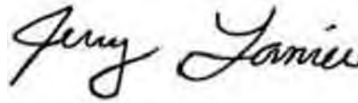
Eurofins Savannah

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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Case Narrative

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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.

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Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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

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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

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Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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.
α	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: 680-236991-1

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.

Eurofins Savannah

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66411

Lab Sample ID: 680-236991-1

Date Collected: 06/19/23 13:09

Matrix: Water

Date Received: 06/27/23 09:30

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66412

Lab Sample ID: 680-236991-2

Date Collected: 06/19/23 13:14

Matrix: Water

Date Received: 06/27/23 09:30

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66413

Lab Sample ID: 680-236991-3

Date Collected: 06/19/23 14:50

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66409

Lab Sample ID: 680-236991-4

Date Collected: 06/20/23 09:11

Matrix: Water

Date Received: 06/27/23 09:30

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66415

Lab Sample ID: 680-236991-5

Date Collected: 06/20/23 10:17

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66410

Lab Sample ID: 680-236991-6

Date Collected: 06/20/23 11:20

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
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Client Sample Results

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

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66422

Lab Sample ID: 680-236991-8

Date Collected: 06/21/23 13:27

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66423

Lab Sample ID: 680-236991-9

Date Collected: 06/21/23 14:38

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66446

Lab Sample ID: 680-236991-10

Date Collected: 06/22/23 09:46

Matrix: Water

Date Received: 06/27/23 09:30

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66424

Lab Sample ID: 680-236991-11

Date Collected: 06/22/23 10:58

Matrix: Water

Date Received: 06/27/23 09:30

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

- 1
- 2
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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

Client Sample ID: AF66416

Lab Sample ID: 680-236991-12

Date Collected: 06/22/23 12:55

Matrix: Water

Date Received: 06/27/23 09:30

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

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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

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

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QC Sample Results

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							Client Sample ID: Method Blank			
Matrix: Water							Prep Type: Total/NA			
Analysis Batch: 786208							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							Client Sample ID: Lab Control Sample			
Matrix: Water							Prep Type: Total/NA			
Analysis Batch: 786208							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							Client Sample ID: AF66411			
Matrix: Water							Prep Type: Total/NA			
Analysis Batch: 786208							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							Client Sample ID: AF66411				
Matrix: Water							Prep Type: Total/NA				
Analysis Batch: 786208							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

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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

Lab Sample ID: 680-236991-1

Date Collected: 06/19/23 13:09

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 10:03

Client Sample ID: AF66412

Lab Sample ID: 680-236991-2

Date Collected: 06/19/23 13:14

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 10:11

Client Sample ID: AF66413

Lab Sample ID: 680-236991-3

Date Collected: 06/19/23 14:50

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 10:12

Client Sample ID: AF66409

Lab Sample ID: 680-236991-4

Date Collected: 06/20/23 09:11

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 10:14

Client Sample ID: AF66415

Lab Sample ID: 680-236991-5

Date Collected: 06/20/23 10:17

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 10:15

Client Sample ID: AF66410

Lab Sample ID: 680-236991-6

Date Collected: 06/20/23 11:20

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 10:17

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

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 10:18

Client Sample ID: AF66422

Lab Sample ID: 680-236991-8

Date Collected: 06/21/23 13:27

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 10:20

Client Sample ID: AF66423

Lab Sample ID: 680-236991-9

Date Collected: 06/21/23 14:38

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 10:22

Client Sample ID: AF66446

Lab Sample ID: 680-236991-10

Date Collected: 06/22/23 09:46

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 10:23

Client Sample ID: AF66424

Lab Sample ID: 680-236991-11

Date Collected: 06/22/23 10:58

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 10:25

Client Sample ID: AF66416

Lab Sample ID: 680-236991-12

Date Collected: 06/22/23 12:55

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 10:29

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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

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Chain of Custody

Customer Email/Report Recipient: LINDA.WILLIAMS @santecooper.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	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								



Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35594	6/26/23	1300	<i>C. Moore</i>	142/140	6/27/23	09:30

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

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> P <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum(all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil <input type="checkbox"/> Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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Chain of Custody

Customer Email/Report Recipient: LINDA.WILLIAMS @santecooper.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
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								
AF66446	CCMAP-8		1255								
AF66408	CCMAP-1		1351								

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sibrown</i>	35594	6/26/23	1300	<i>C.Miao</i>	142140	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: _____

<input type="checkbox"/> METALS (all) <input type="checkbox"/> Ag <input type="checkbox"/> Cu <input type="checkbox"/> Sb <input type="checkbox"/> Al <input type="checkbox"/> Fe <input type="checkbox"/> Se <input type="checkbox"/> As <input type="checkbox"/> K <input type="checkbox"/> Sn <input type="checkbox"/> B <input type="checkbox"/> Li <input type="checkbox"/> Sr <input type="checkbox"/> Ba <input type="checkbox"/> Mg <input type="checkbox"/> Ti <input type="checkbox"/> Be <input type="checkbox"/> Mn <input type="checkbox"/> Tl <input type="checkbox"/> Ca <input type="checkbox"/> Mo <input type="checkbox"/> V <input type="checkbox"/> Cd <input type="checkbox"/> Na <input type="checkbox"/> Zn <input type="checkbox"/> Co <input type="checkbox"/> Ni <input type="checkbox"/> Hg <input type="checkbox"/> Cr <input type="checkbox"/> Pb <input type="checkbox"/> CrVI			Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> THM/HAA <input type="checkbox"/> VOC <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Gypsum <input type="checkbox"/> Wallboard Gypsum (all below) <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur	Coal <input type="checkbox"/> Ultimate <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN Other Tests: <input type="checkbox"/> XRF Scan <input type="checkbox"/> HGI <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Qual. <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil (As,Cd,Cr,Ni,Pb,Hg) <input type="checkbox"/> TX <input type="checkbox"/> GOFER
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Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-236991-1

Login Number: 236991

List Number: 1

Creator: Munro, Caroline

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.	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
Project/Site: 125915/JM02.09.G01.1/36500

Job ID: 680-236991-1

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

- 1
- 2
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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 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 11/4

Samples were collected by Zach McHenry and Melanie Goings

**Cross Generating Station
Class 3 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
CLF1B-1	83.76	6.29	12.0 - 22.0	1/26/2023	938

Drawdown: 6.44 depth to GW (ft)
 Ferric Iron: 0.09 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)
858	19	6.97	189	654	0.8
903	18.32	6.86	164	655	1.4
908	17.47	6.76	145	671	0
913	17.16	6.69	132	674	0
918	17.14	6.64	124	682	0
923	17.14	6.6	118	682	0.1
926	17.23	6.58	116	685	1.6
929	17.29	6.58	112	688	9.8
932	17.37	6.56	111	684	15.6
935	17.23	6.6	107	678	14.3
938	17.12	6.62	104	665	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:

Duplicate at 943

Samples were collected by Zach McHenry, Melanie Goings, and Brian Brase

**Cross Generating Station
Class 3 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CLF1B-3	82.75	5.23	10.0 - 20.0	1/25/2023	954	22.98

Drawdown: 5.23 depth to GW (ft)

Ferric Iron: 2.11 mg/L

Ferrous Iron: 0.85 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)
908	18.57	6.87	68	660	564	1.28
913	19.14	6.71	57	658	650	1.09
918	18.33	6.67	49	661	158	0.66
923	18.37	6.64	46	661	80	0.57
928	18.42	6.64	45	663	55.3	0.53
933	18.49	6.64	42	667	35.8	0.5
936	18.53	6.62	41	667	38.9	0.49
939	18.58	6.61	41	667	25.5	0.47
942	18.62	6.6	39	670	15.8	0.46
945	18.68	6.6	37	671	15.3	0.45
948	18.72	6.6	34	674	12	0.45
951	18.78	6.6	33	678	3.4	0.44
954	18.85	6.61	31	679	7	0.42

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 Zach McHenry, Brian Brase, and Melanie Goings

**Cross Generating Station
Class 3 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CLF1B-4	82.74	5.16	12.0 - 22.0	1/24/2023	1540	24.43

Drawdown: 5.26 depth to GW (ft)

Ferric Iron: 0.03 mg/L

Ferrous Iron: 0.06 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)
1506	18.53	6.95	99	511	0	3.26
1511	18.59	6.94	138	515	0	2.91
1516	18.8	6.95	177	514	0	2.59
1521	19.1	7.04	199	512	0	2.31
1526	19.41	7.02	224	510	0	2.05
1531	19.74	7.04	241	508	0	1.88
1534	19.93	7.03	253	507	0	1.79
1537	20.11	7.03	258	507	0	1.66
1540	20.29	7.02	263	504	0	1.63

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 Zach McHenry, Brian Brase, and Melanie Goings

**Cross Generating Station
Class 3 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CLF1B-5	81.09	3.46	12.0 - 22.0	1/24/2023	1327	24.75

Drawdown: 3.64 depth to GW (ft)

Ferric Iron: 0.81 mg/L

Ferrous Iron: 0.73 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)
1241	17.59	6.39	284	1080	0.5	2.01
1246	17.57	6.46	369	1080	10.7	1.73
1251	17.85	6.49	408	1090	12.3	1.59
1256	17.89	6.54	418	1090	10.3	1.52
1301	17.93	6.55	377	1090	1.5	1.43
1306	17.99	6.58	201	1080	0	1.34
1309	18.06	6.6	132	1090	0	1.28
1312	18.05	6.62	105	1080	0	1.17
1315	18.15	6.67	86	1080	0	1.13
1318	18.1	6.62	80	1070	0	1.11
1321	18.11	6.62	72	1080	0	0.97
1324	18.29	6.59	67	1080	0	0.92
1327	18.31	6.58	63	1080	0	0.86

Comments/Conditions:

Samples were collected by Zach McHenry, Brian Brase, and Melanie Goings

**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
Class 3 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
CLF1B-1	83.76	7.65	12.0 - 22.0	6/12/2023	911

Drawdown: 7.8 depth to GW (ft)
 Ferric Iron: 0.12 mg/L
 Ferrous Iron: 0.1 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
844	20.81	6.6	137	862	0.8
849	20.76	6.6	118	859	0.1
854	20.79	6.58	101	864	0.9
901	20.98	6.54	83	863	0.9
906	21.07	6.52	79	862	0.6
911	21.21	6.5	74	858	0
916					

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:
 Duplicate at 916

Samples were collected by Justin Kirk and Marvin Lewis

Cross Generating Station Class 3 Landfill Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time
CLF1B-2	82.04	5.94	12.0 - 22.0	6/12/2023	1014

Drawdown: 5.97 depth to GW (ft)

Ferric Iron: 0.32 mg/L

Ferrous Iron: 0.28 mg/L

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)
941	22.14	6.76	103	763	0.4
946	21.5	6.75	77	759	0
951	21.26	6.76	14	752	0
956	21.21	6.77	-4	751	0
1001	21.23	6.78	-17	750	0
1006	21.22	6.8	-24	748	0
1011	21.17	6.82	-29	747	0
1014	21.09	6.83	-32	745	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:

**Cross Generating Station
Class 3 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CLF1B-4	82.74	6.89	12.0 - 22.0	6/12/2023	1212	24.43

Drawdown: 7.01 depth to GW (ft)

Ferric Iron: 0.1 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)	Dissolved Oxygen (ppm)
1130	23.1	6.97	61	722	48.9	1.4
1135	22.4	6.94	98	714	26	0.91
1140	22.36	6.95	109	706	24.5	7.44
1145	22.25	6.95	125	706	24.9	6.91
1150	22.2	6.96	130	701	20.5	6.42
1155	22.23	6.96	134	702	16.1	6
1200	22.09	6.97	141	699	12.2	5.58
1203	22.02	6.98	150	696	10	5.38
1206	21.96	6.98	156	699	10.3	5.14
1209	22.02	6.98	163	699	11.2	4.93
1212	21.96	6.99	166	697	5.1	4.72

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


Appendix C – Alternate Source Demonstration

**REPORT ON
ALTERNATE SOURCE DEMONSTRATION (ASD)
CROSS GENERATING STATION
CLASS 3 LANDFILL
PINEVILLE, SOUTH CAROLINA**

by Haley & Aldrich, Inc.
Greenville, South Carolina

for South Carolina Public Service Authority (Santee Cooper)
Moncks Corner, South Carolina

File No: 0132892-100-001-03
March 23, 2023

The bottom of the page features a decorative graphic consisting of several overlapping triangles in various shades of gray, creating a modern, abstract design.

Certification Page

**SANTEE COOPER
CROSS GENERATING STATION
CLASS 3 LANDFILL
APPENDIX III SSI ALTERNATE SOURCE DEMONSTRATION**

Pursuant to 40 CFR § 257.94(e)(2), Haley & Aldrich, Inc., on behalf of Santee Cooper, conducted an alternate source demonstration to substantiate that a source other than the Class 3 Landfill caused the statistically significant increase (SSI) over background identified during detection monitoring. I certify that this report and all attachments were prepared by me or under my direct supervision. I am a professional engineer who is registered in the State of South Carolina.

This certification and the underlying data support the conclusion that a source other than the Class 3 Landfill is the cause of the SSI over background levels for Appendix III constituents identified during detection monitoring of this unit.

The information contained in this demonstration is, to the best of my knowledge, true, accurate, and complete.

HALEY & ALDRICH, INC.



Susan Jackson, P.E.
South Carolina Professional Engineer
Registration Number 25476

March 23, 2023

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1. Introduction

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual rule (CCR Rule), this document has been prepared to substantiate an Alternate Source Demonstration (ASD) for a statistically significant increase (SSI) calculated at Santee Cooper's Cross Generating Station (CGS), Class 3 Landfill. This document satisfies the requirements of Title 40 Code of Federal Regulations (40 CFR) § 257.94(e)(2), which allows the owner or operator to demonstrate that a source other than the CCR Unit has caused a SSI and that the apparent SSI was the result of an alternative source or resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality.

Santee Cooper is the owner and operator of CGS, which consists of four coal-fired generating units and associated ancillary equipment, including CCR impoundments and two CCR landfills. The CGS Class 3 Landfill receives non-marketable CCR from the on-site, coal-fired generating units and other South Carolina Department of Health and Environmental Control (SCDHEC)-approved waste. The Class 3 Landfill, which commenced operations on December 16, 2015, was constructed to replace the closed Class 2 Landfill. It was constructed and is operating in compliance with the requirements of the federal CCR Rule and South Carolina's State Landfill Regulation 61-107.19 Part V, Solid Waste Management: Solid Waste Landfills and Structural Fill.

The CGS is located north of the Diversion Canal that connects Lake Marion and Lake Moultrie. Lake Marion is located northwest of CGS and Lake Moultrie is located southeast of CGS. The location of the CGS is shown on Figure 1. The CGS is located within the Lower Coastal Plain of the Atlantic Coastal Plain physiographic province in South Carolina between the Surry Scarp to the west and the Summerville Scarp to the east. The CGS terrain is relatively flat, with natural ground surface elevations varying from 79 to 83 feet above mean sea level (msl). Stormwater runoff occurs via sheet flow to low-lying areas surrounding the CGS and into stormwater drainage features located adjacent to primary and secondary roads and parking areas.

In April 2018, an ASD for the CGS Class 3 Landfill was certified by Haley & Aldrich, Inc. (Haley & Aldrich), which concluded that the closed CGS Class 2 Landfill was the alternate source for the Appendix III SSIs identified at that time instead of the newly constructed Class 3 Landfill. This ASD was performed because the initial round of detection monitoring identified SSIs for multiple Appendix III constituents. In December 2022, Haley & Aldrich was retained by Santee Cooper to reassess the 2018 ASD in light of the variability and increasing trends observed for several of the Appendix III constituents, as recognized in the December 2022 statistical evaluation for the Class 3 Landfill. The goal of this evaluation was to incorporate additional lines of evidence, evaluate the possibility of additional contributing sources, and validate the findings of the initial ASD.

This ASD compares groundwater quality conditions downgradient of the Class 3 Landfill prior to first receipt of CCR into the landfill, groundwater constituent concentrations detected after the Class 3 Landfill initially began operations, and groundwater quality conditions observed throughout 2022. This second ASD recognized earlier findings of elevated levels of detected Appendix III and IV constituents identified downgradient of the Class 3 Landfill prior to the placement of any CCRs. It considers the site's hydrogeology and the location of both the Class 3 Landfill and other potential alternative sources. It reviews and considers the construction and operations of the Class 3 Landfill to demonstrate the unlikelihood of it being a contributing source. As presented in the sections that follow, findings of this ASD conclude the 2022 SSIs continue to be the result of physical and pre-existing alternative sources,

specifically the CGS Class 2 Landfill, and possible residual impacts from temporary gypsum marketing storage areas which no longer exist. Furthermore, the ASD demonstrates that the Class 3 Landfill is currently not a contributing source.

1.1 BACKGROUND

Prior to 2016, CCR was managed at CGS in an approximately 91-acre, state-permitted Class 2 Landfill (Industrial Solid Waste Permit # IWP-186) and in two state-permitted CCR ponds; an approximately 79-acre Bottom Ash Pond and an approximately 1-acre Gypsum Slurry Pond (National Pollutant Discharge Elimination System [NPDES] Permit # SC0037401). The Bottom Ash Pond and the now-closed Gypsum Pond were not considered in this evaluation, as they are not hydraulically upgradient of the Class 3 Landfill. Corrective action is currently being implemented for the Class 2 Landfill in accordance with 40 CFR § 257.98 of the Rule, as SSIs for Appendix III constituents and a statistically significant level (SSL) for cobalt exists for the Class 2 Landfill. The selected remedial alternative for this unit is landfill closure (cap-in-place) with enhanced water management improvements followed by monitored natural attenuation (MNA).

In December 2015, the newly permitted Class 3 Landfill (Solid Waste Permit #LF3-00007) began receiving CCRs. The Class 3 Landfill is located directly on the eastern flank abutting the closed Class 2 Landfill. The closed Class 2 Landfill's top deck and east and west slope are covered by a cap of high-density polyethylene (HDPE) that also serves as the bottom liner of the CCR Rule-compliant Class 3 Landfill as it is built out.

The initial groundwater monitoring program began for the Class 2 Landfill around 1995, as required by the landfill operating permit and state regulations. Santee Cooper began collecting semiannual groundwater samples from six downgradient wells during this time. In 2015, two additional wells were installed (POZ-6 and POZ-7) around the Class 2 Landfill to comply with the federal CCR Rule at the unit boundary. For the new Class 3 Landfill, which was under construction in 2015 and not receiving CCRs at that time, five downgradient monitoring wells (CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4, and CLF1B-5) were installed to comply with the federal CCR Rule by monitoring the uppermost aquifer at the CCR unit boundary. The CGS monitoring well network with respect to the Class 2 and Class 3 Landfills is shown on Figure 2. Current potentiometric maps for 2022 are provided as Figures 3A, 3B, and 3C.

Haley & Aldrich performed the initial statistical analysis of the Appendix III constituents detected in groundwater downgradient of the Class 3 Landfill as required by 40 CFR § 257.93(h). Findings from this initial detection monitoring statistical evaluation indicated SSIs for boron, calcium, chloride, pH, sulfate, and total dissolved solids (TDS) that were present in one or more downgradient wells. In April 2018, in response to and consistent with 40 CFR § 257.94(e)(2), Haley & Aldrich conducted an evaluation to demonstrate how the closed adjacent Class 2 Landfill was the source of the SSI over background in lieu of the newly-constructed and lined Class 3 Landfill. Based on results of the successful ASD, Santee Cooper continued semiannual detection monitoring for the Class 3 Landfill using intrawell comparisons for the associated statistical evaluations.

SSIs of chloride and boron were identified during the January 2022 sampling event, which were generally consistent with historical findings. During the June 2022 sampling event, additional SSIs of boron were identified (monitoring well CLF1B-5) and fluoride (monitoring well CLF1B-3) using intrawell comparisons. However, the boron in monitoring well CLF1B-5 and fluoride in monitoring well CLF1B-3 were not SSIs when evaluated with interwell statistical analysis, and analytical results for fluoride remained significantly below the Maximum Contaminant Level (MCL) of 4.0 milligrams per liter (mg/L).

Additionally, 2022 Mann-Kendall trend analyses identified an upward trend for boron in several wells, including CLF1B-3 and CLF1B-5, and chloride in CLF1B-4 and CLF1B-5. The presence of SSIs in multiple wells with observed increasing trends for boron and chloride warranted a review of the initial ASD. Isoconcentration maps illustrating concentrations of boron, chloride, and fluoride through time are provided as Figures 4A through 4G.

1.2 SCOPE AND OBJECTIVE

The objective of this ASD is to present site-specific facts, analytical data, and a technical evaluation to document that an alternate source exists that is responsible for the SSIs of boron, fluoride, and chloride in Class 3 Landfill monitoring wells. Furthermore, this ASD presents site-specific information and construction details pertaining to the CGS Class 3 Landfill to demonstrate the unlikelihood of this unit as a contributing source.

1.3 CCR RULE AND ASD REQUIREMENTS

The EPA regulations regarding detection monitoring programs for CCR units, including landfills and surface impoundments, provide owners and operators with the option to conduct an ASD when an Appendix III constituent is identified at a SSI (40 CFR § 257.94(e)(2)).

According to the CCR Rule, an owner or operator may “demonstrate that a source other than the CCR unit caused the SSI over background levels for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer [...].”

In the absence of South Carolina-specific regulatory requirements for landfill ASDs, the *North Carolina Solid Waste Section Guidelines for Alternate Source Demonstration Submittals for Solid Waste Management Facilities* (2017) was used as a reference. This guidance document defines six lines of evidence an owner/operator could pursue for an ASD, which are numbered below; the guidance requires an ASD to address the first three lines of evidence (items 1 through 3) at a minimum. The last three lines of evidence (items 4 through 6) may also be used to support the first three lines of evidence.

An alternate source exists;

A hydraulic connection exists between the alternative source and the groundwater well with the significant increase;

Constituent(s) (or precursor constituents) are present at the alternative source or along the flow path from the alternative source prior to possible release from the unit;

The relative concentration and distribution of constituents in the zone of contamination are more strongly linked to the alternative source than to the unit when the fate and transport characteristics of the constituents are considered;

Concentrations observed in groundwater could not have resulted from the unit, given the waste constituents and concentrations in the unit leachate and wastes, and the site’s hydrogeologic conditions; and

Data supporting conclusions regarding the alternative source are historically consistent with hydrogeologic conditions and findings of the monitoring program.

Additionally, the EPA has commented in Part A Determinations that to rebut monitoring data and analysis that resulted in a SSI, an ASD should be supported by site-specific facts and analytical data and should meet lines of evidence as outlined in the *EPA Solid Waste Disposal Facility Criteria Technical Manual* (1993), which is consistent with the lines of evidence presented above.

1.4 MONITORING WELL NETWORK FOR THE CGS CLASS 3 LANDFILL

The initial monitoring well network for the Class 3 Landfill was based on a hydrogeologic characterization completed in 2011 to permit the Class 3 Landfill. The groundwater monitoring wells were installed prior to and during construction of the new Class 3 Landfill (Figure 2). As required by the CCR Rule, the groundwater monitoring well network and statistical method were certified by a Professional Engineer.

Prior to implementing the Class 3 monitoring well network, the existing CCR and state groundwater monitoring network for the CGS Class 2 Landfill was considered because the two landfills are contiguous. The monitoring well network for Class 3 Landfill includes two upgradient background monitoring wells, PM-1 and CBW-1. The network also includes two periodically side-gradient and upgradient monitoring wells (CLF1B-1 and CLF1B-2), and three downgradient monitoring wells (CLF1B-3, CLF1B-4, and CLF1B-5). The groundwater monitoring wells were installed to monitor groundwater quality in the uppermost aquifer and are screened in the same shallow hydrostratigraphic unit as the Class 2 Landfill wells that have undergone state-required groundwater monitoring since approximately 1995. Monitoring wells CLF1B-1 and CLF1B-2 will be downgradient wells when the lateral expansion of Class 3 Landfill cell 2 of Area B (2B) is constructed, which is anticipated to be complete in 2024.

In November 2022, two piezometers (CGSPZ-4 and CGSPZ-5) were installed west of the Class 2 and Class 3 Landfill by a South Carolina-certified well driller to improve characterization of the groundwater potentiometric surface, given evolving site conditions that are attributed to events such as landfill closure and remedial measures that could impact groundwater flow direction.

2. Alternative Source Demonstration

Consistent with the CCR Rule and guidance documents, this ASD evaluates multiple lines of evidence to address SSIs individually and collectively. The ASD activities performed by Haley & Aldrich included review of current and prior site conditions using site-specific data, such as landfill design, construction history, and operational information, as well as hydrogeologic, concentration, and statistical evaluations.

The findings of this ASD demonstrate that the SSIs identified are not related to a release from the Class 3 Landfill; rather, the ASD evaluations attribute the observed concentrations and trends for Appendix III constituents to residual impacts in media around and beneath the Class 2 Landfill, in addition to two separate historical temporary gypsum marketing storage areas located south of the Class 3 Landfill. Furthermore, impacts from prior historical storm events, which occurred immediately before the Class 2 Landfill closure, and the presence of stormwater ditches surrounding both the Class 2 and Class 3 Landfills may also contribute to the variability of concentrations and the trends observed. Findings of the ASD evaluations and the lines of evidence supporting this demonstration are described below.

2.1 RELEVANT SITE HISTORY

This detailed summary of the site history of the closed Class 2 Landfill, the historical temporary gypsum marketing storage areas, and the relatively new Class 3 Landfill was incorporated into the ASD evaluation because of its relevance in evaluating the source of the Appendix III constituent SSIs.

The Class 2 Landfill, which began operation in 1982, was unlined without a modern leachate collection system, which was not required by the South Carolina Department of Health and Environmental Control (SCDHEC) at that time. The Class 2 Landfill was permitted for disposal of Poz-O-Tec, a proprietary fixated mixture of flue gas desulfurization (FGD) sludge, fly ash and lime, and gypsum filtrate pond sludge. Poz-O-Tec was produced at the CGS to fixate the fly ash and solidify FGD waste so it could be landfilled. The Poz-O-Tec process, when operating properly, could produce material that once fully cured in the landfill, could have a permeability of down to 1×10^{-7} centimeters per second (cm/s); however, the system was prone to failure and operational downtime; therefore, actual permeability throughout the landfill may vary. After the CGS was upfitted with a forced oxidation scrubber system in the mid-2000s, Poz-O-Tec was no longer produced because FGD residuals were dry-handled. Instead, the landfill was permitted to receive FGD residuals, bottom ash, and lime-fixated fly ash. Poz-O-Tec is generally located in the southern areas and middle of the Class 2 Landfill, while more permeable waste materials are located in the northern section due to the landfill build-out phases.

The original permit allowed placement of material up to elevation 120 feet (National Geodetic Vertical Datum of 1929 [NGVD 1929]), which is approximately 38 feet above grade. A consent agreement with SCDHEC in 2011 allowed Santee Cooper to continue placement of material above this elevation, with a maximum top elevation of 210 feet (NGVD 1929). Placement operations ceased in December 2015, and the actual top elevation of the Class 2 Landfill is approximately 168 feet (NGVD 1929). The Class 2 Landfill was closed by installing a low-permeability geomembrane clay cap and cover, along with surface water controls for drainage and erosion protection. The engineered and installed geomembrane cap virtually eliminate infiltration of water into the CCR material within the Class 2 Landfill. Landfill closure was completed in August 2016, and SCDHEC certified the closure on February 28, 2017. The Class 2 Landfill is maintained in post-closure care pursuant to SCDHEC regulations and the Post-Closure Permit #083337-1601.

As the Class 2 Landfill was not closed as of the effective date of the CCR Rule, it remains a regulated CCR landfill and is monitored accordingly under a corrective action monitoring program pursuant to 40 CFR § 257.98. Previously, SSIs of boron, calcium, chloride, sulfate, and TDS were identified in monitoring wells POZ-4, POZ-6, and POZ-7 during the 2017 detection monitoring events. This triggered an assessment monitoring program initiated on January 15, 2018. The statistical analysis of the downgradient wells for the Class 2 Landfill identified a SSL of the Appendix IV constituent cobalt in monitoring well POZ-4, and later also, but temporarily, in POZ-6. An assessment of corrective measures was initiated on January 14, 2019. A remedy was selected pursuant to 40 CFR § 257.97 with the Remedy Selection Report completed on July 27, 2020. The selected remedy was capping with water management enhancements followed by MNA. The water enhancements, completed in January 2020, capture ash contact water which was present in the landfill at the time of closure, thereby removing as much of the leachate as is feasible; however, the landfill remains unlined. In 2022 and consistent with historical data, SSIs of cobalt in monitoring well POZ-4 were again identified for the January/February and June 2022 sampling events; however, according to the Mann-Kendall trend analysis, the concentration of cobalt is trending downward.

Prior to 2015, Santee Cooper operated two gypsum marketing storage areas. These areas were used for truck loading of gypsum sold for beneficial use from approximately 2005 to 2015. The storage areas were intermittent in nature, as they were required during periods of gypsum marketing and not necessarily on a year-round, continuous basis. One gypsum marketing area was previously located directly southwest of the existing Class 3 Landfill and east of the Class 2 Landfill, in the footprint of future Class 3 Landfill Area 2B, and another was located south of both landfills. Fugitive dust and stormwater best management practices were used, and the areas were not paved. Gypsum was removed from both locations prior to the effective date of the CCR Rule in 2015. Figures 5A through 5G depict the locations of the historical stockpiles with respect to current site features through time.

In December 2015, the new Class 3 Landfill began receiving CCRs. The Class 3 Landfill (Cell 1B) was constructed immediately adjacent to and contiguous with the eastern slope of the recently closed Class 2 Landfill. For this reason, the east and west slopes and the top deck of the Class 2 Landfill are covered with a HDPE liner, which also serves as the bottom liner for the Class 3 Landfill. The landfill abuts the Class 2 Landfill and consists of lined cells with a geocomposite drainage net and sand drainage layer to facilitate removal of leachate water from the Class 3 Landfill into the leachate pond south of the landfill.

2.2 CGS CLASS 2 LANDFILL CONTENTS AND LOCATION OF BOTTOM OF WASTE

Even though the Class 2 Landfill and the Class 3 Landfill both contain gypsum, gypsum sludge, fly ash, and bottom ash, there are notable differences in contents in the Class 2 Landfill that are not present in the Class 3 Landfill, such as the use of Poz-O-Tec and fixated lime. Based on a survey conducted in 2015 near the time of closure, the Class 2 Landfill contained approximately 7,856,203 cubic yards of CCRs. Specific contents placed in the Class 2 Landfill in the final years prior to closure did not involve Poz-O-Tec, thus the material was not a solid mass. A snapshot of the tons of material placed in the Class 2 Landfill for the four years prior to closure based on Santee Cooper’s annual regulatory reports is provided below:

Year	Gypsum	Fly Ash	Gypsum Sludge	Bottom Ash	Alum Sludge	Total
2012	111,700	192,860	99,400	31,560	0	335,520
2013	28,572	141,303	67,584	552,864	600	790,833
2014	0	43,665	146,232	438,936	2,149	630,982

Year	Gypsum	Fly Ash	Gypsum Sludge	Bottom Ash	Alum Sludge	Total
2015	0	77,465	269,573	8,891	1,880	357,810

Note: all measurements in tons.

In planning for closure of the Class 2 Landfill and construction of the Class 3 Landfill, Worley Parsons evaluated the location of the bottom of the waste in the Class 2 Landfill (Appendix A). The evaluation considered the Class 3 Landfill abutting and “piggybacking” over the existing Class 2 Landfill. The deflection of the existing landfill base grade due to the additional “piggyback” loading was analyzed with respect to the seasonal high groundwater level. A conservative maximum predicted settlement after Class 2 Landfill closure and construction of the built-out Class 3 Landfill, including abutting both the east and west sides and piggybacking up and over the crest of the Class 2 Landfill, concluded “some groundwater separation will be maintained even during a confluence of worst-case conditions.” This conclusion was based on the minimum estimated original base grade under the existing landfill as elevation 80 feet along the western edge. The conservative maximum settlement was calculated to equal 1.5 feet, indicating a conservative estimate of the waste location in the unlined landfill at an elevation of 78.5 feet with a maximum seasonal high groundwater level of approximate elevation 78.3 feet.

The Class 3 Landfill is built on one half of one side of the Class 2 Landfill but has not “piggybacked,” indicating that the aforementioned maximum predictive settlement has not occurred. A Class 3 Landfill construction drawing showing waste placement areas is included in Appendix A. Since the time of the Worley Parsons evaluation, groundwater levels have occasionally exceeded 78.5 feet in multiple groundwater monitoring wells after severe weather events involving extreme rainfall. Specifically, Class 2 Landfill groundwater monitoring well POZ-4 showed groundwater elevations greater than 78.5 feet in October 2016 and January 2017, with a maximum of 79.27 feet in February 2020. Monitoring wells POZ-6 and POZ-7 exceeded 78.5 feet in February 2020, with maximum elevations of 78.71 feet and 78.55, respectively (Figure 6).

Considering the Class 2 Landfill is unlined and is proximate to the uppermost aquifer, an intermittent hydraulic connection could exist between the landfill and shallow aquifer during or following severe weather events. This would have the potential to contribute to pre-existing and current groundwater quality conditions in the vicinity of the Class 2 Landfill.

2.3 GYPSUM MARKETING AREA CONTENTS

Santee Cooper has marketed gypsum produced at CGS for beneficial use for many years prior to the CCR Rule becoming effective. To facilitate loading of commercial trucks for marketing, temporary loading areas containing intermittent piles of marketable and typically unwashed gypsum (which is chemically known as calcium sulfate) were maintained at CGS prior to the effective date of the CCR Rule. Records are not available regarding the exact volume of gypsum that was transferred through these loading areas nor the dates the areas were active. Analytical data regarding inorganic constituents in the gypsum is provided in Appendix B. This data, provided by Santee Cooper, was for washed and unwashed gypsum marketed from 2015 to 2022. However, it reflects the contents of the gypsum storage management areas prior to 2015 because the gypsum production process had not been significantly altered and the standards and metals limits for gypsum sales were consistent. A notable difference occurs in the earlier years when the gypsum would typically be unwashed. In later years, the gypsum

would have undergone the washing process, which reduces chlorides. Highlights from Appendix B as it relates to the Appendix III SSIs include:

- Calcium sulfate indicating a gypsum purity average of 84.52 percent
- Boron average of 34.4 milligrams per kilogram (mg/kg)
- Chloride average of 1,175 parts per million (ppm)

Based on the prior existence and use of the gypsum management storage areas and their contents, it is probable these areas were contributing sources of the boron and chloride SSIs identified in downgradient groundwater monitoring wells. Based on their prior locations and the site-specific groundwater flow characteristics discussed later in this report, they could be contributing to the apparent variability in the groundwater concentrations, including the increasing trends for chloride and boron.

2.4 CGS CLASS 3 LANDFILL CONTENTS

Based on a December 2022 survey, the Class 3 Landfill contains approximately 1,067,435 cubic yards of CCRs and waste, which is significantly less than the total contents in the closed Class 2 Landfill. The Class 3 Landfill footprint to date (which is Cell 1B) is also significantly smaller than the Class 2 Landfill. The Class 3 Landfill base is approximately 800 feet wide by 1,600 feet in length as of the end of 2022, while the closed Class 2 Landfill base is approximately 1,500 feet wide by 3,000 feet in length.

The contents placed in the CGS Class 3 Landfill after completion of the initial ASD in 2018 are shown below.

Year	Gypsum	Ash	Soils from Misc. Areas/Ditch Cleaning	Pyrites	Alum Sludge	Limestone	Total
2019	0	174,084	39,995	0	5,984	0	220,063
2020	8,361	401	26,543	0	2,471	0	37,776
2021	41,459	36,166	10,453	2,300	3,403	393	94,174
2022	58,120	68,479	8,359	2,412	2,489	0	139,859
2023	16,269	28,293	1,477	879	0	0	46,918

Note: all measurements in tons.

From July 2019 through January 2023, the Class 3 Landfill received a total of 538,790 tons of CCRs and other permitted waste products, with over half being fly ash or bottom ash (307,423 tons). Only 124,209 tons of gypsum was placed in the landfill during this period, which is less than the gypsum or gypsum sludge placed in the Class 2 Landfill on average each year. Accordingly, the Class 3 Landfill's contents and footprint are significantly smaller than the closed Class 2 Landfill.

2.5 CGS CLASS 3 LANDFILL CONSTRUCTION AND OPERATIONS

A technical engineering evaluation of the contents, construction, and operations of the Class 3 Landfill was conducted to ascertain the potential of a release from the landfill. The findings discussed below demonstrate the improbability that the Class 3 Landfill is a contributing source of the detected Appendix III constituent SSIs due to its design, construction, operations, and relative age.

The CGS Landfill is a permitted Class 3 Industrial Solid Waste Landfill, specifically designed, constructed, and operated to meet SCDHEC's Solid Waste Management regulations. The landfill was constructed with a composite liner system, a leachate collection system, and a contact stormwater collection system. Its design and construction meet state and federal CCR regulations, which prohibit the release of materials, including leachate, into the environment.

Throughout the construction process, Santee Cooper engineers oversaw the landfill construction to ensure it was completed in accordance with the permitted construction drawings. Construction quality assurance (CQA) was contracted to a third-party team of consultants. Terracon Consultants, Inc. (Terracon), performed industry-standard materials testing to ensure and certify that the landfill construction was completed as designed and permitted. Santee Cooper oversees the operation of the landfill and oversees and/or conducts routine landfill inspections. The landfill Operator-in-Charge works full time at CGS and is a certified Class 3 Landfill manager authorized by the State of South Carolina.

2.5.1 Unstable Areas

The CCR Rule under 40 CFR § 257.64(a) indicates that landfills “must not be located in an unstable area unless the owner or operator demonstrates...that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR until will not be disrupted.” The *Location Restrictions Compliance Demonstration Report* (Geosyntec Consultants [Geosyntec], October 2018) concluded the Class 3 Landfill met the location restrictions because the Class 3 Landfill design considered unstable conditions and incorporated recognized engineering practices capable of mitigating said conditions, which in this case, was the presence of karst beneath the landfill and the site's location in a seismic zone.

Implementation of the mitigation, as documented Terracon's CQA report, included installation of earthquake drains¹ and a heavy-duty geosynthetic base reinforcement. The landfill foundation construction consisted of the placement of 45,000 cubic yards of fill and more than 10,000 earthquake drains. Earthquake drains typically consist of a corrugated pipe with slot-type perforations encased by a geotextile filter fabric (jacket material). The space within the pipes above the groundwater table provides a reservoir for water expelled from the ground for liquefaction mitigation. The earthquake drain ground improvement method minimizes bearing capacity failures and settlement during and immediately after a seismic event.² It mitigates liquefaction by limiting excess pore pressures generated during seismic events to levels less than those that could trigger liquefaction. A stone drainage layer was placed over the earthquake drains. The fill was placed to ensure the storage and drainage layer stone across the top of the earthquake drains would be above the seasonal high groundwater level. Heavy-duty geosynthetic base reinforcement was placed over the entire footprint of Area 1B-Cell 1, the current Class 3 Landfill extent. The base reinforcement material is a polypropylene woven fabric (TerraTex® HPG-16) and was placed by Chesapeake Containment Services (Chesapeake). Prior to placement of the base reinforcement, Chesapeake sewed five test seams on site under the observation of Terracon personnel.

Following placement of the geosynthetic base reinforcement, 70,000 cubic yards of subgrade fill and 15,000 tons of drainage stone were placed to meet the subgrade elevations in the permit drawings. These materials were installed under and prior to installation of the Class 3 Landfill's liner system. As

¹ <https://www.scdot.org/business/technicalPDFs/supTechSpecs/SC-M-205-1-012019.pdf>

² <https://www.keller-na.com/expertise/techniques/earthquake-drains>

detailed in the permit application, the base reinforcement was included in the design to further strengthen the landfill foundation, providing a belt-and-suspender engineering approach using a geosynthetic net and the earthquake drains in consideration of the site's geology.

2.5.2 Placement of Waste

The Class 3 Landfill was constructed to maintain at least 3 feet of separation between the liner subgrade and the seasonal high-water table in Class 3 Landfill areas, even in worst-case conditions of settlement once the landfill is fully built out. Because this was an existing landfill that commenced construction prior to the effective date of the CCR Rule, the 5-foot separation requirement did not apply. Description of the base grade settlement for the Class 3 Landfill is included in Appendix A.

2.5.3 Composite Liner and Leachate Collection and Removal System

The Class 3 Landfill liner system was designed and constructed to meet the design criteria requirements. The Class 3 Landfill is lined with a geocomposite drainage layer and protective cover material. The drainage layer includes a 200-mil geonet with 6-ounce, non-woven geotextile bonded to the top and bottom, and a 2-foot sand or bottom ash protective cover and drainage layer with a minimum hydraulic conductivity of 1×10^{-4} cm/s. A linear, low-density polyethylene rain flap was placed over portions of the protective cover and a 12-inch-thick layer of compacted CCR was placed at a 4-horizontal to 1-vertical (4:1) slope over the protective cover for stability, erosion control, and to anchor the rain flap. The CQA documents that the Class 3 Landfill liner system and leachate collection and removal system was constructed in accordance with the permit drawings and the permitted technical specifications.

Leachate generated in the landfill flows in the geocomposite drainage layer component of the liner system either directly toward or into the leachate collection sumps. The leachate collection system discharges into the permitted and lined Leachate Collection Pond south of the landfill. Effluent from the Leachate Collection Pond is pumped to the Wastewater Decant Pond for additional treatment, which is then conveyed to a low-volume wastewater treatment system prior to discharge to permitted NPDES Outfall 002 after water quality requirements are verified.

2.5.4 Contact Stormwater Management

Contact water is stormwater runoff that has been in contact with exposed CCR waste in active areas of a landfill. Contact stormwater is managed through sequential management as ongoing lifts of waste are placed into a landfill area cell. A chimney drain decant structure is used in active or open areas of the landfill to intercept stormwater runoff from the active portion of the landfill and convey it directly to the lined Leachate Collection Pond. The chimney drain consists of a perforated, vertical concrete-riser pipe. The entire active area is graded to drain toward the chimney drain, which in turn discharges into the Leachate Collection Pond via gravity piping. The purpose of the chimney drain decant structure is to minimize leachate generation and to collect and control (at a minimum) the water volume and peak flow rate resulting from a 24-hour, 25-year storm.

One of the requirements of 40 CFR § 257.81(c) is to prepare initial and periodic run-on and runoff control system plans for CCR landfills. On October 14, 2021, the first periodic run-on and runoff control system plan for the CGS landfills was certified by a qualified professional engineer. The plan documents how the run-on system prevents flow onto the active or open portion of the landfill and how a runoff system from the active or open portion of the landfill collects and controls at least the water volume during peak discharge from a 24-hour, 25-year storm event.

In summary, the control systems have been designed and constructed in compliance with the applicable requirements according to the certifying engineer; thus, they are operating to prohibit the release of CCRs into the environment in accordance with 40 CFR § 257.81.

2.5.5 Annual Inspections

Both the Class 2 and the Class 3 Landfills are formally inspected weekly by trained landfill operators under the supervision of the landfill Operator-in-Charge. Annual reviews of the weekly inspections indicate no major structural or operational problems, except for one incident associated with the Class 2 Landfill. There was a failure at one location of the closed landfill following a severe weather event when the non-contact stormwater overwhelmed the drainage system, resulting in sheet flow over the sides of the bench drains.

The landfills are also inspected annually by licensed professional civil engineers in compliance with 40 CFR § 257.84(b) of the CCR Rule. For state compliance, the landfill is inspected approximately monthly by SCDHEC. There have been no landfill violations based on regulatory inspections. Additional compliance inspections include routine fugitive dust inspections of the site and weekly stormwater pollution prevention inspections by trained Santee Cooper employees.

The most recent annual inspection was conducted in September 2022 by a Santee Cooper-qualified, professionally licensed engineer. This inspection focused on the assessment of the stability and functionality of the landfills. The report noted the landfills were found in satisfactory condition and safe for continued operation with no significant findings noted. The findings were consistent with prior inspections that have been conducted since 2018. Fugitive dust inspection reports from 2017 through 2021 for the Class 3 Landfill did not identify any citizen complaints, nor were any corrective actions required. Fugitive dust inspections are no longer conducted or required for the Class 2 Landfill because it is capped and closed. The findings of these inspection reports provide additional support that there is no evidence of a release directly from the Class 3 Landfill, Cell 1B.

2.6 SITE GEOLOGY AND HYDROGEOLOGY

Relevant geologic formations underlying recent Holocene deposits at CGS include the Wicomico, Raysor, Santee Limestone, and Black Mingo Group. Shallow lithology generally consists of loose and unconsolidated clayey sand or sandy clay until the Raysor Formation is reached. This formation consists of relatively dense, partially indurated, shelly, fine- to medium-grained sand. Underlying the Raysor, the Santee Limestone consists of variably weathered and competent, shelly to muddy limestone. Dissolution of the Santee Limestone, where present, gives way to karstic features in the subsurface; however, these are minimized by the presence of silica-rich sediments also present in large quantities within this formation (quartz sand and clay minerals) that are not as susceptible to dissolution.

Shallow groundwater recharge at CGS occurs from direct precipitation infiltration. The surficial aquifer at CGS is unconfined and lies within the Wicomico and Raysor Formations, and groundwater beneath the closed Class 2 Landfill is hydraulically connected to groundwater beneath the Class 3 Landfill. While both landfills are constructed above the seasonal high-water table, the closed Class 2 Landfill is unlined with a cap and the Class 3 Landfill is constructed with a comprehensive liner system to collect leachate and withstand seismic events and karst sinkholes as previously described.

The monitoring wells installed downgradient of the Class 3 Landfill were constructed to monitor groundwater quality in the uppermost aquifer and are screened in the same hydrostratigraphic unit as the existing state and federal CCR Rule wells that historically monitored groundwater during operation, closure, and post-closure of the Class 2 Landfill. The Class 3 Landfill monitoring wells installed to establish baseline groundwater quality downgradient of the Class 3 Landfill are also located downgradient of the closed Class 2 Landfill and side-gradient of two historical temporary gypsum stockpile locations.

2.7 HYDROGEOLOGICAL EVALUATION

Based on review of historical potentiometric maps provided by Santee Cooper (Appendix C) and recent potentiometric maps (Figures 3A, 3B, and 3C), groundwater flow direction in the vicinity of the Class 2 and Class 3 Landfills has varied in response to changing site conditions and extreme weather events. The flow alternates from generally radial, southeast, to northwest without seasonal uniformity. Inconsistent flow patterns suggest that chemical transport in the shallow aquifer may also be inconsistent, as plume migration is expected to follow flow direction in an unconfined aquifer setting. In this scenario, fluctuations in concentration are likely to occur over the anticipated plume migration time frame and contribute to slow migration and produce contradictory trends.

Groundwater flow velocity for this portion of the CGS site is approximately 11 to 22 feet per year based on flow velocities calculated from March 2022 water table elevations. This specific event depicts southeasterly flow toward the downgradient Class 3 wells. Based on the velocity, it would take approximately 16 to 33 years for the leading edge of a release from the former Class 2 Landfill to reach the closest well in the downgradient Class 3 Landfill CCR monitoring network, CLF-1B-5. Since the closed Class 2 Landfill was constructed in 1982, sufficient time has passed for a release to have migrated to the downgradient groundwater monitoring locations. As previously stated in the 2018 Class 3 Landfill ASD and subsequent statistical memoranda, Appendix III constituent leaching was expected to subside when closure (August 2016) and water management improvements (January 2020) were completed for the Class 2 Landfill; however, based on the calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells for many years.

Conversely, one would conclude that there has not been enough time for a release from the Class 3 Landfill to have reached the downgradient monitoring wells, even if that release occurred on the first day of operation in December 2015. Based on the same calculated flow velocity, the leading edge of a release would not be anticipated to reach the downgradient wells until sometime between 2023 to 2029 (7 to 13 years) based on the distance between the boundary of the Class 3 Landfill and the closest downgradient well. Class 3 monitoring wells were placed in these locations based on accessibility and to prevent damage during landfill construction. This also does not take into consideration localized inflow via stormwater management ditches between the landfill and well network, which may present a hydraulic barrier or other hydrogeologic variables. Stormwater management ditches surround the perimeter of both the Class 2 and Class 3 Landfills, as depicted in the drawings provided in Appendix D. Therefore, based on the above, Appendix III concentrations through June 2022 do not indicate a release from the Class 3 Landfill, as the increases appear to originate from a pre-existing condition.

Furthermore, historical weather events have likely contributed to variability observed around the Class 2 and Class 3 Landfill footprint over time. On October 1 through 5, 2015, Hurricane Joaquin caused historical flooding in the Pineville area. According to the National Weather Service, Berkeley County received 15 to 20 inches of rainfall over this five-day period. At the time of the major storm event, the

Class 2 Landfill was uncapped, and the Class 3 Landfill had not begun receiving waste. As depicted in the hydrograph (Figure 6), a potentiometric high was gauged following the storm event which may have caused a hydraulic connection between groundwater and the base of the Class 2 Landfill when accounting for landfill settlement. Significant precipitation amounts percolated through the top of the landfill and likely created a slug of leachate just prior to capping in 2016. As the landfill is unlined, additional leachate is anticipated to migrate into the water table over time. Based on the time between the historical rain event and current flow velocities for the area, the recent increases in constituent concentrations may represent the leading edge of a short-term release attributable to that historical weather event.

Finally, by 2005, aerial photographs suggest that two temporary gypsum storage areas of varying volume were present directly south of the Class 3 Landfill prior to the unit's construction. While the temporary marketed gypsum stockpiles contained fluctuating quantities, the piles were uncovered and housed directly on the ground surface, which allowed for precipitation infiltration into groundwater over time. The closer temporary stockpile west of monitoring well CLF1B-2 appears to be used more frequently after 2005 until 2015, when it was removed. Given the calculated flow velocity, increases in boron and chloride concentrations down- and side-gradient of the Class 3 Landfill could also be attributed to the temporary gypsum storage pile closest to the landfills. Historical aerial photography depicting the temporary stockpiles with respect to the Class 3 Landfill is provided as Figures 5A through 5G. Data for gypsum citing high concentrations of boron and chloride is provided as Appendix B.

2.8 GROUNDWATER QUALITY – APPENDIX III CONSTITUENT EVALUATION

The first sampling round from the newly installed wells downgradient of the Class 3 Landfill took place in October 2015, three months prior to the Class 3 Landfill receiving CCRs. A summary of the groundwater sampling results for the Appendix III constituents through time is included as Table 1. A map depicting trends for boron and chloride through time is provided as Figure 7.

As noted in the 2018 Class 3 Landfill ASD, preliminary observations of impacted groundwater prior to the construction of the Class 3 Landfill led to the conclusion that the concentrations of boron and chloride (also detected at SSIs above background for that unit) in the Class 3 Landfill downgradient wells originated from the Class 2 Landfill and are representative of pre-existing conditions. While detection monitoring results yielded a slight increasing trend based on the last several years of data for chloride and boron, these constituents still fall generally within historical ranges in concentrations observed for the Class 2 Landfill (except for a 120 microgram per liter [$\mu\text{g}/\text{L}$] detection of boron in June 2022) and likely do not represent a release from the new Class 3 Landfill. Isoconcentration maps depicting concentrations before and after Class 3 Landfill construction for boron, chloride, fluoride, and cobalt are provided as Figures 4A through 4G. Cobalt is presented on these figures because it is the Appendix IV constituent that triggered corrective action for the Class 2 Landfill. The presence of cobalt is definitively connected to the Class 2 Landfill and pre-dates the existence of the Class 3 Landfill.

The temporary gypsum piles, located south of the current Class 3 Landfill, contained variable contents of gypsum, which as previously discussed, were uncovered and staged directly on the ground surface. Data for marketable gypsum provided by Santee Cooper is included as Appendix B. In 2015 when the piles were removed, limited data indicate that concentrations of boron in the pile averaged 14.6 mg/kg. During the same time frame, chloride averaged approximately 340 ppm or mg/kg.

2.8.1 Chloride

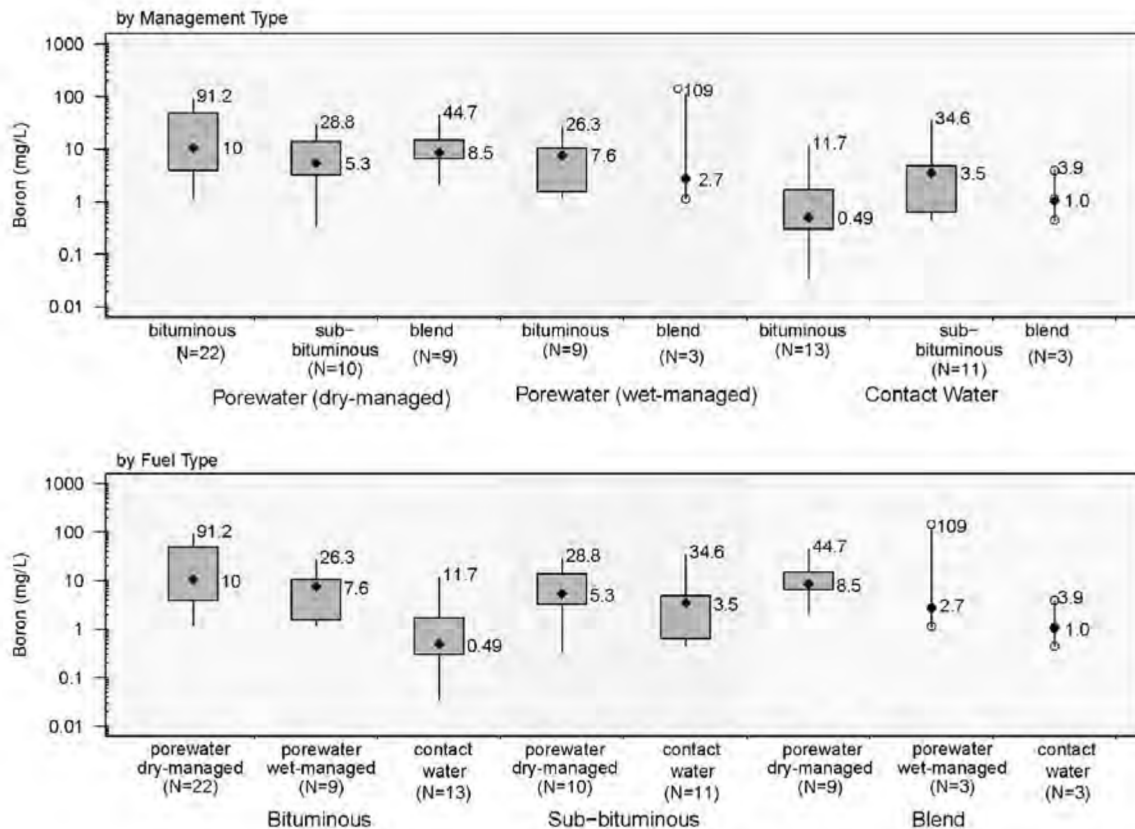
As shown on Table 1, chloride concentrations detected in Class 3 downgradient monitoring wells CLF-1B-3 through CLF-1B-5 fall within a lower range of concentrations observed at former Class 2 Landfill downgradient wells locations, POZ-4, POZ-6, and POZ-7. Prior to receiving waste in 2015, chloride concentrations in Class 3 downgradient wells ranged from 26.8 to 69.5 mg/L, whereas in downgradient Class 2 Landfill wells, chloride concentrations range from 159 to 644 mg/L. From 2015 to June 2022, the same Class 3 downgradient wells ranged from 20.8 to 174 mg/L for chloride, whereas the Class 2 downgradient wells ranged from 24.8 to 920 mg/L. If the plume is migrating through the hydrogeologic system toward the downgradient Class 3 wells, one would anticipate observation of similar concentration ranges to the upgradient source over time. The relatively lower range of chloride concentrations may indicate that the leading edge of a plume from the former Class 2 Landfill is just beginning to impact the downgradient Class 3 Landfill wells. Increasing trends in the same wells may continue to be observed as the plume moves downgradient through the system.

2.8.2 Boron

Boron is a known constituent in typical CCR leachate. The boron plume observed around the Class 2 Landfill appears generally farther downgradient from the chloride plume. Based on review of the data and as depicted in the isoconcentration maps through time, boron was detected at the highest concentrations during the June 2022 groundwater monitoring event.

As discussed in the *Attenuation and Source Depletion* research presented at the World of Coal Ash (WOCA) in 2019 (Appendix E), boron is highly mobile in groundwater. Under most conditions, dissolved boron is present in groundwater as a weakly charged oxyanion, while chloride occurs as a more reactive monatomic anion with a large negative charge. Because of this, chloride is more readily sorbed to organic matter and clay minerals, leading to slower migration than boron. Since boron generally sorbs weakly to most geologic media, a boron plume often moves passively with groundwater transport, with the dominant attenuation mechanisms being dispersion and dilution. Despite this, boron impacts to groundwater have been observed to attenuate rapidly. Boron is also naturally abundant in coals; in a United States Geological Survey compilation of domestic coals, boron had a median concentration of 35.7 mg/kg, with some coals more than 300 mg/kg. The WOCA presentation speculates that Paleozoic Illinois Basin coals may have higher boron content because of their marine affiliation, but this distinction is not made in the cited Electric Power Research Institute (EPRI) publication referenced in this presentation.

When burned, boron in coal is concentrated in CCRs. Fly ash tends to have higher boron concentrations than bottom ash, with typical fly ash values in the range of 100 to 1,000 mg/kg. The highest concentrations of CCR-derived boron are found in porewater from dry-managed fly ash, as shown below and cited by Haley & Aldrich in the WOCA abstract.



CCR-derived aqueous boron concentration from EPRI, 2020

Fly ash was dry-managed for disposal in the landfills at CGS, and Illinois Basin coal has been one of the fuel sources. Boron found in the CCR leachate likely began as a polyborate coating on glassy CCR granules. This coating may be easily washed off, which is inferred to be the primary mechanism for CCR source zone depletion in boron and helps to explain rapid pre-remedy attenuation of some plumes.

Based on the high prevalence of boron in dry-managed fly ash, the possibility of prevalence with Illinois Basin coal, and its ability to wash off and attenuate, the variability in concentrations observed in boron in groundwater could be the result of fly ash disposal in the unlined Class 2 Landfill. This is more feasible, considering the likely possibility of a hydraulic connection from the base of the landfill to the shallow aquifer following severe weather events such as Hurricane Joaquin.

2.8.3 Fluoride

As previously discussed, fluoride has not exceeded its respective MCL of 4 mg/L, and the SSI from the June 2022 data (concentration of 0.2 mg/L) may be reflective of laboratory reporting limits (RLs) and how the statistics for the Class 3 Landfill are generated and may not necessarily be reflective of a potential release of CCR from a CCR unit. Santee Cooper provided a copy of Revision 4 of the laboratory's Method Detection Limit (MDL) study standard operating procedure dated April 19, 2021. Review of the procedure indicates that the determination of the MDL for the laboratory analyses is consistent with the procedure promulgated in Appendix B of 40 CFR Part 136 as revised by the EPA in December 2016. Thus, the RLs established based on the MDL studies performed by the laboratory incorporate the variability for measurements obtained throughout the instrument calibration range and should preclude the potential for false positive results at concentrations above the laboratory RL. During

a telephone conference call with the Santee Cooper laboratory, laboratory staff indicated parameters detected at concentrations above the MDL but below the established RL are not reported to the data user.

The laboratory policy of not reporting concentrations above the MDL but below the established RL could have affected the identification of fluoride as a statistical exceedance, since many previous and subsequent sample results were reported below the RL, thus creating a one-sided dataset that was used to establish the action level. This creates the potential for a positive bias in the data evaluation for fluoride using intrawell statistics.

2.9 STATISTICAL EVALUATION

According to the December 26, 2022, statistical report for the Class 3 Landfill provided as Appendix F, Appendix III constituent detections from downgradient well samples were compared to their respective Groundwater Protection Standard (GWPS) using intrawell comparisons. SSIs and respective June 2022 concentrations for the following were identified:

- Boron SSIs for CLF1B-3 (120 µg/L) and CLF1B-5 (26 µg/L)
- Chloride SSIs for CLF1B-2 (89.3 mg/L) and CLF1B-4 (100 mg/L)
- Fluoride SSI for CLF1B-3 (0.2 mg/L)

Even though fluoride in CLF1B-3 and boron in CLF1B-5 showed SSIs for the intrawell statistical evaluation, the analytical concentration for fluoride was below its respective MCL of 4 mg/L, and boron and fluoride were not SSIs for these wells when evaluated using interwell statistical analysis.

Based on preliminary statistics from October 2022 data, fluoride was not considered a SSI when evaluated using intrawell statistics.

Additionally, increasing trends were identified for boron at CLF1B-3 and CLF1B-5 and for chloride at CLF1B-3, CLF1B-4, and CLF1B-5 via Mann-Kendall trend analysis; however, increasing trends do not appear to be restricted to Class 3 CCR downgradient compliance wells. Several other wells that are upgradient of the Class 3 Landfill, including POZ-6 and POZ-4, show incremental and variable increases for the same constituents since the start of detection monitoring in 2015. A graphical trend comparison of concentrations for the Class 2 and Class 3 Landfill CCR monitoring well networks for boron and chloride through time is provided as Figure 7.

3. Findings and Conclusions

Haley & Aldrich has concluded that the Class 2 Landfill is the alternate source for the Appendix III SSIs detected downgradient of the new Class 3 Landfill. Additionally, evidence exists that indicates pre-existing temporary gypsum management areas located near the Class 3 Landfill may be contributing alternate sources. Several different lines of evidence indicated that the SSIs are not the result of a release from the Class 3 Landfill but are rather from an alternative source:

- Location and intermittent hydraulic connection of known alternative sources: the Class 2 Landfill and the pre-existing gypsum management areas.
- CCR constituent concentrations in the groundwater that pre-date the first receipt of waste in the Class 3 Landfill.
- The robust design, certified construction, and diligent operations of the Class 3 Landfill.
- The CGS hydrogeology, which shows the time of release from the Class 3 Landfill to the downgradient monitoring wells versus the time that has elapsed since first receipt of waste. Alternatively, sufficient time has elapsed for releases from alternative sources to pass through Class 3 Landfill's downgradient monitoring wells.
- Increasing trends for Appendix III constituents, such as boron, chloride, and fluoride, may occur while the plume from the Class 2 Landfill continues to move through the hydrogeologic system.

1. An alternative source exists.

Appendix III groundwater constituent concentrations are known to exist prior to construction and operation of the Class 3 Landfill. The Class 2 Landfill was previously identified as the alternative source, based on state and federal groundwater monitoring showing Appendix III constituents above background levels. Additionally, historical temporary gypsum storage areas were identified to have existed south of the Class 3 Landfill, which may also have contributed to boron and chloride concentrations over time.

2. A hydraulic connection exists between the alternative source and the groundwater well with the significant increase.

The Class 3 Landfill and the Class 2 Landfill have monitoring wells installed to monitor shallow groundwater and are screened in the same hydrostratigraphic unit. The Class 2 Landfill was not constructed with a liner or leachate collection system, and the waste was placed a minimum of 1.5 feet above the surficial aquifer. Considering the Class 2 Landfill is unlined and is near the uppermost aquifer as compared to the Class 3 Landfill, a hydraulic connection likely exists during or following severe weather events, contributing to pre-existing and current groundwater aquifer conditions. The Class 3 Landfill was purposefully constructed to not be hydraulically connected to groundwater through engineering controls, including additional foundational geomembrane and a liner and leachate collection system.

3. Constituent(s) (or precursor constituents) are present at the alternative source or along the flow path from the alternative source prior to possible release from the unit.

Both state and federal groundwater monitoring show constituent concentrations that were elevated above the background monitoring wells prior to initial waste disposal in the Class 3 Landfill. Additionally, based on calculations from recent flow velocities, sufficient time has passed for a release to have migrated to the downgradient Class 3 Landfill groundwater monitoring locations from the Class 2 Landfill and the gypsum management areas. Furthermore, fluoride has not exceeded its respective MCL of 4 mg/L, and the SSI from the June 2022 data (concentration of 0.2 mg/L) may be reflective of RLs and how the statistics for the Class 3 Landfill are generated and may not be reflective of a potential release from a CCR unit.

4. Relative concentration and distribution of constituents in the zone of contamination are more strongly linked to the alternative source than to the unit when the fate and transport characteristics of the constituents are considered.

The relatively lower range of chloride concentrations and higher range of boron concentrations (given that boron is one of the more mobile of the Appendix III constituents) may indicate that the leading edge of a plume from the former Class 2 Landfill is beginning to impact the downgradient Class 3 wells and boron may be on the leading edge of this plume. Furthermore, enough time has passed since the October 2015 Hurricane Joaquin storm event for a slug of leachate from the Class 2 Landfill to reach the Class 3 downgradient wells.

Concentration observed in groundwater could not have resulted from the unit, given the waste constituents and concentrations in the unit leachate and wastes, and site hydrogeologic conditions.

The Class 3 Landfill is constructed with an additional foundational geomembrane for the underlying karst features and seismic zone, and a liner and leachate collection system. CCRs were not placed in the Class 3 Landfill until December 2015. Based on the calculated flow velocity, the leading edge of a release from the Class 3 Landfill would not be anticipated to reach the downgradient wells until sometime between 2023 to 2029 (7 to 13 years) based on the distance between the boundary of the landfill and the closest downgradient well. Furthermore, increasing trends would not have been observed in data generated prior if a release had originated from the Class 3 Landfill.

5. Data supporting conclusions regarding the alternative source are historically consistent with hydrogeologic conditions and findings of the monitoring program.

Boron and chloride have been historically detected in groundwater downgradient of the Class 2 Landfill prior to first waste placement. Additionally, the CCRs disposed in the Class 2 Landfill and the side-gradient gypsum stockpiles contained high concentrations of boron and chloride prior to first placement of waste in the Class 3 Landfill.

Consistent with 40 CFR § 257.94(e)(2), this written successful demonstration, which includes obtaining a certification from a qualified professional engineer, has been completed within 90 days of detecting a SSI above background levels. As a result, and consistent with 40 CFR § 257.94(e)(2), the Class 3 Landfill at the CGS will remain in detection monitoring.

References

- Brandenburg, J.P. and Hagen, D. 2022. *Attenuation and Source Zone Depletion of Boron from Coal Combustion Residuals in Groundwater*. “World of Coal Ash” Conference, Covington, KY. May 19.
- EPRI, 2020. *Chemical Constituents in Coal Combustion Products: Boron*. EPRI, Palo Alto, CA: 2020. 3002018777.
- Geosyntec Consultants. 2018. *CCR Rule Location Restriction Compliance Demonstration*. October.
- Geosyntec Consultants. 2018. *Santee Cooper Location Restrictions Compliance Demonstration, Class 3 Landfill, Cross Generating Station, Pineville, South Carolina*. October.
[20181017-CGS-Class-3-Landfill-Location-Restriction.pdf \(santeecooper.com\)](https://www.santeecooper.com/20181017-CGS-Class-3-Landfill-Location-Restriction.pdf)
- Haley & Aldrich, Inc. 2022. *Statistical Evaluation of the Summer 2022 Semiannual Groundwater Assessment Monitoring Data, Cross Generating Station, Class 3 Landfill*. December 26.
- Illinois General Assembly Section 816.520, Poz-O-Tec Monofills.
<https://www.ilga.gov/commission/jcar/admincode/035/035008160005200R.html>
- Kleiman, G., U.S. Department of Energy Office of Scientific and Technical Information.
[Poz-O-Tec: a practical approach to handling flue gas scrubber sludge \(Conference\) | OSTI.GOV](https://www.osti.gov/scitech/biblio/?query=POZ-O-TEC&fq=type%3AConference)
- North Carolina Department of Environmental Quality (NCDEQ), Division of Waste Management Solid Waste Section. 2017. *North Carolina Solid Waste Section Guidelines for Alternate Source Demonstration Submittals for Solid Waste Management Facilities*. July.
[NCSWSGuidelinesForASD2017.pdf](https://www.ncdeq.gov/Portals/0/NCDEQ/Divisions/Solid%20Waste/ASD/2017/NCDEQ_Solid_Waste_Guidelines_for_Alternate_Source_Demonstration_Submittals_for_Solid_Waste_Management_Facilities.pdf)
- Santee Cooper. 2018. *Fugitive Dust Control Plan for compliance with 40 CFR Part 257*.
<https://www.santeecooper.com/About/CCR-Data-Rule/Cross/pdfs/Operating-Criteria/20181101-CGS-Fugitive-Dust-Plan.pdf>
- Santee Cooper. 2022. *CCR Rule – Coal Combustion Residual Class 3 Landfill Inspection-Cross Generating Station*. September.
<https://www.santeecooper.com/About/CCR-Data-Rule/Cross/pdfs/Operating-Criteria/20220929-CGS-All-Landfills-365-Day-Inspection.pdf>
- Terracon Consultants, Inc., 2014. *CQA Engineer’s Documentation Report - Earthquake Drain Installation Area 1B, Cell 1*. October 9.
- Terracon Consultants, Inc., 2015. *CQA Engineer’s Documentation Report - Construction of Landfill Area 1B, Cell 1*. November 16.
- Terracon Consultants, Inc., 2018. *CQA Engineer’s Documentation Report - Phase 1&2 Drainage Layer Extension Area 1B, Cell 1*. July 16.
- United States Environmental Protection Agency (USEPA). 1993. *EPA Solid Waste Disposal Facility Criteria Technical Manual*. [EPA Solid Waste Disposal Facility Criteria Technical Manual](https://www.epa.gov/osw/epa-solid-waste-disposal-facility-criteria-technical-manual)

Worley. 2021. *Cross Generating Station, Periodic (5-Yr) Run-on and Run-off Control System Plan for CCR Landfills*. October 14.

[20211015-CGS-Class-3-Landfill-Run-On-Run-Off-Controls.pdf \(santeecooper.com\)](#)

TABLE

TABLE I
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 SANTEE COOPER
 CROSS GENERATING STATION - CLASS 2 AND CLASS 3 LANDFILLS
 CROSS, SOUTH CAROLINA

Location	Sample Date	Sample Type	Chemical Group Chemical Name Units Lab Sample ID	Appendix III Parameters Plus Cobalt						Total Dissolved Solids (TDS) mg/L	pH, Field pH units
				Boron, Total µg/L	Calcium, Total mg/L	Cobalt, Total µg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L		
POZ-3	02/16/2015	Primary	AD07948	-	-	-	-	-	-	1295	6.32
POZ-3	06/16/2015	Primary	AD20126	-	-	-	-	-	-	1253	6.07
POZ-3	02/08/2018	Primary	AE04172	< 15	-	-	66.5	-	141	852	6.42
POZ-3	06/28/2018	Primary	AE13405	< 15	-	-	50.3	-	157	882.5	6.46
POZ-3	02/26/2020	Primary	AE66537	< 15	-	0.94	23.8	-	155	737.5	6.37
POZ-3	06/24/2020	Primary	AE75388	< 15	-	1.9	23.8	-	129	733.8	6.55
POZ-3	01/27/2021	Primary	AE94873	< 15	-	0.73	20.3	-	105	673.8	6.39
POZ-3	01/26/2022	Primary	AF24802	< 10	-	1.04	20.7	-	94.8	731.2	6.31
POZ-3	06/27/2022	Primary	AF36902	< 15	180	3	19.8	-	87.8	658.8	6.49
POZ-3	11/01/2022	Primary	AF47640	14.8	164	0.96	17.6	0.14	88.4	640	6.42
POZ-4	02/16/2015	Primary	AD07949	-	-	-	-	-	-	1262	6.04
POZ-4	06/17/2015	Primary	AD20127	-	-	-	-	-	-	2480	5.53
POZ-4	10/22/2015	Primary	AD33583	22.2	420	65	644	0.13	233	2180	5.94
POZ-4	01/27/2016	Primary	AD40784	15.1	260	8.4	325	0.17	105	1245	6.35
POZ-4	04/25/2016	Primary	AD47593	23.3	577	197	920	< 0.1	351	2750	5.63
POZ-4	07/18/2016	Primary	AD56649	19.3	431	83.8	646	< 0.1	226	1988	5.96
POZ-4	10/13/2016	Primary	AD65006	23.7	338	53.6	485	0.1	171	1798	6.04
POZ-4	01/24/2017	Primary	AD72809	20.1	457	60.3	598	< 0.1	199	2046	6.06
POZ-4	04/18/2017	Primary	AD79007	23	614	210	872	< 0.1	303	2678	5.73
POZ-4	08/01/2017	Primary	AD86315	< 15	-	-	455	-	128	1896	6.06
POZ-4	09/26/2017	Primary	AD93484	19	387	95.3	620	< 0.1	164	2032	6.05
POZ-4	10/11/2017	Primary	AD94531	25	520	-	826	< 0.1	278	2415	5.77
POZ-4	10/11/2017	Duplicate	AD94534	24	530	-	804	< 0.1	269	2322	-
POZ-4	02/07/2018	Primary	AE04175	16	391	53.3	640	< 0.1	185	1770	6.22
POZ-4	06/28/2018	Primary	AE13406	20	450	177	730	0.16	227	2505	5.78
POZ-4	02/13/2019	Primary	AE35559	-	-	45.1	449	< 0.1	110	1566	6.28
POZ-4	04/17/2019	Primary	AE40605	-	-	158/150	-	-	-	2738	5.95
POZ-4	04/17/2019	Duplicate	AE40606	-	-	155/140	-	-	-	2922	-
POZ-4	05/22/2019	Primary	AE43335	-	468	198	705	-	225	1711	5.89
POZ-4	02/25/2020	Primary	AE66538	15	-	21.7	303	0.1	69.9	1005	6.19
POZ-4	06/23/2020	Primary	AE75389	15	307	46.4	396	0.12	96.2	1489	6.2
POZ-4	01/28/2021	Primary	AE94874	< 15	-	32.3	385	< 0.1	98.1	1395	6.33
POZ-4	06/23/2021	Primary	AF07283	< 15	356	90.5	555	< 0.1	144	2028	6.13
POZ-4	01/25/2022	Primary	AF24803	< 10	-	24.9	325	0.12	83.5	1125	6.3
POZ-4	06/28/2022	Primary	AF36903	22	310	109	563	< 0.1	148	2174	5.92
POZ-4	11/01/2022	Primary	AF47641	21.4	273	60	388	0.1	100	1429	6.23
POZ-6	10/22/2015	Primary	AD33585	73.2	520	0.74	474	0.15	524	2330	6.79
POZ-6	10/22/2015	Duplicate	AD33893	92.8	540	1.1	195	0.14	215	2198	-
POZ-6	01/26/2016	Primary	AD40786	48	490	4.5	433	0.15	529	2305	6.72
POZ-6	04/25/2016	Primary	AD47594	54	511	4	414	0.13	518	2415	6.54
POZ-6	04/25/2016	Duplicate	AD47737	61.8	521	3.36	434	< 0.1	619	2465	-
POZ-6	07/18/2016	Primary	AD56651	75.1	523	2.97	506	< 0.1	611	2362	5.97
POZ-6	10/13/2016	Primary	AD65007	67.4	426	3.14	319	< 0.1	478	1883	6.47
POZ-6	01/24/2017	Primary	AD72811	61.4	433	2	284	< 0.1	454	1848	6.42
POZ-6	04/18/2017	Primary	AD79008	58	476	1.4	278	< 0.1	467	1756	6.58
POZ-6	07/27/2017	Primary	AD86317	54	-	-	209	-	460	1590	6.58
POZ-6	09/26/2017	Primary	AD93485	68	413	3.2	233	< 0.1	459	1442	6.53
POZ-6	10/11/2017	Primary	AD94532	62	450	-	329	< 0.1	517	1808	6.46
POZ-6	02/08/2018	Primary	AE04176	56	467	0.99	277	< 0.1	478	1606	6.63
POZ-6	06/28/2018	Primary	AE13408	55	420	5	272	0.15	432	1932	6.7
POZ-6	02/14/2019	Primary	AE35560	-	-	3.2	243	< 0.1	430	1529	6.67
POZ-6	05/21/2019	Primary	AE43243	-	450	8.2	334	-	483	2128	6.39
POZ-6	02/26/2020	Primary	AE66540	45	-	0.79	245	< 0.1	420	1432	6.57
POZ-6	06/24/2020	Primary	AE75391	47	420	3.4	279	< 0.1	449	1918	6.51
POZ-6	01/28/2021	Primary	AE94876	44	-	3.2	302	< 0.1	459	1674	6.57
POZ-6	06/23/2021	Primary	AF07285	41	414	2.2	276	< 0.1	441	1886	6.57
POZ-6	01/25/2022	Primary	AF24805	41	-	2.69	280	0.16	453	1571	6.65
POZ-6	06/28/2022	Primary	AF36905	44	470	4	388	< 0.1	551	2331	6.52
POZ-6	11/01/2022	Primary	AF47642	42.9	450	3.07	370	< 0.1	515	2172	6.31
POZ-7	10/22/2015	Primary	AD33586	23.6	110	2.8	159	0.13	6.43	504	6.33
POZ-7	01/26/2016	Primary	AD40787	< 15	59	0.97	90	0.12	3.39	388.3	5.81
POZ-7	01/26/2016	Duplicate	AD41418	< 15	63	0.88	97.7	0.13	3.68	426.7	-
POZ-7	04/25/2016	Primary	AD47595	19.7	138	< 0.5	184	< 0.1	6.77	775	6.42
POZ-7	07/18/2016	Primary	AD56652	15.2	45.1	0.95	90.9	< 0.1	2.53	270	5.83
POZ-7	07/18/2016	Duplicate	AD56867	17	62.2	0.72	103	< 0.1	2.89	330	-
POZ-7	10/12/2016	Primary	AD65008	16	34.7	1.15	65.8	0.1	11.8	255	5.64
POZ-7	10/12/2016	Duplicate	AD65017	15.4	38.7	1.02	70.1	0.11	13.2	296.7	-
POZ-7	01/24/2017	Primary	AD72812	< 15	22.9	1.5	46.8	< 0.1	< 2	182	5.42
POZ-7	01/24/2017	Duplicate	AD72822	< 15	30.5	0.98	53.3	< 0.1	< 2	200	-
POZ-7	04/18/2017	Primary	AD79009	< 15	46.9	< 0.5	70.9	< 0.1	< 2	230	5.88
POZ-7	04/18/2017	Duplicate	AD79017	< 15	49.1	< 0.5	77.5	< 0.1	2.27	248	-
POZ-7	07/27/2017	Primary	AD86318	< 15	-	-	57	-	< 2	192	5.51
POZ-7	09/26/2017	Primary	AD93486	< 15	41.4	< 0.5	69.2	0.1	< 2	122	5.81
POZ-7	09/26/2017	Duplicate	AD93487	< 15	45.8	< 0.5	73.9	< 0.1	< 2	192	-
POZ-7	10/10/2017	Primary	AD94533	18	74	-	118	0.12	4.42	513.3	6.02
POZ-7	02/07/2018	Primary	AE04177	< 15	32.5	0.9	52	< 0.1	< 2	226	5.68
POZ-7	02/07/2018	Duplicate	AE04178	< 15	35.6	0.74	59.9	< 0.1	< 2	218	-
POZ-7	06/27/2018	Primary	AE13409	23	130	< 0.5	217	0.13	14.4	891.2	6.11
POZ-7	06/27/2018	Duplicate	AE13410	25	140	< 0.5	226	0.13	15.7	907.5	-
POZ-7	02/14/2019	Primary	AE35561	-	-	< 0.5	80.3	< 0.1	3.01	258.8	5.75
POZ-7	02/14/2019	Duplicate	AE35562	-	-	< 0.5	80.2	< 0.1	3.01	275	-
POZ-7	05/20/2019	Primary	AE43100	-	80.3	1.1	128	-	5.24	533.8	5.91
POZ-7	05/20/2019	Duplicate	AE43101	< 15	94.3	< 0.5	162	-	8.67	637.5	-
POZ-7	02/26/2020	Primary	AE66541	< 15	-	1.8	30.8	< 0.1	< 2	93.75	5.18
POZ-7	02/26/2020	Duplicate	AE66542	< 15	-	1.8	30.7	< 0.1	< 2	76.25	-
POZ-7	06/24/2020	Primary	AE75392	< 15	18.5	0.96	34.2	< 0.1	< 2	137.5	5.51
POZ-7	06/24/2020	Duplicate	AE75393	< 15	21.7	0.88	36.4	< 0.1	< 2	143.8	-
POZ-7	01/28/2021	Primary	AE94877	< 15	-	2.4	24.8	< 0.1	< 2	121.2	4.81
POZ-7	01/28/2021	Duplicate	AE94878	< 15	-	1.4	25.1	< 0.1	< 2	76.25	-
POZ-7	06/24/2021	Primary	AF07286	< 15	82.4	< 0.5	135	< 0.1	10.1	626.2	5.88
POZ-7	06/24/2021	Duplicate	AF07287	< 15	88.5	< 0.5	142	< 0.1	10.8	532.5	-
POZ-7	01/26/2022	Primary	AF24806	< 10	-	1.06	32.1	< 0.1	< 2	196.2	5.25
POZ-7	01/26/2022	Duplicate	AF24807	< 10	-	0.94	34.7	< 0.1	< 2	137.5	-
POZ-7	06/28/2022	Primary	AF36906	< 15	47	1	64.4	0.27	3.76	257.5	5.85
POZ-7	06/28/2022	Duplicate	AF36907	< 15	51	< 1	64.8	0.16	3.61	272.5	-
POZ-7	11/02/2022	Primary	AF47643	10.9	13.5	0.86	27.1	< 0.1	< 2	108.8	5.02
POZ-7	11/02/2022	Duplicate	AF47644	11.4	14.4	0.91	26.7	< 0.1	< 2	111.2	-

TABLE I
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 SANTEE COOPER
 CROSS GENERATING STATION - CLASS 2 AND CLASS 3 LANDFILLS
 CROSS, SOUTH CAROLINA

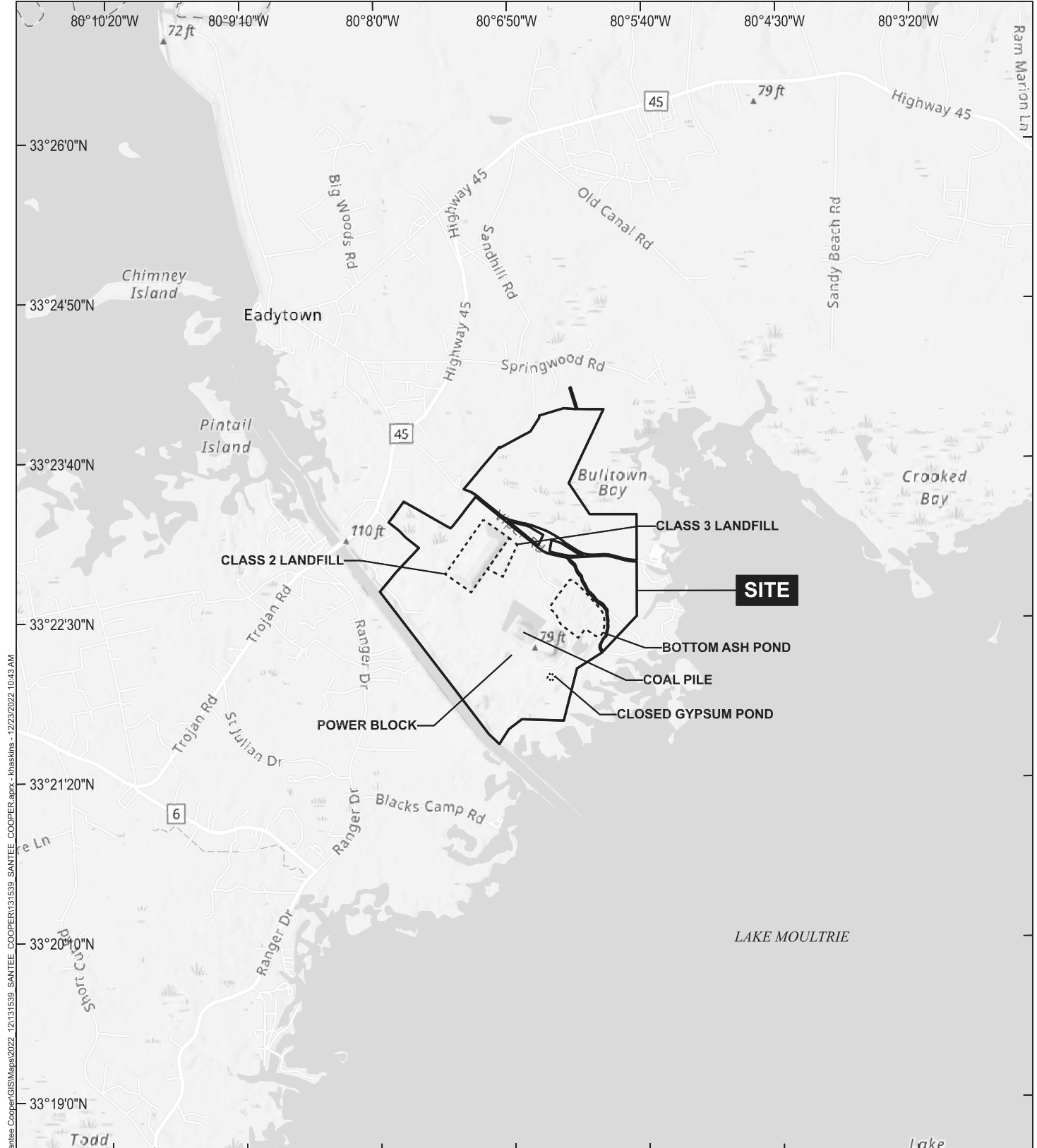
Location	Sample Date	Sample Type	Chemical Group Chemical Name Units Lab Sample ID	Appendix III Parameters Plus Cobalt						Total Dissolved Solids (TDS) mg/L	pH, Field pH units
				Boron, Total µg/L	Calcium, Total mg/L	Cobalt, Total µg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L		
CLF1B-1	10/21/2015	Primary	AD33588	< 15	180	2.7	38.7	0.17	123	594	6.44
CLF1B-1	02/01/2016	Primary	AD40788	< 15	180	3.6	39.7	0.12	136	602	6.55
CLF1B-1	04/19/2016	Primary	AD47588	< 15	189	4.11	39.2	0.12	136	558.3	6.67
CLF1B-1	04/19/2016	Duplicate	AD47696	< 15	188	3.76	38.9	0.18	136	555	-
CLF1B-1	07/18/2016	Primary	AD56656	< 15	181	3.66	41.5	0.12	134	574	6.53
CLF1B-1	07/18/2016	Duplicate	AD56868	< 15	181	3.7	40.8	0.12	135	596	-
CLF1B-1	10/13/2016	Primary	AD65009	< 15	175	3.49	41	< 0.1	153	651.7	6.6
CLF1B-1	10/13/2016	Duplicate	AD65018	< 15	175	3.32	40.2	< 0.1	149	496.7	-
CLF1B-1	01/30/2017	Primary	AD72813	< 15	171	2.4	38.7	0.13	153	602	6.68
CLF1B-1	01/30/2017	Duplicate	AD72821	< 15	175	2.6	38.6	0.13	151	578	-
CLF1B-1	04/17/2017	Primary	AD79010	16	191	3.2	34.2	0.14	150	556	6.58
CLF1B-1	04/17/2017	Duplicate	AD79018	< 15	185	3.2	33.9	0.15	154	696	-
CLF1B-1	07/26/2017	Primary	AD86320	< 15	-	-	38.9	-	129	614	6.63
CLF1B-1	09/25/2017	Primary	AD93488	< 15	167	3.5	38.9	< 0.1	135	498	6.67
CLF1B-1	09/25/2017	Duplicate	AD93489	< 15	169	3.5	38.7	0.11	136	548	-
CLF1B-1	10/10/2017	Primary	AD94535	15	170	-	37.4	0.13	131	581.7	6.32
CLF1B-1	10/10/2017	Duplicate	AD94536	15	180	-	36.9	0.13	130	650	-
CLF1B-1	02/19/2018	Primary	AE04179	< 15	185	-	34.4	0.19	145	648.6	6.61
CLF1B-1	06/27/2018	Primary	AE13394	< 15	170	5	39.3	0.15	143	585	6.58
CLF1B-1	06/27/2018	Duplicate	AE13395	< 15	170	5	38	0.16	138	596.2	-
CLF1B-1	02/12/2019	Primary	AE35563	< 15	176	-	36.3	< 0.1	139	617.5	6.82
CLF1B-1	02/12/2019	Duplicate	AE35564	< 15	181	-	36.8	< 0.1	137	617.5	-
CLF1B-1	07/08/2019	Primary	AE47690	< 15	168	-	40.6	< 0.1	144	580	6.47
CLF1B-1	07/08/2019	Duplicate	AE47691	< 15	190	-	38	< 0.1	144	602.5	-
CLF1B-1	02/24/2020	Primary	AE66523	< 15	173	3	37.3	< 0.1	159	558.8	6.47
CLF1B-1	02/24/2020	Duplicate	AE66524	< 15	170	2.9	37.7	< 0.1	150	570	-
CLF1B-1	06/22/2020	Primary	AE75377	< 15	178	3.3	33.2	< 0.1	133	577.5	6.76
CLF1B-1	06/22/2020	Duplicate	AE75378	< 15	172	3.3	32.8	0.1	132	605	-
CLF1B-1	01/26/2021	Primary	AE94865	< 15	166	2.5	34	< 0.1	132	556.2	6.84
CLF1B-1	01/26/2021	Duplicate	AE94866	< 15	164	2.5	33.8	< 0.1	133	580	-
CLF1B-1	06/22/2021	Primary	AF07274	< 15	167	1.9	41	< 0.1	133	583.8	6.66
CLF1B-1	06/22/2021	Duplicate	AF07275	< 15	164	2	39.1	< 0.1	128	600	-
CLF1B-1	01/24/2022	Primary	AF24794	10.1	166	2.36	42.2	< 0.1	154	568.8	6.74
CLF1B-1	01/24/2022	Duplicate	AF24795	< 10	164	2.64	42.4	< 0.1	147	586.2	-
CLF1B-1	06/27/2022	Primary	AF36894	< 15	180	2	42.4	0.14	149	583.8	6.78
CLF1B-1	06/27/2022	Duplicate	AF36895	< 15	190	3	42.1	0.11	146	586.2	-
CLF1B-1	10/31/2022	Primary	AF47634	12.7	168	3.06	36.7	0.11	134	576.2	6.55
CLF1B-1	10/31/2022	Duplicate	AF47635	12.1	175	3.13	36.6	0.1	133	578.8	-
CLF1B-2	10/21/2015	Primary	AD33589	18.6	210	2.5	62.7	0.16	22.4	472	7.09
CLF1B-2	10/21/2015	Duplicate	AD33584	19.1	160	1.3	62.3	0.15	21.5	470	-
CLF1B-2	02/01/2016	Primary	AD40789	< 15	120	1.2	64.6	0.11	19.6	433	6.79
CLF1B-2	04/19/2016	Primary	AD47589	15.2	130	0.86	66.6	< 0.1	16.3	415	6.92
CLF1B-2	07/19/2016	Primary	AD56657	39.8	131	1.39	70.9	< 0.1	13.7	512	6.93
CLF1B-2	10/13/2016	Primary	AD65010	15.7	121	1.25	69	< 0.1	13.3	486.7	6.88
CLF1B-2	01/30/2017	Primary	AD72814	16.2	124	1	70.4	< 0.1	13	462	6.85
CLF1B-2	04/17/2017	Primary	AD79011	18	131	1.4	69.7	0.12	16.4	390	6.91
CLF1B-2	07/26/2017	Primary	AD86322	16	-	-	74.7	-	12.4	512	6.89
CLF1B-2	09/25/2017	Primary	AD93490	16	127	1.5	76	< 0.1	12.5	398	6.97
CLF1B-2	10/11/2017	Primary	AD94537	17	140	-	74.1	0.11	12.9	396.7	7.08
CLF1B-2	02/19/2018	Primary	AE04181	20	138	-	75.8	0.13	13.2	524.3	6.79
CLF1B-2	06/27/2018	Primary	AE13396	< 15	130	2	78	0.14	12.9	535	6.88
CLF1B-2	02/12/2019	Primary	AE35565	16	152	-	80.1	< 0.1	13.5	476.2	7.07
CLF1B-2	07/08/2019	Primary	AE47692	17	130	-	39.6	< 0.1	12.5	545	6.61
CLF1B-2	02/24/2020	Primary	AE66525	15	135	1.6	82.5	< 0.1	13.9	455	6.67
CLF1B-2	06/22/2020	Primary	AE75379	< 15	139	3.2	82.6	< 0.1	13.5	535	7.01
CLF1B-2	01/26/2021	Primary	AE94867	17	138	1.4	84.1	< 0.1	14.6	485	6.97
CLF1B-2	06/22/2021	Primary	AF07276	16	137	2.6	90.2	< 0.1	14.7	597.5	6.83
CLF1B-2	01/24/2022	Primary	AF24796	16.8	130	1.7	86.4	< 0.1	14.4	436.2	6.97
CLF1B-2	06/27/2022	Primary	AF36896	20	140	3	89.3	< 0.1	15.3	571.2	6.85
CLF1B-2	10/31/2022	Primary	AF47636	20.2	138	3.64	87.9	< 0.1	14.1	536.2	6.81
CLF1B-3	10/22/2015	Primary	AD33590	17.2	100	< 0.5	26.8	0.12	33	326	6.94
CLF1B-3	10/22/2015	Duplicate	AD33593	17.4	100	< 0.5	27.2	0.12	35.4	320	-
CLF1B-3	02/01/2016	Primary	AD40790	18.9	140	0.88	22.4	0.13	107	447	6.71
CLF1B-3	04/19/2016	Primary	AD47590	24.6	167	2.7	22.1	0.12	116	5355	6.82
CLF1B-3	07/19/2016	Primary	AD56658	41.7	207	5.6	23.5	< 0.1	203	686	6.58
CLF1B-3	10/13/2016	Primary	AD65011	25.8	113	4.05	25.2	< 0.1	63.9	276.7	6.6
CLF1B-3	01/30/2017	Primary	AD72815	25	128	3.2	23	0.12	84.4	430	6.81
CLF1B-3	04/17/2017	Primary	AD79012	27	177	5.8	20.8	0.13	159	452	6.76
CLF1B-3	07/26/2017	Primary	AD86323	47	-	-	22	-	194	674	6.57
CLF1B-3	09/25/2017	Primary	AD93491	50	183	8.5	22.7	< 0.1	174	530	6.74
CLF1B-3	10/11/2017	Primary	AD94538	64	220	-	24.8	0.15	226	621.7	6.66
CLF1B-3	02/19/2018	Primary	AE04182	31	-	-	23	0.15	132	542.9	6.73
CLF1B-3	06/27/2018	Primary	AE13397	48	200	7	34.2	0.15	166	656.2	6.67
CLF1B-3	02/12/2019	Primary	AE35566	44	198	-	29	< 0.1	191	651.2	6.82
CLF1B-3	07/08/2019	Primary	AE47693	40	217	-	81.2	< 0.1	13	755	6.53
CLF1B-3	02/24/2020	Primary	AE66526	37	125	20.5	26	< 0.1	95.2	388.8	6.43
CLF1B-3	06/22/2020	Primary	AE75380	39	180	18.2	23.7	0.11	196	583.8	6.79
CLF1B-3	01/26/2021	Primary	AE94868	34	168	6.8	23.6	< 0.1	177	562.5	6.76
CLF1B-3	06/22/2021	Primary	AF07277	80	244	11.1	27.6	0.14	349	837.5	6.61
CLF1B-3	01/24/2022	Primary	AF24797	71	185	13.7	23.7	0.14	245	643.8	6.62
CLF1B-3	06/27/2022	Primary	AF36897	120	230	8	22.8	0.2	355	791.2	6.73
CLF1B-3	10/31/2022	Primary	AF47637	140	222	14.2	18	0.12	338	787.5	6.68

TABLE I
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 SANTEE COOPER
 CROSS GENERATING STATION - CLASS 2 AND CLASS 3 LANDFILLS
 CROSS, SOUTH CAROLINA

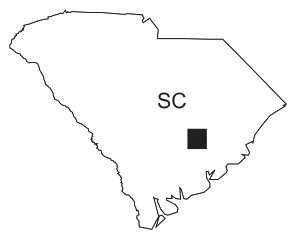
Location	Sample Date	Sample Type	Chemical Group Chemical Name Units Lab Sample ID	Appendix III Parameters Plus Cobalt							pH, Field pH units
				Boron, Total µg/L	Calcium, Total mg/L	Cobalt, Total µg/L	Chloride mg/L	Fluoride mg/L	Sulfate mg/L	Total Dissolved Solids (TDS) mg/L	
CLF1B-4	10/22/2015	Primary	AD33591	27.2	110	< 0.5	51.1	0.12	34.3	350	7.17
CLF1B-4	01/27/2016	Primary	AD40791	29.2	67	< 0.5	51.1	0.13	31.1	375	7.37
CLF1B-4	04/19/2016	Primary	AD47591	18.2	94.5	< 0.5	50.9	< 0.1	22.4	290	7.18
CLF1B-4	07/19/2016	Primary	AD56659	20.4	97.3	< 0.5	52.7	< 0.1	17.4	384	7.16
CLF1B-4	10/13/2016	Primary	AD65012	21.4	180	0.229	50.7	< 0.1	15.3	360	6.97
CLF1B-4	01/30/2017	Primary	AD72816	21.7	88.1	< 0.5	49.1	< 0.1	16.3	344	7.22
CLF1B-4	04/17/2017	Primary	AD79013	19	92.9	< 0.5	47.4	0.11	16.1	278	7.23
CLF1B-4	07/26/2017	Primary	AD86324	20	-	-	56	-	14.8	396	7.02
CLF1B-4	09/26/2017	Primary	AD93492	17	92.6	< 0.5	53.1	< 0.1	14.3	286	7.24
CLF1B-4	10/11/2017	Primary	AD94539	20	92	-	49.9	< 0.1	13.7	256.7	7.2
CLF1B-4	02/08/2018	Primary	AE04183	17	89.9	-	47.2	< 0.1	14.8	434	7.23
CLF1B-4	06/28/2018	Primary	AE13398	17	92	< 0.5	50.5	< 0.1	13.4	380	7.01
CLF1B-4	02/12/2019	Primary	AE35567	18	110	-	54.4	< 0.1	13.7	331.2	7.38
CLF1B-4	07/08/2019	Primary	AE47694	19	102	-	66.5	< 0.1	13.9	427.5	6.93
CLF1B-4	02/24/2020	Primary	AE66527	18	103	< 0.5	77.7	< 0.1	14.6	371.2	6.93
CLF1B-4	06/23/2020	Primary	AE75381	23	117	< 0.5	88.2	< 0.1	17.1	513.8	6.99
CLF1B-4	01/27/2021	Primary	AE94869	17	106	< 0.5	82.2	< 0.1	12.2	418.8	7.06
CLF1B-4	06/22/2021	Primary	AF07278	16	118	< 0.5	99.9	< 0.1	16.4	552.5	7.03
CLF1B-4	01/24/2022	Primary	AF24798	18.3	116	< 0.5	99.3	< 0.1	18.1	417.5	7.05
CLF1B-4	06/27/2022	Primary	AF36898	27	140	< 1	100	< 0.1	26.6	490	6.93
CLF1B-4	10/31/2022	Primary	AF47638	26.5	130	< 0.5	99.5	< 0.1	23.8	553.8	6.96
CLF1B-5	10/22/2015	Primary	AD33592	15.8	160	2.9	69.5	0.11	24.2	528	6.83
CLF1B-5	01/27/2016	Primary	AD40792	15.5	160	3.6	90.9	< 0.1	44.4	662.5	6.76
CLF1B-5	01/28/2016	Duplicate	AD41483	< 15	160	3.6	90.7	0.12	43.8	675	-
CLF1B-5	04/25/2016	Primary	AD47592	< 15	192	2.33	99.8	< 0.1	63.6	755	6.68
CLF1B-5	07/19/2016	Primary	AD56660	< 15	202	2.44	113	< 0.1	87.3	848	6.59
CLF1B-5	10/14/2016	Primary	AD65013	< 15	196	2.55	109	< 0.1	110	763.3	6.51
CLF1B-5	01/24/2017	Primary	AD72817	15.3	205	4.2	110	< 0.1	112	758	6.75
CLF1B-5	04/18/2017	Primary	AD79014	< 15	223	3.4	114	< 0.1	130	756	6.6
CLF1B-5	07/25/2017	Primary	AD86325	15	-	-	117	-	161	840	6.67
CLF1B-5	09/28/2017	Primary	AD93493	15	224	3.1	118	< 0.1	165	812	6.76
CLF1B-5	10/11/2017	Primary	AD94540	19	220	-	117	< 0.1	177	776.7	6.71
CLF1B-5	02/08/2018	Primary	AE04184	16	279	-	120	0.12	278	1076	6.71
CLF1B-5	06/27/2018	Primary	AE13399	16	250	3	117	0.15	176	936.2	6.71
CLF1B-5	02/13/2019	Primary	AE35568	18	257	3.2	134	< 0.1	203	921.2	6.71
CLF1B-5	05/21/2019	Primary	AE43244	-	264	4.7	127	-	209	1024	6.64
CLF1B-5	07/09/2019	Primary	AE47774	19	256	-	151	< 0.1	236	1155	6.5
CLF1B-5	02/25/2020	Primary	AE66528	18	256	3.5	138	< 0.1	230	935	6.49
CLF1B-5	06/23/2020	Primary	AE75382	19	265	3.5	139	< 0.1	228	1076	6.61
CLF1B-5	01/27/2021	Primary	AE94870	19	264	2.6	152	< 0.1	238	1024	6.58
CLF1B-5	06/23/2021	Primary	AF07279	19	272	3.7	174	< 0.1	251	1176	5.57
CLF1B-5	01/25/2022	Primary	AF24799	16.5	276	4.19	152	< 0.1	291	1132	6.64
CLF1B-5	06/27/2022	Primary	AF36899	26	290	4	168	< 0.1	262	1148	6.66
CLF1B-5	11/01/2022	Primary	AF47639	24.4	274	4.2	180	< 0.1	264	1099	6.47

- Notes:
1. Results in **bold** are detected.
 2. <: Not detected above the indicated reporting limit.
 3. -: Not analyzed or not reported.
 4. µg/L = micrograms per liter; mg/L = milligrams per liter.

FIGURES



GIS: \\haleyaldrich.com\share\gim_common\131539 - Santee Cooper\GIS\Maps\2022_12\131539_Santee_Cooper.aprx - khaskins - 12/23/2022 10:43 AM



MAP SOURCE: ESRI
 SITE COORDINATES: 33°22'43"N, 80°06'55"W

**HALEY
 ALDRICH**

SANTEE COOPER
 CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

SITE LOCATION MAP

APPROXIMATE SCALE: 1 IN = 6000 FT
 MARCH 2023

FIGURE 1

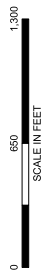


LEGEND

- CLASS 2 LANDFILL WELL
- CLASS 3 LANDFILL WELL
- NATURE & EXTENT WELL (LATERAL EXTENT)
- NATURE & EXTENT WELL (VERTICAL EXTENT)
- CCR UNIT BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY

NOTES

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

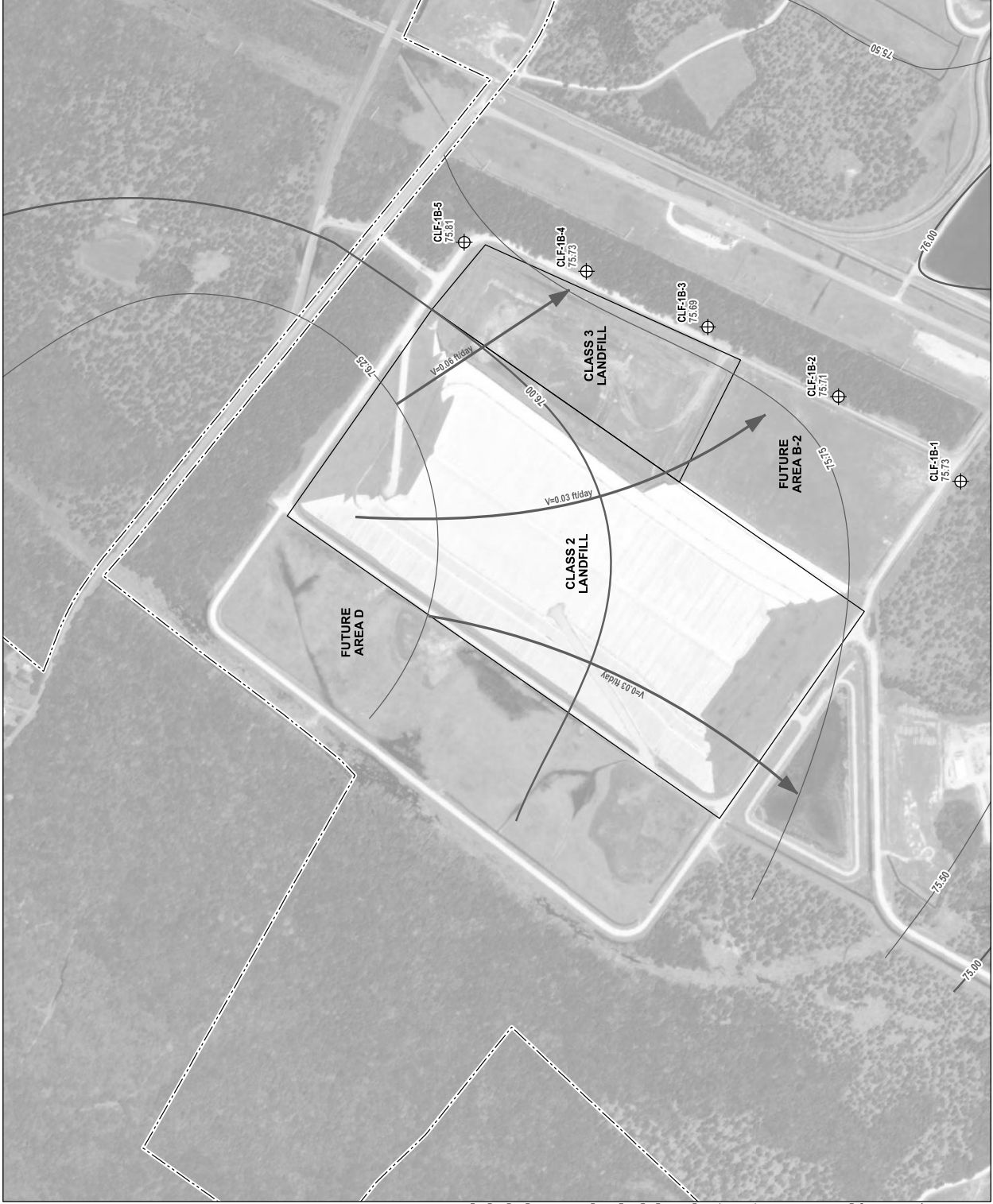


SANTEE COOPER
GENERATING STATION
PINNACLE, SOUTH CAROLINA

**CLASS 2 AND CLASS 3 LANDFILL
WELL LOCATION MAP**

MARCH 2023

FIGURE 2



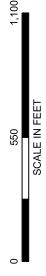
LEGEND

- ⊕ CLASS 3 LANDFILL WELL
- GROUNDWATER ELEVATION CONTOUR, 1-FT INTERVAL
- INTERMEDIATE GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- ▭ CCR UNIT BOUNDARY
- - - CROSS GENERATING STATION PROPERTY BOUNDARY
- ▭ SANTEE COOPER PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AVERAGE LINEAR VELOCITY WAS CALCULATED USING:

$$v = \frac{K}{n_c} \frac{\Delta h}{\Delta L}$$
3. ABBREVIATIONS:
 ft/day = FEET PER DAY
 V = AVERAGE LINEAR VELOCITY (ft/day)
 K = HYDRAULIC PERMEABILITY (ft/day)
 n_c = COEFFICIENT OF POROSITY
 Δh = CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH
 ΔL = DISTANCE IN FEET
 K = 25 FEET PER DAY (ft/day)
5. n_c = 0.25
6. AVERAGE LINEAR VELOCITY FOR THE UNIT (GEOMETRIC MEAN OF VALUES) IS 0.04 FT/DAY.
7. AERIAL IMAGERY SOURCE: ESRI



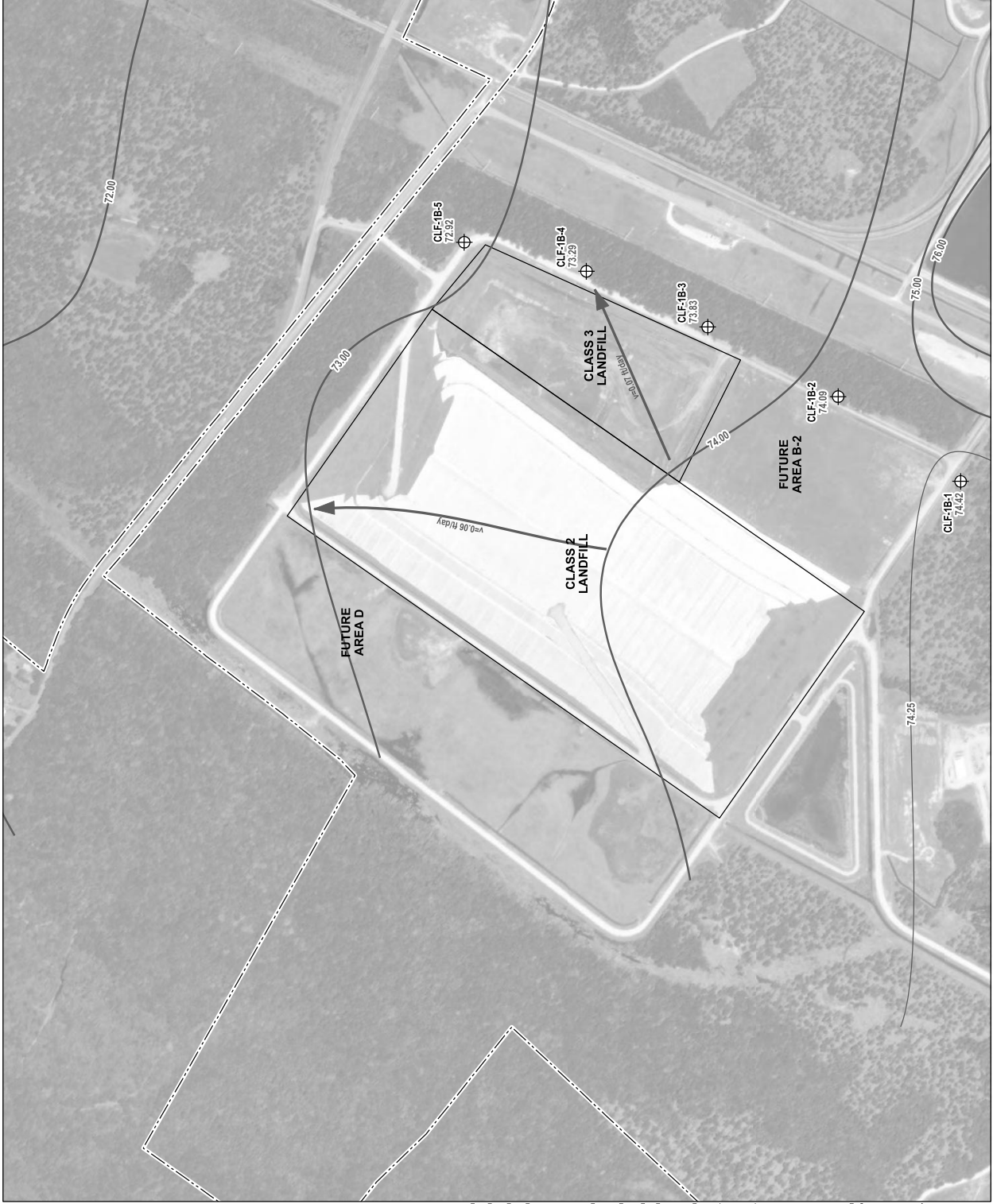
HALEY ALDRICH

SANTEE COOPER CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

POTENTIOMETRIC MAP
 CLASS 3 LANDFILL
 MARCH 17, 2022

MARCH 2022

FIGURE 3A



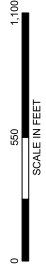
LEGEND

- ⊕ CLASS 3 LANDFILL WELL
- GROUNDWATER ELEVATION CONTOUR, 1-FT INTERVAL
- INTERMEDIATE GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- CCR UNIT BOUNDARY
- - - CROSS GENERATING STATION PROPERTY BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AVERAGE LINEAR VELOCITY WAS CALCULATED USING:

$$v = \frac{K \Delta h}{n_e \Delta L}$$
3. ABBREVIATIONS:
 ft/day = FEET PER DAY
 V = AVERAGE LINEAR VELOCITY (ft/day)
 K = HYDRAULIC PERMEABILITY (ft/day)
 n_e = EFFECTIVE POROSITY (DIMENSIONLESS)
 ΔL = LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH
 FL = LENGTH OF FLOW PATH
 FL = DISTANCE IN FEET
 K = 25 FEET PER DAY (ft/day)
 n_e = 0.25
6. AVERAGE LINEAR VELOCITY FOR THE UNIT (GEOMETRIC MEAN OF VALUES) IS 0.06 FT/DAY.
7. THE NATURE AND EXTENT WELLS USED FOR VERTICAL EXTENT WERE NOT USED FOR CONTOURING THE SHALLOW GROUNDWATER POTENTIOMETRIC SURFACE.
8. AERIAL IMAGERY SOURCE: ESRI

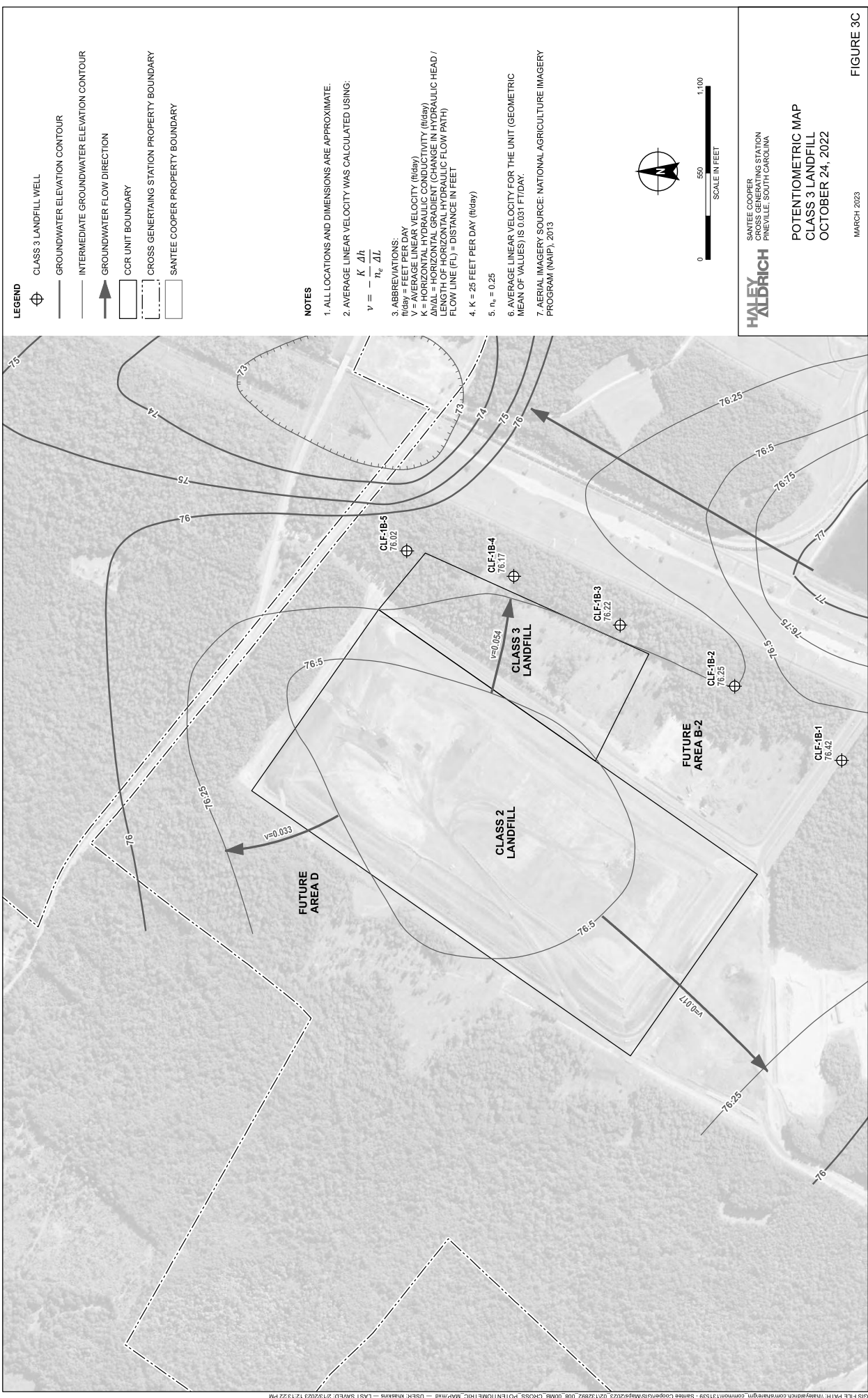


SANTEE COOPER
 CONSULTING STATION
 PINEVILLE, SOUTH CAROLINA

**POTENTIOMETRIC MAP
 CLASS 3 LANDFILL
 JUNE 20, 2022**

MARCH 2023

FIGURE 3B



LEGEND

- CLASS 3 LANDFILL WELL
- GROUNDWATER ELEVATION CONTOUR
- INTERMEDIATE GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- CCR UNIT BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AVERAGE LINEAR VELOCITY WAS CALCULATED USING:

$$v = \frac{K}{n_e} \frac{\Delta h}{\Delta L}$$
3. ABBREVIATIONS:
 v_{day} = FEET PER DAY
 K = AVERAGE LINEAR VELOCITY (ft/day)
 n_e = EFFECTIVE POROSITY
 Δh = HORIZONTAL GRADIENT (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
 ΔL = DISTANCE IN FEET
 $K = 25$ FEET PER DAY (ft/day)
4. $n_e = 0.25$
5. AVERAGE LINEAR VELOCITY FOR THE UNIT (GEOMETRIC MEAN OF VALUES) IS 0.031 FT/DAY.
6. AERIAL IMAGERY SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP), 2013



HALBRICH
 SANTEE COOPER
 CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

POTENTIOMETRIC MAP
 CLASS 3 LANDFILL
 OCTOBER 24, 2022

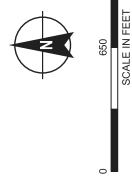
MARCH 2023

FIGURE 3C

- LEGEND**
- CLASS 2 LANDFILL WELL
 - CLASS 3 LANDFILL WELL
 - NPDES WELL
 - BORON (20 µg/L)
 - CHLORIDE (100 mg/L)
 - COBALT (2 µg/L)
 - FLUORIDE (0.12 mg/L)
 - CCR UNIT BOUNDARY
 - SANTEE COOPER PROPERTY BOUNDARY
 - CROSS GENERATING STATION PROPERTY BOUNDARY

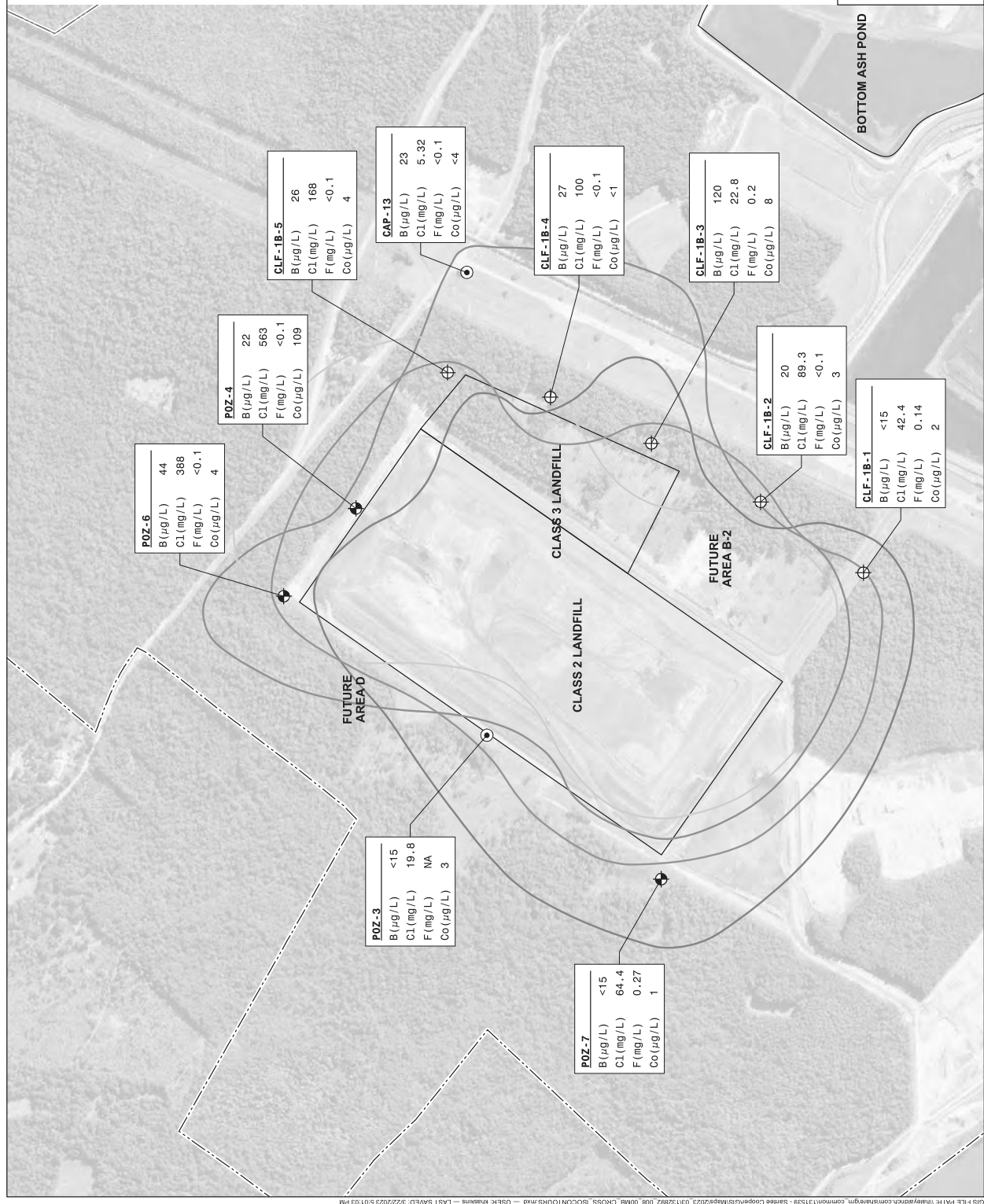
NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP), 2013



HALDRICH
 SANTEE COOPER CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

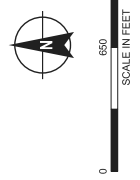
OCTOBER 2015
 BORON, CHLORIDE, FLUORIDE,
 AND COBALT ISOCONCENTRATIONS
 MARCH 2023
 FIGURE 4A



- LEGEND**
- CLASS 2 LANDFILL WELL
 - ⊕ CLASS 3 LANDFILL WELL
 - BORON (20 µg/L)
 - CHLORIDE (100 mg/L)
 - FLUORIDE (0.12 mg/L)
 - CCR UNIT BOUNDARY
 - SANTEE COOPER PROPERTY BOUNDARY
 - CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

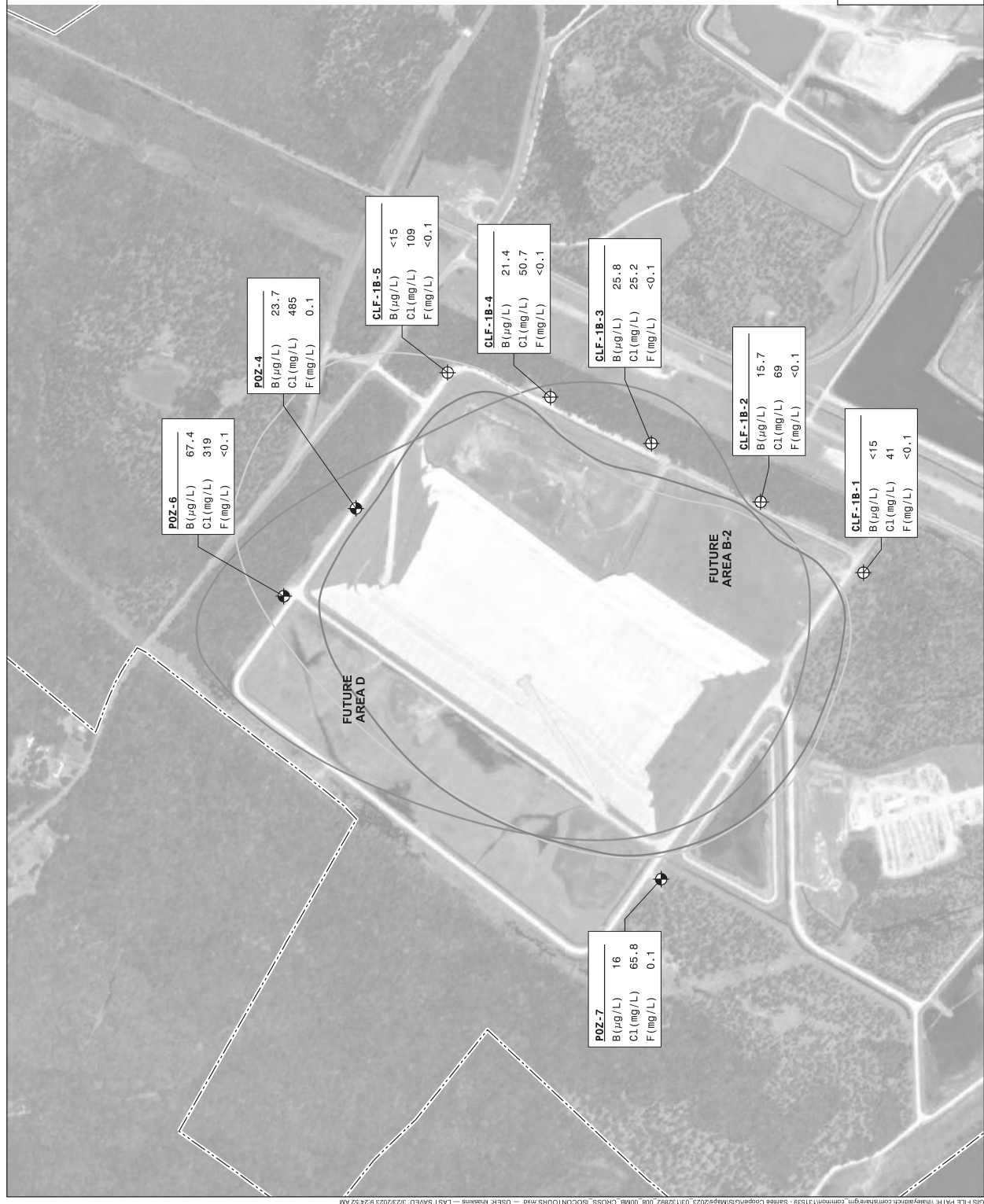
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI











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 SANTEE COOPER GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

OCTOBER 2016
 BORON, CHLORIDE, AND FLUORIDE
 ISOCONCENTRATIONS

MARCH 2023
 FIGURE 4B



LEGEND

-  CLASS 2 LANDFILL WELL
-  CLASS 3 LANDFILL WELL
-  BORON (20 µg/L)
-  CHLORIDE (100 mg/L)
-  FLUORIDE (0.12 mg/L)
-  CCR UNIT BOUNDARY
-  SANTEE COOPER PROPERTY BOUNDARY
-  CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

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

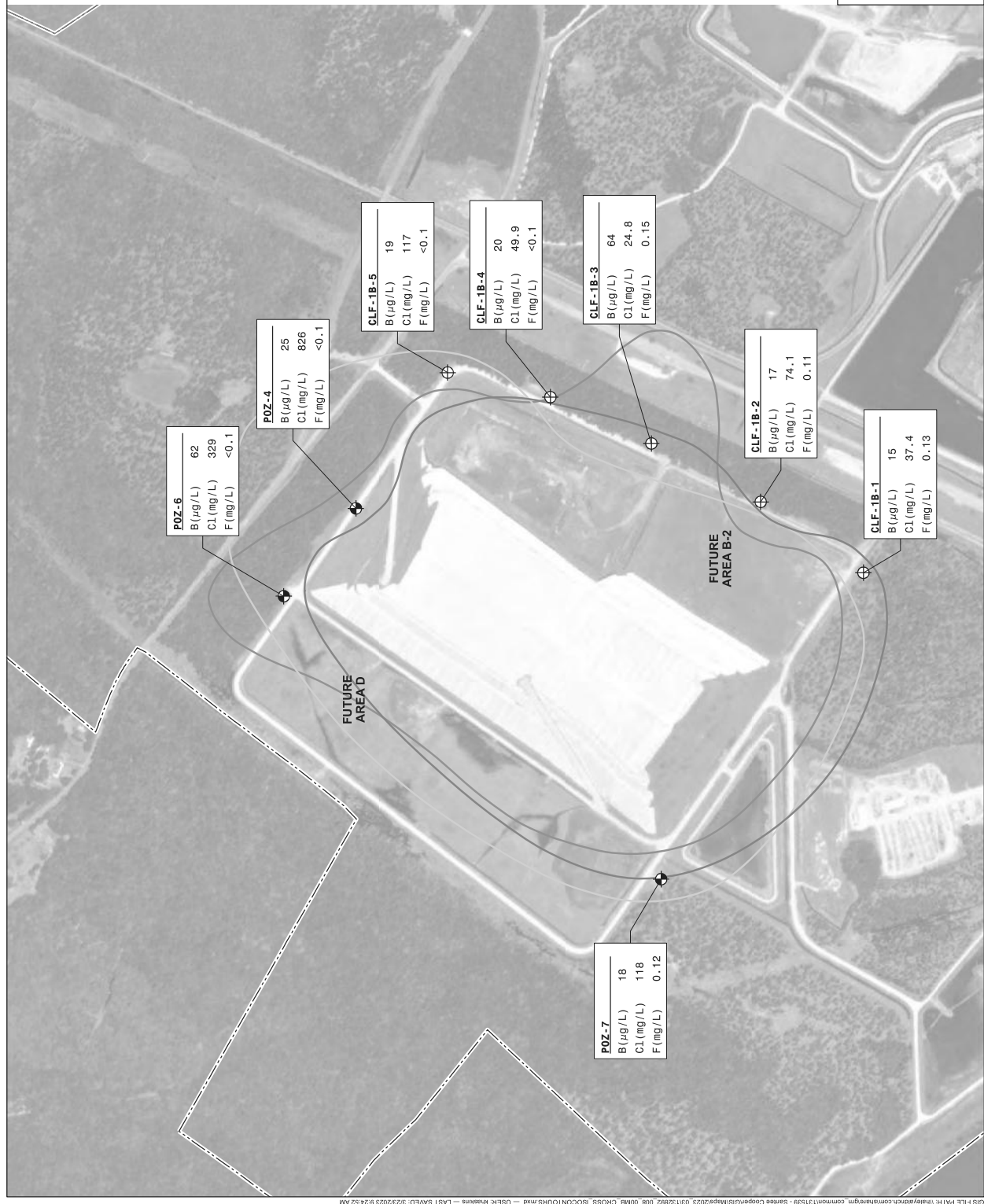


HALEY ALDRICH
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 PINEVILLE, SOUTH CAROLINA

OCTOBER 2017
 BORON, CHLORIDE, AND FLUORIDE
 ISOCONCENTRATIONS

MARCH 2023










FIGURE 4C



FUTURE AREA D

FUTURE AREA B-2

LEGEND

-  CLASS 2 LANDFILL WELL
-  CLASS 3 LANDFILL WELL
-  BORON (20 µg/L)
-  CHLORIDE (100 mg/L)
-  COBALT (2 µg/L)
-  FLUORIDE (0.12 mg/L)
-  CCR UNIT BOUNDARY
-  SANTEE COOPER PROPERTY BOUNDARY
-  CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

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



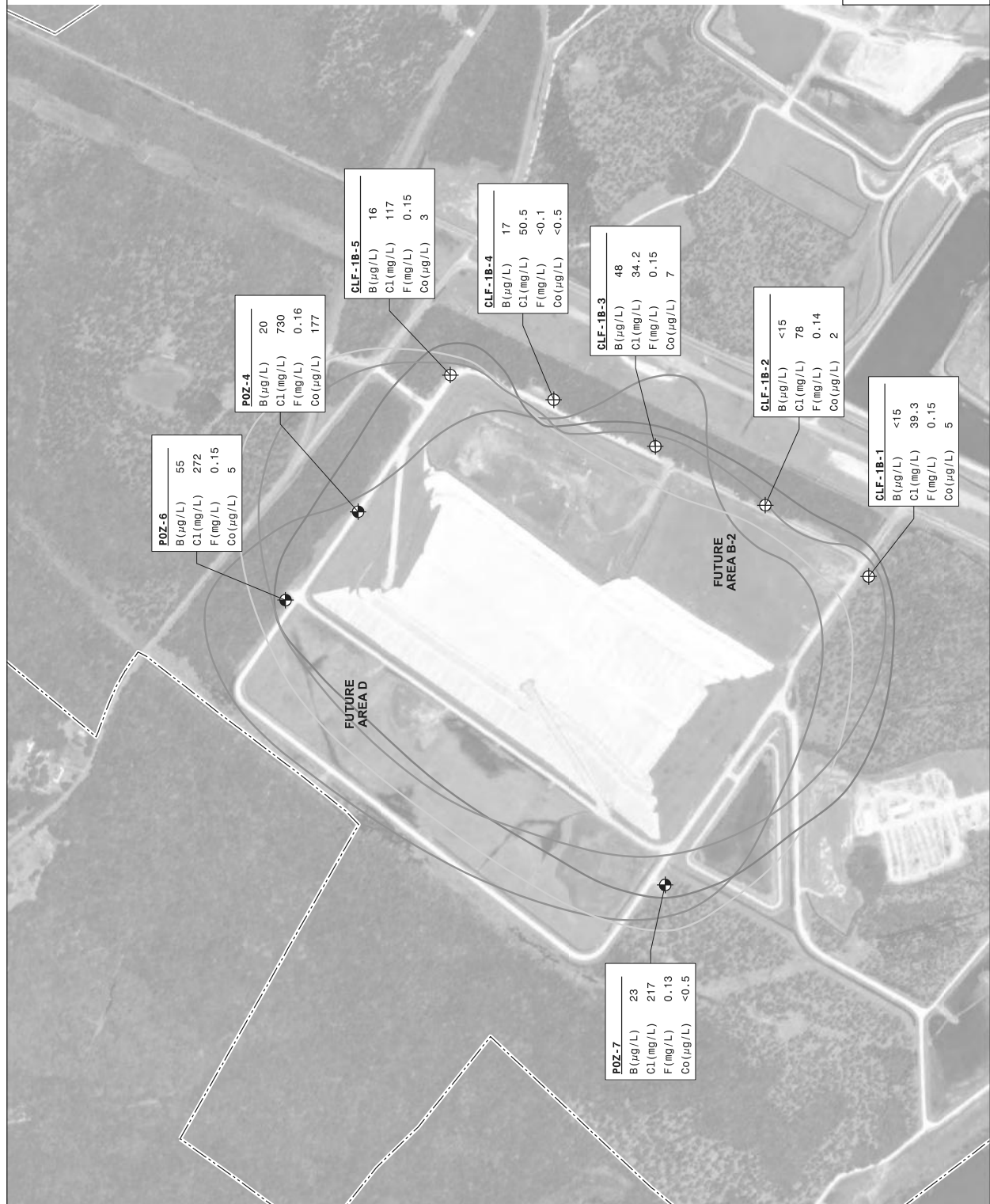
HAILEY ALDRICH

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PINEVILLE, SOUTH CAROLINA











JUNE 2018
BORON, CHLORIDE, FLUORIDE,
AND COBALT ISOCONCENTRATIONS

MARCH 2023

FIGURE 4D

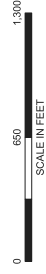


LEGEND

-  CLASS 2 LANDFILL WELL
-  CLASS 3 LANDFILL WELL
-  NPDES WELL
-  BORON (20 µg/L)
-  CHLORIDE (100 mg/L)
-  COBALT (2 µg/L)
-  FLUORIDE (0.12 mg/L)
-  CCR UNIT BOUNDARY
-  SANTEE COOPER PROPERTY BOUNDARY
-  CROSS-GENERATING STATION PROPERTY BOUNDARY

NOTES

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



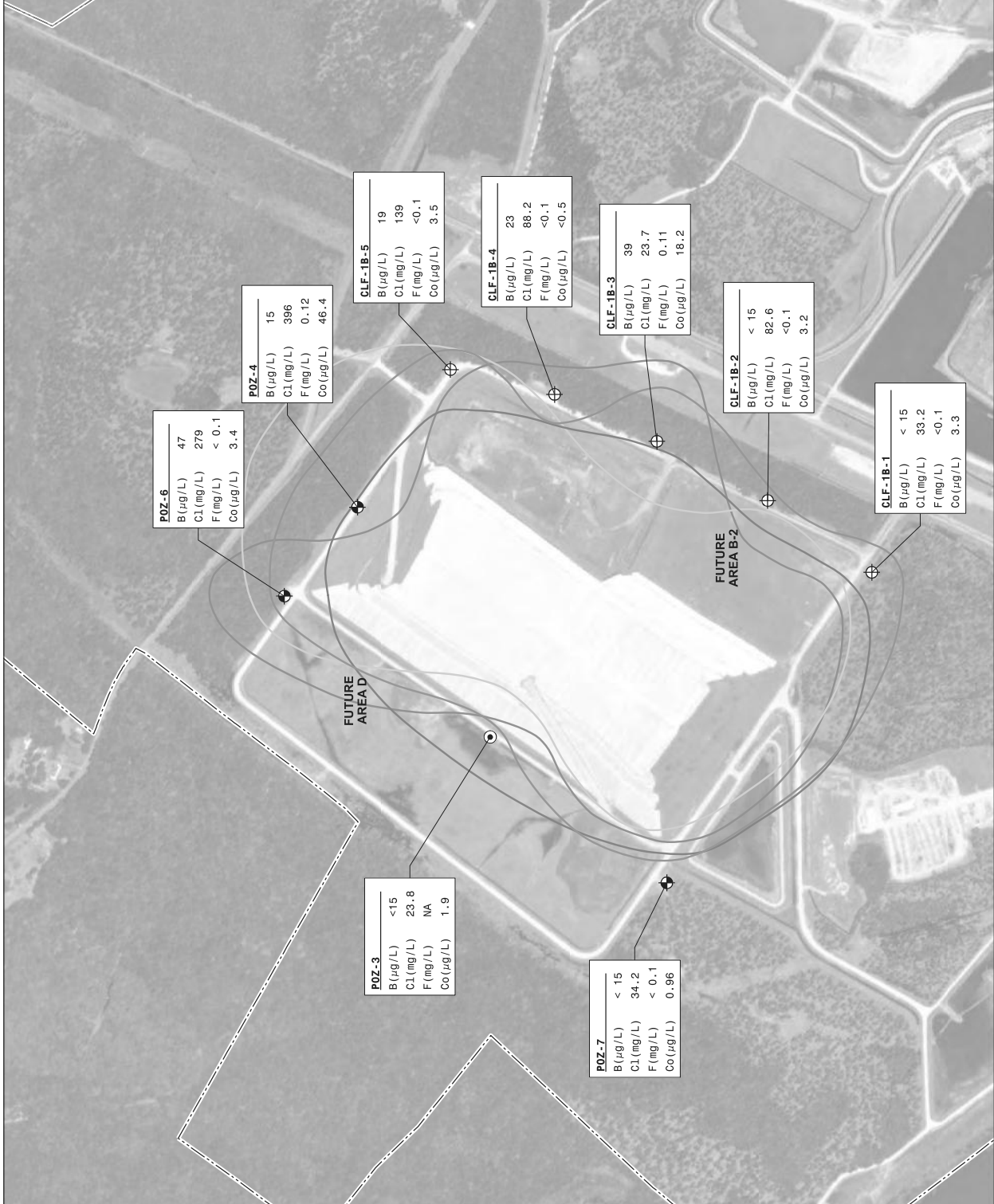
HALLEY ALDRICH

SANTEE COOPER
CROSS-GENERATING STATION
PINEVILLE, SOUTH CAROLINA










JUNE 2020
BORON, CHLORIDE, FLUORIDE,
AND COBALT ISOCONCENTRATIONS

MARCH 2023

FIGURE 4E

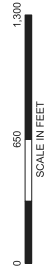


LEGEND

-  CLASS 2 LANDFILL WELL
-  CLASS 3 LANDFILL WELL
-  BORON (20 µg/L)
-  CHLORIDE (100 mg/L)
-  COBALT (2 µg/L)
-  FLUORIDE (0.12 mg/L)
-  CCR UNIT BOUNDARY
-  SANTEE COOPER PROPERTY BOUNDARY
-  CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

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

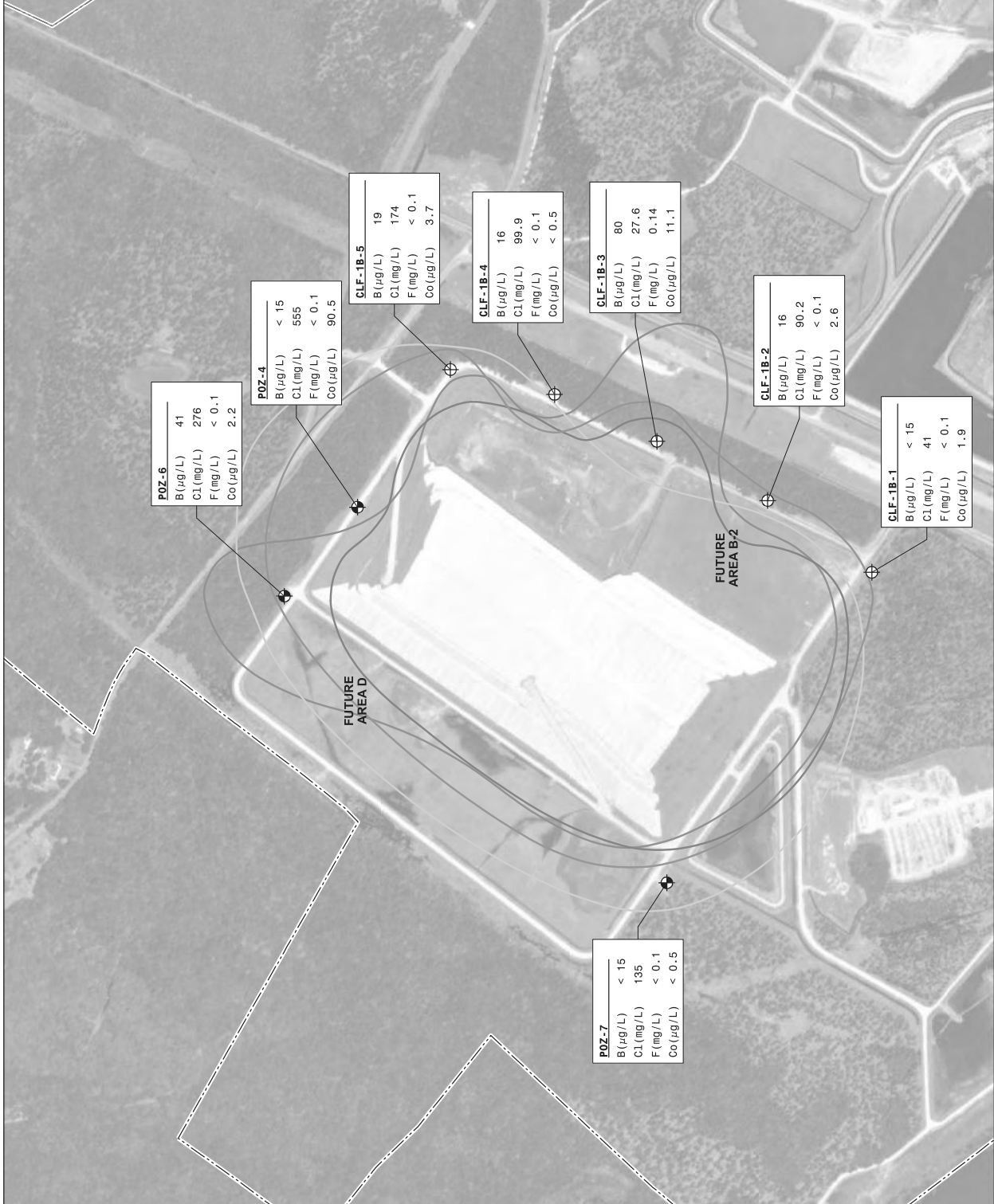


HALEY ALDRICH
 SANTEE COOPER CROSS GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

JUNE 2021
 BORON, CHLORIDE, FLUORIDE,
 AND COBALT ISOCONCENTRATIONS

MARCH 2023

FIGURE 4F

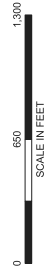


LEGEND

- CLASS 2 LANDFILL WELL
- CLASS 3 LANDFILL WELL
- NPDES WELL
- BORON (20 µg/L)
- CHLORIDE (100 mg/L)
- COBALT (2 µg/L)
- FLUORIDE (0.12 mg/L)
- CCR UNIT BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY
- CROSS-GENERATING STATION PROPERTY BOUNDARY

NOTES

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

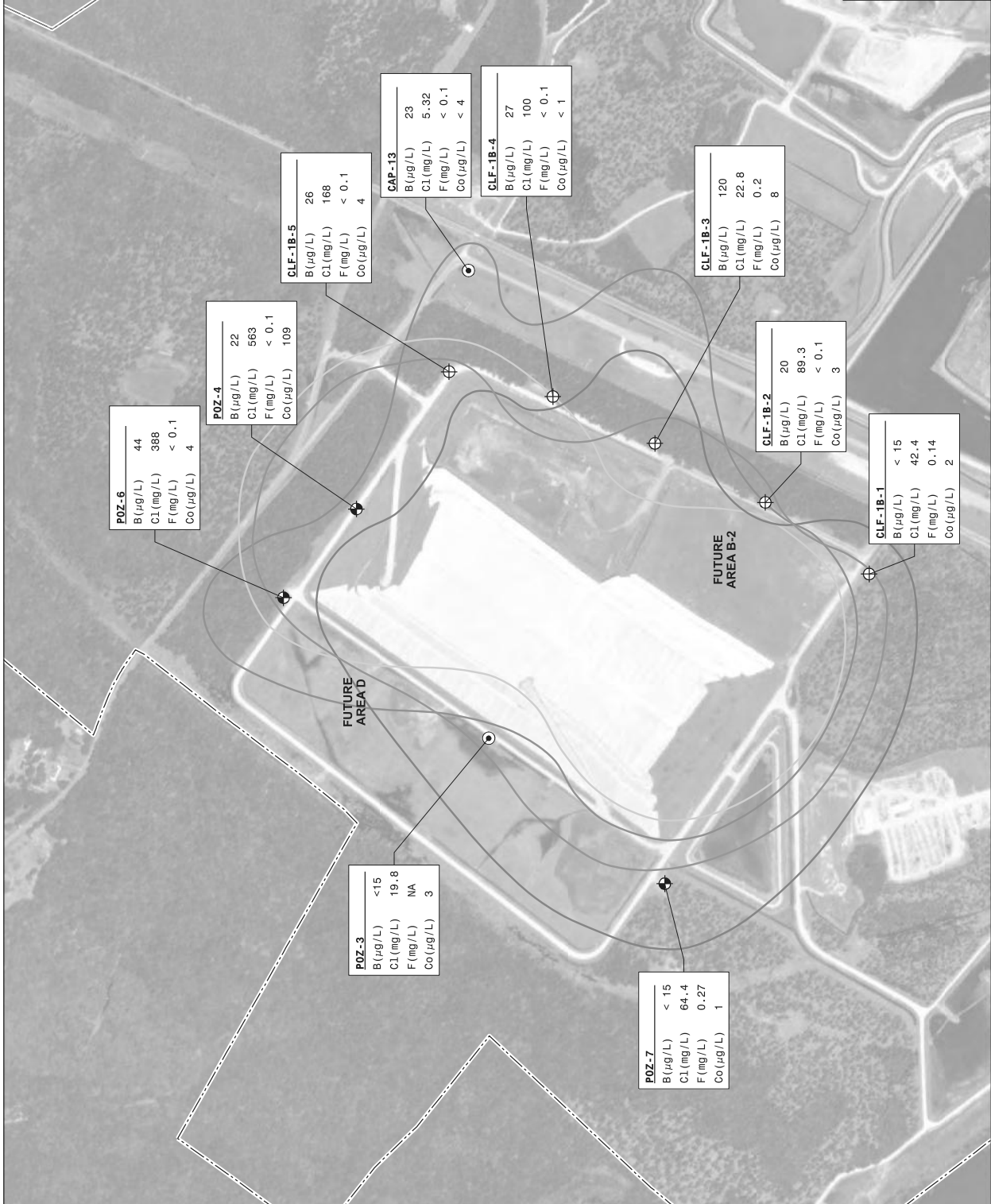


HALEY ALDRICH
 SANTEE COOPER CROSS-GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

JUNE 2022
 BORON, CHLORIDE, FLUORIDE,
 AND COBALT ISOCONCENTRATIONS

MARCH 2023

FIGURE 4G





LEGEND

- CLASS 2 LANDFILL WELL
- NPDES WELL
- FUTURE MONITORING WELL
- CCR BOUNDARY
- SITE FEATURE
- SANTEE COOPER PROPERTY BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2005



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SANTEE COOPER
 GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
 SEPTEMBER 2005

MARCH 2023

FIGURE 5A



LEGEND

- CLASS 2 LANDFILL WELL
- NPDES WELL
- FUTURE MONITORING WELL
- CCR BOUNDARY
- SITE FEATURE
- SANTEE COOPER PROPERTY BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2010



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GENERATING STATION
PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
SEPTEMBER 2010

MARCH 2023

FIGURE 5B

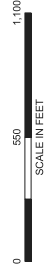


LEGEND

- CLASS 2 LANDFILL WELL
- NPDES WELL
- FUTURE MONITORING WELL
- CCR BOUNDARY
- SITE FEATURE
- SANTEE COOPER PROPERTY BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2012



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GENERATING STATION
PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
JANUARY 2012

MARCH 2023

FIGURE 5C

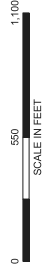


LEGEND

- CLASS 2 LANDFILL WELL
- NPDES WELL
- FUTURE MONITORING WELL
- CCR BOUNDARY
- SITE FEATURE
- SANTEE COOPER PROPERTY BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2013



HALEY ALDRICH

SANTEE COOPER
 WASTEWATER TREATING STATION
 PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
 FEBRUARY 2013

MARCH 2023

FIGURE 5D



LEGEND

- CLASS 2 LANDFILL WELL
- NPDES WELL
- FUTURE MONITORING WELL
- CCR BOUNDARY
- SITE FEATURE
- SANTEE COOPER PROPERTY BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2014



SANTEE COOPER
GENERATING STATION
PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
MARCH 2014

MARCH 2023

FIGURE 5E



LEGEND

- ⊕ CLASS 2 LANDFILL WELL
- ⊕ CLASS 3 LANDFILL WELL
- ⊙ NPDES WELL
- ⊕ FUTURE MONITORING WELL
- ▭ CCR BOUNDARY
- ▭ SITE FEATURE
- ▭ SANTEE COOPER PROPERTY BOUNDARY
- ▭ CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2016

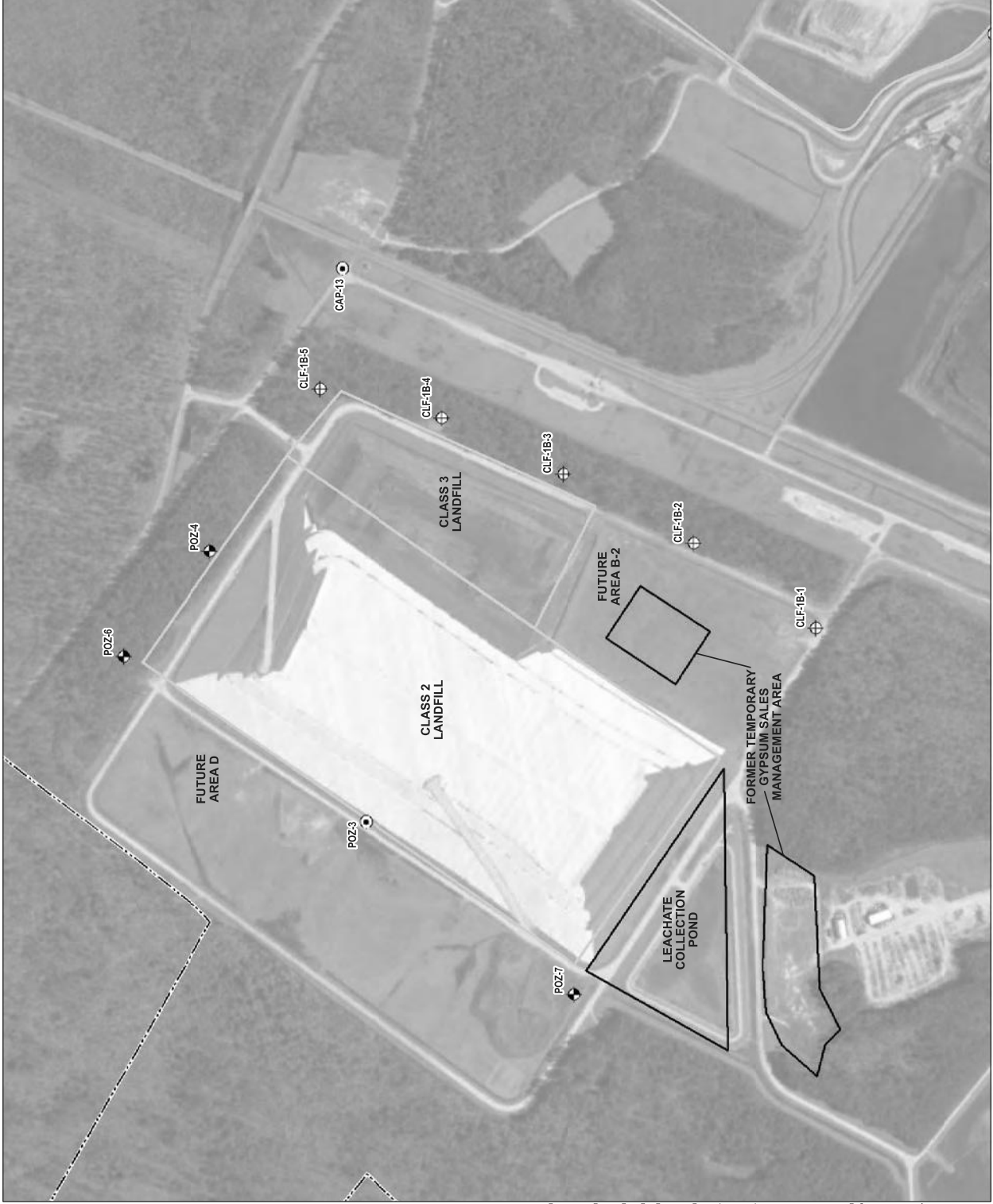


SANTEE COOPER GENERATING STATION
PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
OCTOBER 2016

MARCH 2023

FIGURE 5F

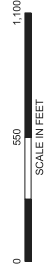


LEGEND

- ⊕ CLASS 2 LANDFILL WELL
- ⊕ CLASS 3 LANDFILL WELL
- ⊙ NPDES WELL
- ▭ CCR BOUNDARY
- ▭ SITE FEATURE
- ▭ SANTEE COOPER PROPERTY BOUNDARY
- - - CROSS GENERATING STATION PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 2021



HAILEY ALDRICH

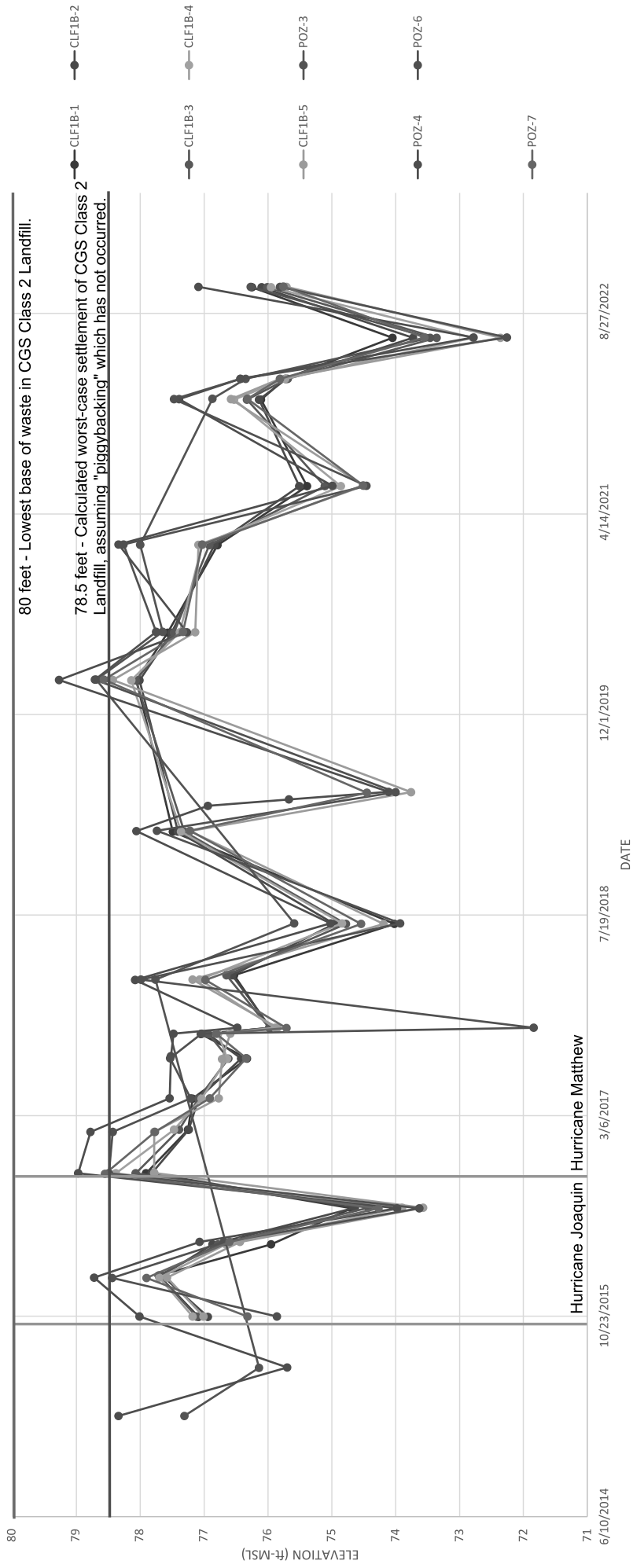
SANTEE COOPER
WASTE TREATING STATION
PINEVILLE, SOUTH CAROLINA

CGS HISTORICAL AERIAL IMAGERY
JANUARY 2021

MARCH 2023

FIGURE 5G

WATER TABLE ELEVATION - MONITORING WELLS



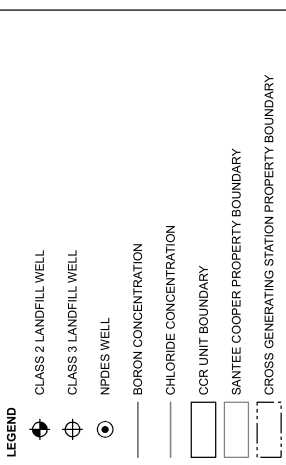
Notes:
 ft-MSL: feet above mean sea level
 CGS: Cross Generating Station



WATER TABLE ELEVATIONS
 HYDROGRAPH, 2014 - 2022

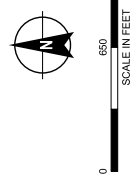
MARCH 2023

FIGURE 6



NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SOLID SYMBOL REPRESENTS A DETECTED CONCENTRATION. HOLLOW SYMBOL REPRESENTS A NON-DETECT CONCENTRATION (LABORATORY LIMIT).
3. AERIAL IMAGERY SOURCE: NATIONAL AGRICULTURE IMAGERY PROGRAM, 2013

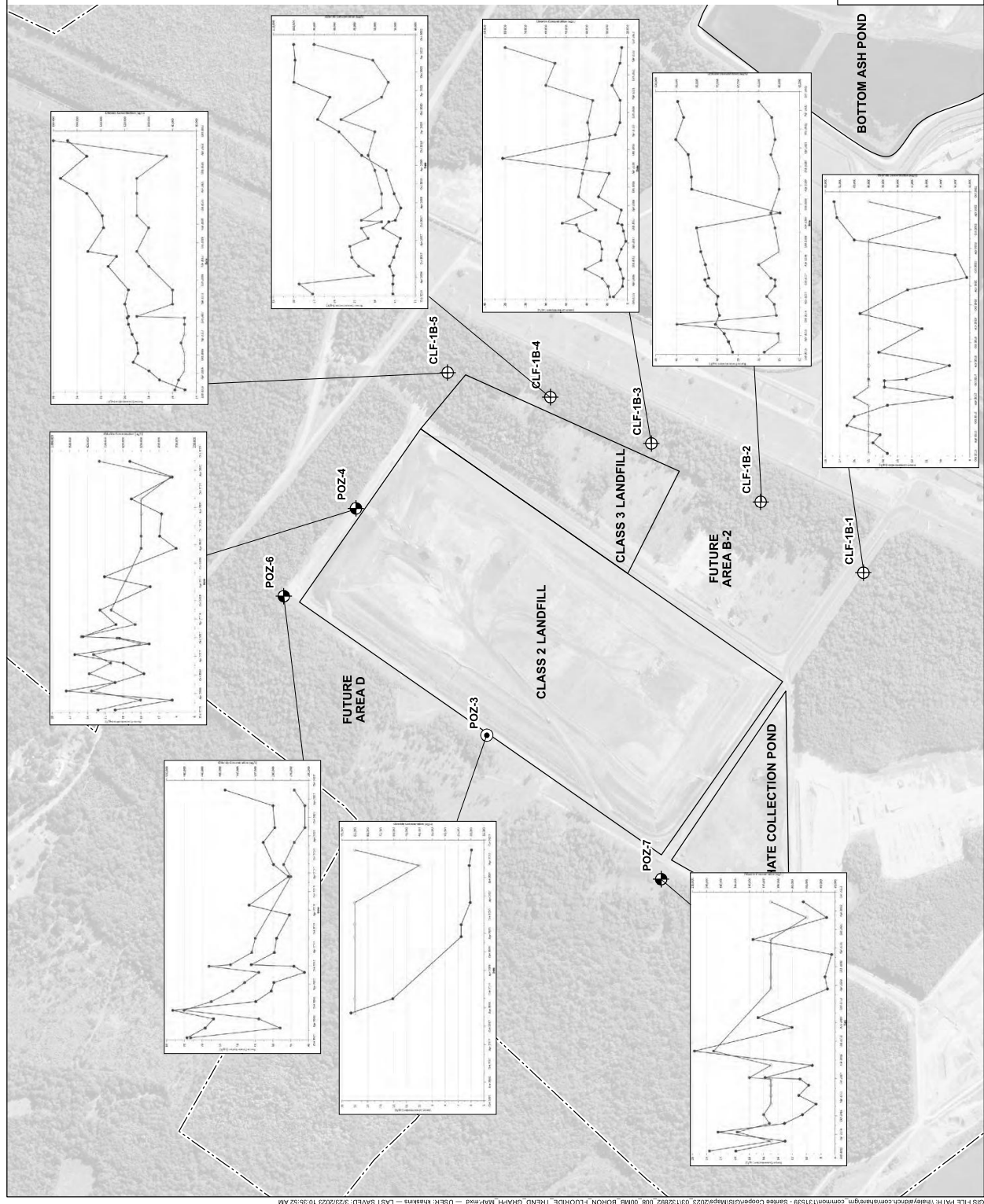


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 PINEVILLE, SOUTH CAROLINA

**BORON AND CHLORIDE
 TREND GRAPH MAP**

MARCH 2023

FIGURE 7



APPENDIX A
Santee Cooper Landfill Base Grade Settlement
(Worley Parson, February 2012)

Customer	Santee Cooper	Project No.	108008-01330								
Project Title	Cross Generating Station - Class III Solid Waste Landfill	Calc No.	CR34-0-DC-LF-CE-001								
Calculation Title	Landfill Base Grade Settlement	Phase/CTR	N/A								
Elec File Location	P:\SanteeCooper\CR34\Doc\Civil\Cross Generating Station\Class III SWLF Horizontal Expansion\Calculations\CE-001 Settlement\CR34-0-DC-LF-CE-001-R0.doc										
Project File Location	See Encompass	Page	4	of	189						
Rev	Date	By	Checked	Rev	Date	By	Checked	Rev	Date	By	Checked
0	14-Feb-2012	F.Wood	Y.Xu								

Purpose

The purpose of this calculation is to evaluate the predicted landfill base grade settlement resulting from the development of the proposed Class Three solid waste landfill Areas 1B, 1D, 2, and 5.

The magnitude of predicted settlement is evaluated to ensure satisfactory performance of the proposed Class Three landfill areas with respect to the following:

- Maintaining at least 3 feet of separation between the base of the lowest liner component and the seasonal high groundwater level
- Maintaining leachate collection system performance
- Maintaining base liner and leachate collection system component strains within acceptable limits

Where a proposed Class Three landfill area 'piggybacks' over the existing Class Two landfill or the existing Unit 1 and Unit 2 Construction and Demolition (C&D) landfills, the deflection of the existing landfill base grade due to the additional 'piggyback' loading is analyzed with respect to the seasonal high groundwater level.

References

1. Garrett & Moore, Inc., 2011, *Site Hydrogeological Characterization Report*
2. Law Engineering Testing Company, February 9, 1979, *Final Report - Cross Generating Station - Volume 2*
3. Marchetti, S. et al., May 2001, *The Flat Dilatometer Test (DMT) in Soil Investigations*, A report by the ISSMGE Committee IC16. Proc. IN SITU 2001, Intl. Conf. On In situ Measurement of Soil Properties, Bali, Indonesia.
4. Robertson, P.K., May 2009, *Interpretation of Cone Penetration Tests – a Unified Approach*, Canadian Geotechnical Journal, CGJ MS 08-158.
5. WorleyParsons Calculation CR34-0-DC-LF-CE-005 *Base Reinforcement*
6. WorleyParsons Calculation CR34-0-DC-LF-CE-006 *Leachate Generation*
7. WorleyParsons Calculation CR34-0-DC-LF-CE-008 *Liner System Performance*
8. WorleyParsons Report CR34-0-LI-LF-0003 *Separation between Base Grade and Groundwater Under Existing Landfills*
9. WPC, A Terracon Company, April 2011, *Geotechnical Data Report - Cross Generating Station - Solid Waste Landfill (SWLF) Expansion*
10. WPC, A Terracon Company, September 2011, *Supplemental Geotechnical Data Report - Cross Generating Station - Solid Waste Landfill (SWLF) Expansion*

Methodology

General

The general methodology used in this analysis is as follows:

Customer	Santee Cooper	Project No.	108008-01330								
Project Title	Cross Generating Station - Class III Solid Waste Landfill	Calc No.	CR34-0-DC-LF-CE-001								
Calculation Title	Landfill Base Grade Settlement	Phase/CTR	N/A								
Elec File Location	P:\SanteeCooper\CR34\Doc\Civil\Cross Generating Station\Class III SWLF Horizontal Expansion\Calculations\CE-001 Settlement\CR34-0-DC-LF-CE-001-R0.doc										
Project File Location	See Encompass	Page	5	of	189						
Rev	Date	By	Checked	Rev	Date	By	Checked	Rev	Date	By	Checked
0	14-Feb-2012	F.Wood	Y.Xu								

1. Develop simple yet conservative generalized subsurface soil and rock profiles for each proposed landfill area based on a review of available test data in and around each area.
2. Develop an estimate of settlement as a function of landfill height for each proposed landfill area based on the generalized subsurface profiles, and use this information to develop approximate upper-bound settlement contours within each proposed landfill area.
3. Verify that groundwater separation is maintained based on an overlay of settlement and seasonal high groundwater level [Ref. 1] contours with the subgrade plans
4. Verify that leachate collection system performance is maintained based on an overlay of settlement contours with leachate collection system plans.
5. Perform a point-by-point settlement analysis at each field test location assuming the soil conditions at each individual test location extend infinitely in the horizontal direction, and overlay the results with the predicted settlement contours. This will have the tendency of providing more accurate magnitudes of settlement at locations with stiffer profiles, while over-predicting settlement at locations with softer profiles.
6. Verify that liner system and leachate collection system component strains are maintained within acceptable limits based on maximum differential settlement indicated by point-by-point settlement analysis.

Methodology of Settlement Estimation

The landfill base grade settlement at any given location depends primarily on the additional overburden stress imposed by the weight of the landfill and the compressibility of the underlying soils. The additional overburden stress increases with the height of the landfill. The near-surface Pleistocene soils are much more compressible than the underlying Santee Limestone and Black Mingo Formations. Therefore, the magnitude of settlement in a given location depends heavily on the final landfill height as well as the nature and thickness of the Pleistocene soils in that particular area. A significant number of in-situ tests therefore targeted the Pleistocene soils to characterize their compressibility and thickness, and will be discussed further in the following sections.

The average thickness of the Pleistocene soils varies between different regions of the overall Cross site, even though there is less variation in thickness within a given proposed landfill area. Therefore, a unique generalized subsurface profile is developed to represent the subsurface conditions underlying each proposed landfill area. Discussion of the in-situ testing, the general site conditions, and development of the generalized subsurface profiles is presented in the following section.

The compressibility of a particular soil depends on many factors, including the geometry of the applied load due to variations in the lateral confinement of the soil. When no lateral strain is allowed, it is known as the constrained or one-dimensional consolidation condition. A practical example of this condition is soil underneath the large areas of fill, particularly at shallow depths near the center of the fill area. Due to the large footprint of

Calculation Template

Customer	Santee Cooper	Project No.	108008-01330								
Project Title	Cross Generating Station - Class III Solid Waste Landfill	Calc No.	CR34-0-DC-LF-CE-001								
Calculation Title	Landfill Base Grade Settlement	Phase/CTR	N/A								
Elec File Location	P:\SanteeCooper\CR34\Doc\Civil\Cross Generating Station\Class III SWLF Horizontal Expansion\Calculations\CE-001 Settlement\CR34-0-DC-LF-CE-001-R0.doc										
Project File Location	See Encompass	Page	6	of	189						
Rev	Date	By	Checked	Rev	Date	By	Checked	Rev	Date	By	Checked
0	14-Feb-2012	F.Wood	Y.Xu								

the landfill areas relative to the thickness of the Pleistocene soils, settlement is estimated from the constrained modulus derived from in-situ flat plate dilatometer (DMT) and cone penetration test (CPT) soundings [Ref. 9].

Constrained modulus, M , is defined as the vertical drained confined tangent modulus at σ_{v0} . For each sounding location, M values within the Pleistocene soils are derived based on the methods outlined by Marchetti [Ref. 3] and Robertson [Ref. 4]. The DMT and CPT soundings include measurements approximately every 8 inches and 1 inch, respectively, throughout the entire depth of the soil profile.

For each discrete measurement, the corresponding settlement of the i^{th} layer represented by that measurement is provided by:

$$S_i = (\sigma_{z,i} h_i) / M$$

where: $\sigma_{z,i}$ - vertical component of incremental stress in the middle of i^{th} layer

h_i - thickness of the i^{th} layer

M - constrained modulus

The settlement at a given location is then determined by summing the predicted settlement within each discrete layer.

The above methodology is considered most appropriate to predict settlement at the site due to the composite nature of the Pleistocene soils (i.e. variable mixtures of clays, silts, and sands). One-dimensional consolidation tests also were performed on relatively undisturbed soil samples obtained from the soil borings. However, due to the lack of a predominant stratum of clay across the site from which a representative sample can be obtained and tested to obtain compression indices, it is considered more appropriate to use in-situ testing to develop a more complete understanding of the variation in settlement behavior within the project site.

Similar to DMT soundings within Pleistocene soils, constrained modulus values for the Santee Limestone and Black Mingo Formation were derived from pressuremeter test results. Although these formations are much stiffer and contribute much less to the total magnitude of predicted settlement, they are included in the analysis due to the large landfill footprint and therefore greater depth of influence of the applied load. The analysis assumes that the stress imposed by the landfill spreads out laterally below the top of the limestone, which transfers the load over a continually larger area as the depth increases (which in turn reduces the stress ratio). Within the Pleistocene soils this effect is ignored, and it is conservatively assumed that the full magnitude of the applied pressure at the ground surface will be transferred directly to each soil layer, regardless of the depth or proximity to the edge of the landfill. This is a conservative assumption overall, but is deemed appropriate in order to be consistent with the assumption of fully constrained conditions near the perimeter of the landfill.

Constrained modulus values within the Santee Limestone and Black Mingo Formation were derived from elastic moduli, E , obtained from pressuremeter testing as follows:

$$M = E \times (1-\mu) / ((1+\mu)(1-2\mu)), \text{ where } \mu \text{ is the Poisson's ratio, assumed to be } 0.25.$$

Calculation Template

Customer	Santee Cooper	Project No.	108008-01330								
Project Title	Cross Generating Station - Class III Solid Waste Landfill	Calc No.	CR34-0-DC-LF-CE-001								
Calculation Title	Landfill Base Grade Settlement	Phase/CTR	N/A								
Elec File Location	P:\SanteeCooper\CR34\Doc\Civil\Cross Generating Station\Class III SWLF Horizontal Expansion\Calculations\CE-001 Settlement\CR34-0-DC-LF-CE-001-R0.doc										
Project File Location	See Encompass	Page	7	of	189						
Rev	Date	By	Checked	Rev	Date	By	Checked	Rev	Date	By	Checked
0	14-Feb-2012	F.Wood	Y.Xu								

Elastic modulus values, E, derived from pressuremeter test results [Ref. 2] used to develop constrained moduli for this analysis are included in Appendix A. The minimum and maximum values were essentially averaged for each Formation Unit, which is appropriate given the large landfill footprint.

The methodology described above is used for two settlement computations. The first computation is performed on simple yet conservative generalized soil profiles in each proposed landfill area. The overall shape of the settlement distribution is expected to be consistent with these contours, even though the magnitude represents more of an upper bound settlement because the overall thickness of the Pleistocene soils are chosen at the high end of the range based on the borings and soundings, while the constrained modulus values are selected on the low end of the range based on the soundings. For example, the weighted average constrained modulus within a given generalized profile is typically about 50-60% of the average constrained modulus indicated from all soundings performed within the vicinity of the corresponding proposed landfill area. Not only does this approach provide a reasonable upper bound for design purposes, but it also accounts for secondary compression (observed to be about 25% of the total settlement in some studies [Ref. 4], although the measured M value already accounts for a small portion of this). The exception is the very soft silts and clays occasionally observed to immediately overlie the limestone, which were limited to a lower-bound modulus of 30 tsf for the reasons described below.

The second computation predicts settlement at each sounding located within the footprint of the proposed landfill areas. Settlement is calculated by summing the values predicted within each discrete measurement depth interval, based on the precise M value measured within that depth interval. For most soil profiles, this method is expected to provide a very accurate prediction of settlement and offer a means of comparison with the values predicted by the generalized method (settlement is generally less than or equal to those predicted by the generalized method due to the conservative nature of the generalized profiles). However for test locations containing isolated zones of very soft soil, this method will tend to over-predict settlement because it assumes the soil conditions extend a great distance laterally in all directions, whereas in reality the precise soil stiffness varies from point to point and there is an overall averaging effect. In such cases, it is expected that stiffer adjacent soil or rock will 'attract' more of the load, effectively bridging over isolated softer deposits. These soft soils are typically detected immediately above the Santee Limestone, and are believed to represent unconsolidated and somewhat soft or sensitive isolated silts and clays where arching already is occurring. In such soft soils, the disturbance created during sounding penetration can sometimes generate sufficiently high pore pressures around the sounding probe to render the field measurements unreliable for the purpose of calculating constrained modulus. In these cases, the computation will predict settlement within a given discrete layer that is greater than the thickness of the layer itself, which is clearly not possible. The strain is therefore limited to 15% within any given discrete layer because if these soils were to consolidate to such a large degree, significant improvements would occur and the measured stiffness would increase substantially. In reality it is more likely that the applied load will transfer to adjacent stiffer soils before such high strain levels are reached, which means that the predicted point settlements at test locations containing isolated zones of very soft soil are conservative.

The first computation is used to evaluate separation between the liner base grade and the seasonal high groundwater level and also to verify leachate collection system performance. The second calculation is used for

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comparison purposes and to obtain a conservative value for differential settlement in order to verify that strains within the liner and leachate collection system remain within acceptable limits.

Site Subsurface Conditions

Extensive subsurface investigations have been completed at the Cross site in support of the design and construction of four electric generating units and their ancillary facilities, including the proposed Class Three solid waste landfill areas. Investigations have been performed by Law Engineering Testing Company (LETCo), Woodward-Clyde Consultants (WCC), S&ME, Inc. (S&ME), and WPC, a Terracon Company (WPC). While more recent investigations have focused primarily on the proposed landfill areas, previous testing has included all areas of the site. Together, the investigations provide a comprehensive depiction of the site subsurface conditions. In general, the near-surface site geology consists of the following (in order of increasing depth):

Pleistocene Soils

The Pleistocene soils extend from the ground surface (around EL 80+/-) down to the top of the Santee Limestone. These soils generally consist of loose to dense sands and silts (or combinations thereof) with occasional isolated zones or interbedded soft to stiff clays. The Pleistocene soils are typically 15 to 25 feet thick, but in some locations (e.g. Area 5) can be over 40 feet. In order to characterize the compressibility and thickness of the Pleistocene soils throughout the proposed landfill areas, the subsurface investigations performed by WPC included 33 cone penetration test (CPT) soundings and 25 flat blade dilatometer test (DMT) soundings. These soundings typically terminated upon reaching refusal near the top of the Santee Limestone, and they provided a near-continuous representation of the soil compressibility with depth.

Numerous Soil Test Borings (STBs) with standard penetration testing also have been performed throughout the site by LETCo, WCC, S&ME, and WPC. Laboratory testing has been performed on both disturbed and undisturbed samples taken from within the Pleistocene soils, with some of the STBs performed adjacent to CPT and/or DMT sounding locations to facilitate soil classification and development of the generalized subsurface profiles.

Santee Limestone

The Santee Limestone is part of the Orangeburg Group and is generally considered to be formed during the Eocene epoch of the Tertiary period. Limestone in this formation is a nearly white to yellow fossiliferous and partly glauconitic rock consisting chiefly of calcium carbonate. The top elevation of Santee limestone typically ranges from EL 55 to EL 65 feet, but can be as deep as EL 35 feet in some areas of the site. In total, over 1500 soil borings and probe holes have been drilled into or completely through the Santee Limestone during the various site subsurface investigations. Rock core samples indicate that the Santee Limestone can range from hard crystalline limestone to lightly cemented sand (indicated as weathered limestone), with a relatively consistent profile pattern. In their 1981 investigation, WCC categorized the Santee Limestone into three distinct units in order of increasing depth:

- "Unit 1" is a deeply weathered to decomposed limestone described as silty clayey calcareous sand with shells and rock fragments

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- “Unit 2” consists of one or more hard crystalline layers
- “Unit 3” consists of shelly limestone becoming softer with depth and often degrading to a calcareous sand

The above Santee Limestone characterization is evident in subsequent subsurface investigations, including 38 recent STBs performed by WPC in the proposed landfill areas. While the depth to (and thickness of) the “Unit 1” weathered limestone varies the most, the depth to the “Unit 2” crystalline limestone is relatively consistent throughout the site. The “Unit 3” limestone was observed in all areas of the site, extending down to the Black Mingo Formation. WCC attributed the development of the more consistent hard crystalline limestone layer to downward percolation of surface water through the limestone, whereby the percolating water induced solutioning of the calcium carbonate within the upper limestone, followed by re-precipitation and re-crystallization upon reaching the cooler waters at the groundwater table (where located at the time). This process induced weathering of the upper limestone, resulting in a higher porosity “Unit 1,” and hardening of the limestone near the groundwater table, resulting in “Unit 2”. The compressibility of the various limestone units was characterized by numerous pressuremeter tests performed by LETCo [Ref. 2], and those results are used in the present analysis.

Black Mingo Formation

The Black Mingo Formation is generally considered to be formed during the Paleocene epoch of the Tertiary period. At the depths encountered, the Black Mingo Formation generally consisted of medium dense to very dense silty sands. The top elevation of the Black Mingo Formation is generally around EL 16 feet, but can range from about EL 8 to EL 26 feet within the proposed landfill areas. Similar to the Santee Limestone, WCC characterized the Black Mingo Formation into three distinct units:

- “Unit 1” is composed of firm to very dense clayey sand and silty sand interlaminated with clayey silt and silty clay. The sands generally contain some shell fragments.
- “Unit 2” is mainly very stiff to very hard clayey silt and silty clays, with some parts similar to a “shale” material that is interlaminated with silty sand and sandy clay.
- “Unit 3” is similar to Unit 1 but contains only sparse shell fragments.

The compressibility of the above units was characterized by pressuremeter tests performed by LETCo [Ref 2], and those results are used in the present analysis.

Generalized Subsurface Profiles

Generalized subsurface profiles were developed for the proposed Class Three solid waste landfill areas 1B, 1D, 2, and 5. The soil borings and soundings were used to determine elevations and thicknesses of the various units within each subsurface formation in order to generate these profiles. A graphic summary of all soil borings

Calculation Template

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and soundings is included in Appendix A. The sounding summaries include average constrained modulus values for each general soil type, and were used to assign conservative modulus values to each layer within the generalized subsurface profiles. Appendix A also includes two figures, one for proposed Areas 1B and 1D, and one for Areas 2 and 5, each of which show the existing ground surface elevations, top of Santee Limestone Formation contours, and top of Black Mingo Formation contours.

Table 1, below, includes a key used to define the various elevations, thicknesses, and constrained modulus values for each layer within the generalized subsurface profiles. Table 2 on the following page provides these values for each proposed landfill area.

Table 1: Generalized Soil and Rock Profile Key

Elevation		Generalized Soil Profile Key	Thickness	
A		Ground Surface	(ft)	
B	Pleistocene Soils	Loose to med dense sands, silty sands, SP, SM	(varies)	
C		Soft to stiff clays, CL		
D		Soft to stiff clays, CH		
E		Loose to med dense sands, silty sands, silts, SP, SM, ML		
F	Soft clays, loose silts, sensitive soils, CH, MH			
G	Santee Limestone	Weathered Limestone – silty, clayey, calcareous sand with shells and rock fragments		Unit 1
H		Hard, Crystalline Limestone (one or more layers)		Unit 2
I		Shelley medium Santee Limestone		Unit 3
J		Soft Santee Limestone to calcareous sand		
K	Black Mingo Formation	Firm to very dense clayey sand and silty sand, interlaminated with clayey silt and silty clay (some shell fragments)		Upper Unit 1
			Lower Unit 1	L
		Very stiff to very hard clayey silt and silty clays, with some parts similar to a “shale” material that is interlaminated with silty sand and sandy clay.	Unit 2	M

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Table 2: Generalized Soil and Rock Profiles

EL	T	Solid Waste Landfill Area							
		1B		1D		2		5	
		EL	M	EL	M	EL	M	EL	M
		(ft)	(tsf)	(ft)	(tsf)	(ft)	(tsf)	(ft)	(tsf)
A		81	-	79	-	80	-	79	-
B		77	500	73	200	73	300	71	300
C		75	50	71	50	71	100	67	100
D								64	50
E		63	300	66	300	60	200	44	400
F		59	30	63	30	55	30	39	40
G		50	2300	53	2300	40	2300	36	2300
H		35	4200	41	4200	29	4200	30	4200
I		26	3000	33	3000	24	3000	25	3000
J		16		25		12		16	
		EL		Thickness		M (tsf)			
K		-30		-		900			
	L	-		50		1600			
	M	-		200		3500			

Settlements were estimated for a range of overburden pressures for each of the above generalized subsurface profiles. The combination of layer thicknesses and corresponding constrained moduli resulted in a unique settlement relationship as a function of final landfill height in each area.

Results and Discussion

Groundwater Separation

Results of the generalized settlement calculations are included in Appendix B. The maximum predicted settlement values based on the generalized profiles are 1.7 ft, 1.5 ft, 1.9 ft, and 2.2 ft within proposed Class Three landfill areas 1B, 1D, 2, and 5, respectively. These results were used to generate conservative settlement contours for each landfill area. Appendix B also includes two figures, one for proposed Areas 1B and 1D, and one for Areas 2 and 5, each of which show the proposed subgrade elevations, the seasonal high groundwater level, and the generalized settlement contours. In all cases, at least 3 feet of separation is maintained (post-settlement) between the bottom of the lowest component of the base liner system and the seasonal high

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groundwater level. The minimum post-settlement groundwater separation typically occurs around each landfill perimeter (approximately 3.5 ft) and increases towards the center of each landfill (up to approximately 8 ft). Unlike the perimeter areas, the controlling factor in subgrade design within interior portions of each landfill area was maintaining positive grades along the leachate collection piping system as opposed to maintaining groundwater separation.

In the case of the existing Class Two solid waste landfill, the settlement contours in Areas 1B and 1D were interpolated through the existing landfill to provide an approximation of the upper bound total settlement in that area. These contours are inclusive of any settlement that has occurred to date. The minimum estimated original base grade under the existing landfill was EL 80 feet along the western edge (adjacent to proposed Area 1D), whereas the maximum seasonal high groundwater level is approximately EL 78.3 feet. With a conservative maximum predicted settlement in Area 1D equal to approximately 1.5 ft, some groundwater separation will be maintained even during a confluence of worst-case conditions.

The original design base under the Unit 1 C&D landfill was EL 80.5 feet, whereas the maximum seasonal high groundwater elevation is 77.3 feet. Based on the generalized profile analysis in Area 2, the maximum settlement approaches 2 ft near the eastern edge of the existing Unit 1 C&D landfill. This is a conservative estimate of settlement, however, as the actual magnitude may be closer to 1 ft based on individual soundings located closest to the east end of the existing landfill. The generalized profile was more heavily influenced by soundings in the general vicinity of Area 2 that indicated a deeper, softer profile, which was appropriate for the purpose of performing a conservative evaluation of leachate collection system performance.

The older Unit 2 C&D landfill was evaluated in detail in Ref. 8. Separation from groundwater currently does not exist for this landfill, as construction of this area pre-dated regulations requiring groundwater separation. The study concluded on the basis of an extensive test pit study that the waste primarily consists of limestone and concrete cores and other inert waste material that is not detrimental to groundwater quality.

The required 3 ft separation is therefore provided between the base grade of the proposed Class Three landfill areas and the seasonal high groundwater level. Some groundwater separation is maintained underneath the existing Class Two solid waste landfill and the existing Unit 1 C&D landfill areas.

Leachate Collection System Performance

Appendix B also includes two figures, one for proposed Areas 1B and 1D, and one for Areas 2 and 5, each of which show the leachate collection system grades and the generalized settlement contours. The installation slope on the base liner is approximately 2.6% everywhere towards the leachate collection piping. A jigsaw grading pattern is used and is intentionally oriented such that flow is somewhat parallel to the settlement contours, which means that the slope on the liner remains relatively unchanged regardless of the magnitude of settlement. The leachate collection system piping is oriented perpendicular to the settlement contours, with an installation slope of 0.75%. There is no required minimum slope along the leachate collection piping per the regulations. A value of 0.5% is commonly used. In the post settlement condition, the slope along the leachate collection piping closer to the perimeter of each landfill area will decrease, whereas the slope within interior portions of each landfill will remain relatively unchanged. The figures suggest that the overall slope along the

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piping will be closer to 0.4 to 0.5% after settlement has occurred (based on conservative generalized contours), with flatter slopes along the perimeter of each landfill. The critical case appears to be in Area 5, where predicted differential settlement between the perimeter of the landfill and locations approximately 160' in from the perimeter of the landfill is about 0.8 ft. The change in original design grade is approximately 1.2 ft over this same distance, which means the post-settlement slope is approximately 0.25%. Based on Ref. 6, the leachate collection system is verified to convey predicted peak leachate flow rates while limiting head on the liner to less than 1 ft, even for long runs of essentially 'flat' pipe with 0% slope. Leachate collection system performance therefore will be maintained in the post-settlement condition within the proposed Class Three landfill areas.

Differential Settlement

Results of the point-by-point settlement calculations are included in Appendix C. These point settlement magnitudes are independent of the generalized settlement contours but are plotted on the same figures included in Appendix B. The greatest differential settlement observed between two nearby locations is in Area 5 (0.8 ft and 2.5 ft at sounding locations C-833 and C-819, respectively). These two soundings are located 200 ft apart, however for the purpose of this analysis it is conservatively assumed that a similar variation could occur over a distance of only 25 ft (1.7 ft over 25 ft, or 7%). Based on Ref. 7, the membrane liner can withstand approximately 280%, the GCL 46%, and the leachate piping 30%. Although the clay liner has a relatively low strain tolerance, the predicted strain levels are considered very small. A distance of 25 ft is assumed based on the differences observed between the two most closely spaced soundings within the project site, C-806 and D-904, which are spaced 5 ft apart. These soundings indicate a reduction in the average profile constrained modulus of approximately 8% from one location to the next over a distance of 5 ft. If the same rate of change were to occur over a 25 ft distance, the modulus would reduce about 40%, which is the observed difference in the average soil profile modulus values between soundings C-833 and C-819. The analysis is conservative because (a.) at that proximity there would be some interaction between the two soil profiles that would tend to reduce the differential settlement; and (b.) geosynthetic base reinforcement will be provided under all proposed landfill areas, which will further limit differential settlements.

Some additional differential settlement is possible where Area 2 will overlie the existing Unit 1 C&D landfill. However, geosynthetic base reinforcement is provided in all areas to both limit differential settlements and to span a 'design-size' void of 7.2 ft in diameter [Ref. 5]. The deflection associated with spanning this size void is the controlling design differential settlement. Approximately 1 ft of local deflection would occur over a radius of 3.6 ft if the base reinforcement reaches 5% strain [Ref. 5], however it should be noted that the calculated tension value is significantly less than the tension corresponding to a 5% strain, so the deflection would likely be less. The calculated differential settlement of 1 ft over 3.6 ft is approximately 28%, which is less than the limiting values listed above.

The calculated differential settlements therefore will not jeopardize the integrity of the base liner or leachate collection system components.



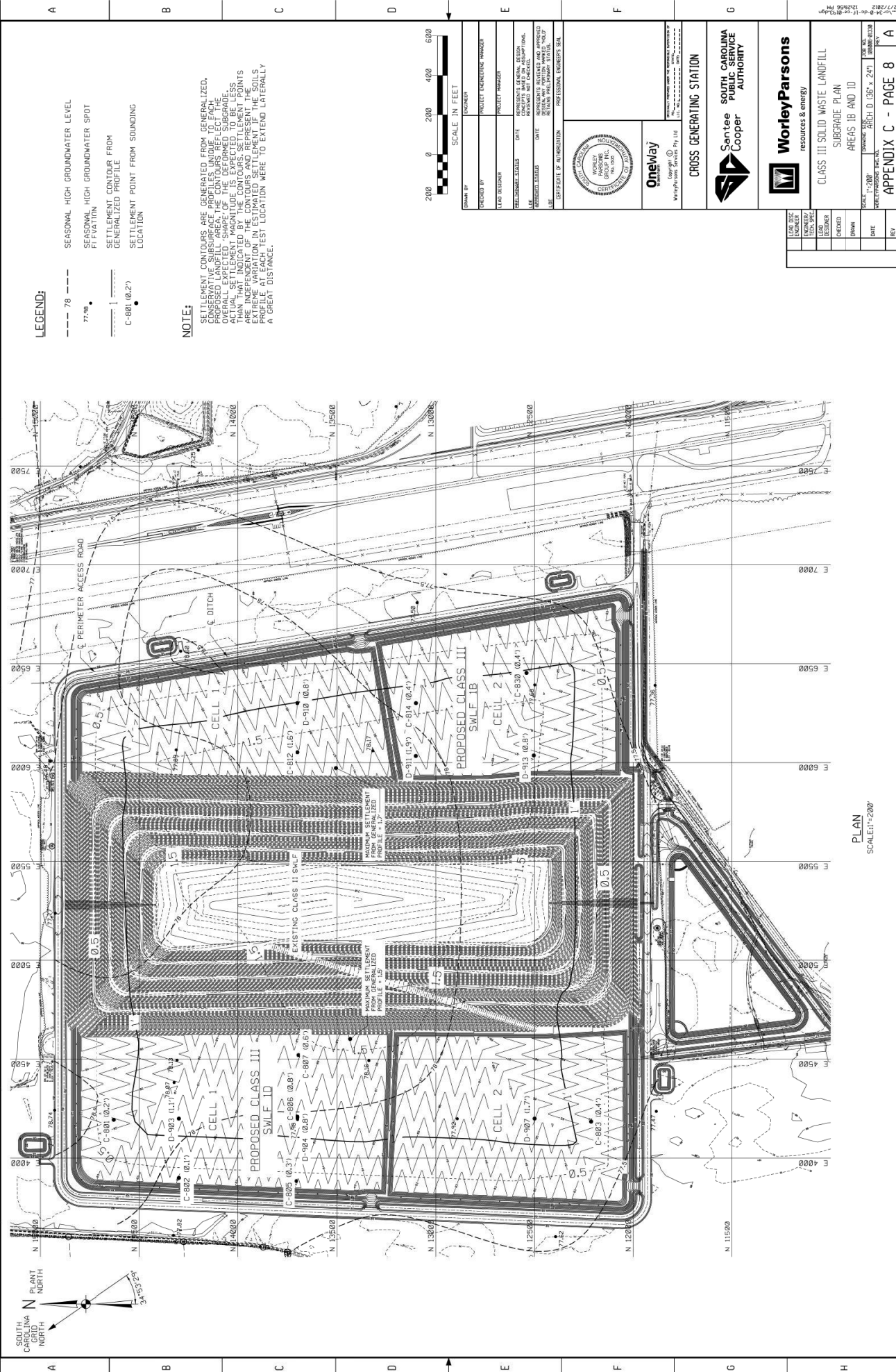
Calculation Template

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Conclusions

The following conclusions may be drawn regarding the base grade settlement in the proposed landfill areas:

- At least 3 f of separation will be maintained between the liner subgrade and the seasonal high groundwater table in all proposed Class Three landfill areas
- Groundwater separation will be maintained between the base grade and the seasonal high groundwater level underneath the existing Class Two solid waste landfill and the existing Unit 1 C&D landfill.
- Positive slope will be maintained on the liner and within the leachate collection system piping as required to convey leachate while maintaining less than 1 ft of head on the liner system
- Differential settlements will not impose excessive strains on the base liner or leachate collection system components, including those resulting from a design-sized subsurface void of 7.2 ft in diameter.

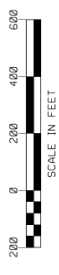


LEGEND:

- 78 --- SEASONAL HIGH GROUNDWATER LEVEL
- 77.98 --- SEASONAL HIGH GROUNDWATER SPOT ELEVATION
- | --- SETTLEMENT CONTOUR FROM GENERALIZED PROFILE
- C-801 (0.2') SETTLEMENT POINT FROM SOUNDING LOCATION

NOTE:

SETTLEMENT CONTOURS ARE GENERATED FROM GENERALIZED PROFILE. THE CONTOURS REFLECT THE OVERALL EXPECTED SHARE OF THE DEFORMED SUBGRADES THAT INDICATED BY THE CONTOURS. SETTLEMENT POINTS ARE INDEPENDENT OF THE CONTOURS AND REPRESENT THE MEAN OF THE CONTOURS. SETTLEMENT POINTS SHOULD BE USED TO DETERMINE THE SETTLEMENT PROFILE AT EACH LOCATION WERE TO EXTEND LATERALLY A GREAT DISTANCE.



DESIGNED BY	PROJECT ENGINEERING MANAGER
DATE	PROJECT NUMBER
PROFESSIONAL STATUS	DATE
APPROVED STATUS	DATE
CERTIFICATE OF AUTHORIZATION	PROFESSIONAL ENGINEER'S SEAL



DESIGNED BY	PROJECT ENGINEERING MANAGER
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CERTIFICATE OF AUTHORIZATION	PROFESSIONAL ENGINEER'S SEAL

PLAN
SCALE: 1"=200'

APPENDIX B
CGS Marketable Gypsum Analytical Data
(Santee Cooper)

CGS	Analyte unit limit AVG	EPA 503 BIOSOLIDS & USDA (partial) TOTAL METALS										CLEMSON LICENSE				
		As	Cd	Cr	Cu	Pb	Hg	Mo	Ni	Se	Zn	Na	Ca	Mg	S	CaSO4
		mg/kg 13.1	mg/kg 1	mg/kg 100	mg/kg 95	mg/kg 30	mg/kg 2.5	mg/kg 10	mg/kg 100	mg/kg 50	mg/kg 125	mg/kg	% 20	mg/kg 900	% 14	% 70
1/22/2015		5.678723	0.495185	15.04303	3.76322	3.554675	12.29378	1.05825	6.935484	9.675574	18.60323	117.8	23.32	1207.653	14.93086	84.519
2/4/2015		3.8	<0.64	6.1	<3.2	<1.3	0.48	<1.3	<5.2	<3.2	7.5					
2/4/2015												21.89		12.78		82.1
3/10/2015												18.12		13.79		91.95
3/13/2015		5.4	<0.56	7	<2.8	<1.1	0.31	<1.1	4.4	3	9.5	19.31				93.43
4/8/2015																
4/8/2015																
5/14/2015																
5/29/2015		4.1	0.29	5.3	1.2	0.58	0.2	<1.2	3.8	3.5	8.2	20.77		14.18		89.86
6/18/2015												25.05		12.88		75.3
6/25/2015												21.84		13.69		85.02
6/30/2015												22.59		14.49		86.03
7/13/2015		3.2	0.23	7.2	1.7	0.69	0.33	<1.3	3.9	4.3	9.2					
7/23/2015		3.4	0.28	5.7	1.4	0.64	0.29		3.5	3.6	7.9	25.31	750	15.9		85.32
8/5/2015		4.5	0.27	7.1	1.7	0.57			4.8	3.4	8.3	21.99	970	13.69		84.95
8/26/2015		4.3	0.23	7.4	1.4	0.62	0.47	<1.2	4.4	4.4	8.5	23.32				
9/29/2015		4.5	0.28	9.2	2	0.74	0.61		4.7	5.4	9.9	21.74	860	14.11		86.77
10/28/2015		3.5	0.26	6.6	1.7	0.68	0.46	<1.4	3.9	4.2	9	22.84	900	14.16		84.57
11/13/2015		4.8	<0.60	8.5	<3	<1.2	0.35	<1.2	<4.8	4.4	9.7	24.94	1100	16.01		85.94
11/19/2015												20.93	820	12.59		81.49
12/16/2015		<6.35	<0.254	6.56	1.44	0.567	0.341	0.615	3.6	<3.84	<12.8	20.07	910	12.9		85.73
1/6/2016		<6.82	<1.36	6.01	<1.36	<2.73	<0.0159	<1.36	3.37	<6.82	<13.6	23.19	989	13.82		82.38
4/19/2016		<6.08	<1.22	9.26	1.46	<2.43	0.397	<1.22	5.15	<6.08	<12.2	21.12		14.26		89.19
5/4/2016		4.29	0.306	10.7	1.98	0.758	0.567	<0.649	4.65	7.11	10.6	21.51				71.87
5/18/2016		<6.24	<1.25	13.9	2.85	<2.5	0.679	<1.25	6.22	10.1	16.4	22.57	826	14.55		85.82
6/24/2016		<6.25	0.338	14.6	2.4	1.04	0.725	0.886	5.62	8.47	20.3	21.7	700	15.23		89.54
7/8/2016		5.4	0.309	15.5	2.66	1.06	0.689	0.775	5.58	7.97	12.6	28.4	1070	14.39		86.16
8/31/2016		5.8	0.322	16.2	2.39	1.08	0.634	0.668	6.26	8.11	14.4	20.69	869			88.24
9/29/2016		4.62	0.276	12.8	2.3	0.872	0.709	0.655	5.6	6.28	15.2	22.67	970			87.95
11/9/2016		<6.78	0.326	16.8	2.35	1.13	0.685	0.888	6.68	6.63	18.8	21.13	818	14.1		87.56
11/10/2016		<6.99	<1.4	17.6	3.5	<2.79	1.14	<1.4	7.53	7.42	17.1	21.68	1140	13.02		81.48
1/31/2017		6.22	0.312	16.5	2.71	1.19	0.783	0.849	6.41	6.79	16.5	28.7	1170	13.5		86.17
4/11/2017		<3.99	<0.666	13.4	3.08	<6.6	0.67	<1.33	5.83	8.31	19	27.4	1090	15		85.2
5/2/2017		8.05	0.405	21.9	3.62	1.55	1.1	1.13	8.24	9.8	28.7	3.99	1260	13.59		84.38
6/12/2017		4.7	<0.55	19.2	<5.36	<13.4	0.82	<1.37	7.57	<26.8	18.8	23.5	1440	16.6		82.92
7/11/2017		2.77	0.382	9.83	2.52	1.26	0.83	<0.77	3.88	6.09	9.67	27.3	543	19.4		90.01
7/31/2017		2.85	<0.53	8.54	1.86	<1.33	0.76	<1.33	3.72	3.86	8.69					
8/31/2017		4.08	<1.28	11.8	2.54	1.62	1	<1.33	4.86	5.82	12.7	6.02	942	12.73		80.95
10/4/2017		<6.57	<1	16.6	2.53	1.09	0.926	0.72	6.13	10.2	12.9	23.5	1130	13.84		83.93
11/3/2017		2.55	<0.263	4.96	1.12	<0.527	0.44	0.376	2.61	6.03	4.54	25.6	259	16.11		96.49
12/5/2017		<3.91	<0.652	12.7	3.53	<1.3	0.735	<1.3	5.89	10.1	16.2	23.9	793	14		85.2
1/19/2018		4.18	<0.658	16	3.81	<1.25	1.14	<1.32	9.34	10.9	24	26.2	1750	13		78.57
2/19/2018		<4.04	<0.674	13.2	3.35	<1.35	0.65	<1.35	5.81	9.91	16.4	28.8	<2020	13		82.87
3/13/2018		<3.9	<0.650	11.3	2.74	<6.5	0.414	<1.3	5.04	9.53	19.7	22.8	1120	13.4		85.75
5/8/2018		4.06	<0.669	14	4.08	40.2	0.75	<1.34	6.59	9.29	15.1	23.5	1160			84.92
7/11/2018		5.2	<0.658	12.9	2.91	<1.32	0.75	<1.32	5.79	12.5		11.2	1070	13		83.91
8/7/2018		<3.93	0.567	12.4	3.28	<26.1	1.04	<1.31	<13.1	12.8	16.6	23.7	1720	17.5		82.16
9/4/2018		6.24	<0.662	15.7	3.97	1.5	0.762	<1.32	7.04	9.63	19.9	26.5	<1990	19.4		83.52
11/15/2018		<3.57	<0.638	16.9	6.17	<1.19	0.699	<1.19	5.94	7.88	18.2	25.2	1010	19.1		84.92
2/26/2019		<4.02	<0.670	9.04	2.73	<1.34	0.706	<1.34	4.56	9.46	13.2	27	831	18.6		85.78
3/14/2019		<3.97	<0.662	13.6	3.47	<1.32	0.73	<1.32	6.72	8.93	18	28.3	1180	20.2		85.39
4/30/2019		4.01	<0.598	11.9	3.29	<2.39	0.665	<1.2	5.22	8.74	16.3	23.4	945	16.6		90.89
5/28/2019		<3.84	<0.640	10.4	3.23	<2.56	0.774	<1.28	4.97	9.7	15.1	28.3	916	18.3		
6/17/2019		<3.87	<0.654	7.53	<2.58	<2.58	0.578	<1.29	3.65	7.23	11.2	24.8	790	14		84.11
7/9/2019		<3.88	<0.647	14.4	2.8	<2.59	0.747	<1.29	6.17	9.12	16.5	26.7	1110	17.8		83.82
9/17/2019		7.63	1.03	7.01	13.3	43.2	0.747	<1.33	9.96	9.7	74.5	3.29	3490	0.0357		85.05
10/15/2019		6.1	<0.59	19	3.2	2.4	0.69	<1.2	7.9	10	6.5	50	1400	11.7		83.9
11/25/2019		7	<0.6	21	4	2	0.84	<1.2	9	13	23	25	1700	16.9		83.74
1/9/2020		5	<0.63	16	4.5	1.3	0.63	<1.3	7.5	7.4	15	28	1400	15.7		79.25
2/28/2020		5.4	<0.6	16	<3	1.5	0.98	<1.2	7.1	7.3	18	24	1200	7.52		83.59
3/20/2020		5.3	0.4	16	3.5	1.5	0.7	<1.2	7.1	8.8	20	23	1200	17.8		82.74
4/15/2020		6.2	0.62	23	5.2	<1.2	1.1	1.2	10	14	27	25	1700	16.1		81.62
5/22/2020		6.5	0.7	22	5.1	1.8	1	<1.4	10	12	27	22	1.9	16.6		84.7
6/23/2020		7.2	<0.65	21	5.1	<1.3	0.6	<1.3	9.8	11	21	23	1600	18.7		80.5
7/27/2020		9.2	1	28	8.3	2.7	0.83	1.6	17	35	220	23	2100	17		80.97
9/15/2020		7.5	0.89	27	7.4	3.1	1	1.4	13	15	33	23	1800	17.7		82.13
10/20/2020		5.9	<0.56	19	3.8	3.24	1.11	<1.1	8	10.9	20	21.3	1400	16.5		81.32
11/17/2020		6.2	<0.602	18	3.6	2.09	0.771	<1.2	7.8	9	19	26.6	1400	18.7		82.79
12/15/2020		7.62	0.712	24.1	4.86	1.98	1.11	1.17	10	14.4	24.4	26.4	1660	15.4		80.34
1/29/2021		6.6	<0.66	22	4.7	2.41	1.03	<1.32	9.1	11.5	21	25.1	1300	13.7		82.14
2/23/2021		6.57	<0.68	22	4.9	2.12	1.21	<1.36	9.3	12.6	23	27.2	1500	16.2		79.45
3/3/2021		7.4	<0.627	26	5.8	2.52	1.45	<1.25	12	23	29	25.5	1800	10.4		83.52
3/24/2021		7.93	<0.694	26	7.3	2.										

CGS	Analyte unit limit AVG	USDA TOTAL METALS SCREENING VALUES												
		Al	Sb	Ba	Be	B	Co	Fe	Mn	Ag	Sn	Tl	V	Rad 226
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	pCi/g
	1893.871	#DIV/0!	9.440667	0.279	34.3836	1.835578	5847.264	114.4787	0.953	28.53333	0.16	11.36865	0.355179	
1/22/2015														
2/4/2015												<5		
2/4/2015												14.37		
3/10/2015														
3/13/2015														
4/8/2015														
5/14/2015														
5/29/2015														
6/18/2015														
6/25/2015														
6/30/2015														
7/13/2015														
7/23/2015														
8/5/2015														
8/26/2015						18								
9/29/2015														
10/28/2015														
11/13/2015														
11/19/2015														
12/16/2015							11.2					6.2		
3/16/2016							24					7.34		
4/19/2016							<18.2							
5/4/2016														
5/18/2016												9.6		
6/24/2016						21.8						9.19		
7/8/2016														
8/31/2016												12.12		
9/29/2016													<0.243	
11/9/2016		<1.26	6.41	<0.639	26.3	1.58		74.9			<0.543	10.6	<0.215	
11/10/2016	1770	<1.34	5.38	<0.699	26.2	1.57	5490	76.1	1.11	45.4	<2.79	10.3	<1	
1/31/2017	1680	<1.39	7.23	0.176	22.6	1.54	5270	79.2	<0.693	<13.9	<0.532	9.03	<0.341	
4/11/2017	1270	<1.30	4.69	<0.666	25.6	1.11	4800	76.7	<33.3	<1.33	<0.542	10.6		
5/2/2017	2050	<1.34	7.14	0.194	30.2	2.03	6420	95	<3.36	<1.34	<0.496	14.1	0.344	
6/12/2017	2390	<1.37	<13.4	<0.55	33.2	<5.36	6580	76.4	<5.36	<13.4	<1	9.82	0.342	
7/11/2017	1270	<0.77	3.57	<0.300	16.3	0.88	3250	24.4	<0.31	<0.77	<0.600	6.73	<0.292	
7/31/2017	1120	<1.33	2.84	<0.53	13	0.87	2980	40.8	<0.53	<1.33	<1	5.43	0.325	
8/31/2017	1540	<1.33	3.76	<2.5	21.3	1.1	4140	58.4	<0.53	<1.33	<1	7.65	0.443	
10/4/2017	1710	<1.25	4.74	0.171	30.7	1.48	4860	67.9	<3.13	<1.25	<0.526	10.3	0.359	
11/3/2017	588	<1.32	2.95	0.132	4.78	0.615		18.7	<3.29	<1.3	<0.527	3.11	<0.101	
12/5/2017	859	<1.3	4.4	<0.652	21.9	1.28	4330	60.6	<3.26		<2.61	6.59	0.275	
1/19/2018	1980	<1.32	6.12	<0.658	39.8	2.07	5390	107	<3.12		<1	8.49	0.475	
2/19/2018	872	<1.35	3.98	<0.674	21.8	1.35	4390	63.2	<33.7	<1.35	<1	7.26	0.316	
3/13/2018	598	<1.3	2.57	<0.650	36.7	1.21	3720	1120	<3.25	27.2	<1	6.1	0.172	
5/8/2018	1140	<1.34	5.52	<3.35	48.6	1.61	4970	72.3	<0.669	<6.69	<1	7.9	0.259	
7/11/2018	1240		3.13	<0.658	34.7	1.28	4780	71.1	<3.17	<6.58	<1	7.09	0.332	
8/7/2018	2180	<1.31	4.4	<0.654	38.2	<13.1	4490	117	<6.54	<26.1	<1	6.75	0.298	
9/4/2018	<1320	<66.2	<33.1	<0.662	26.5	1.94	4900	89.8	<0.662	<66.2	<1	<33.1	0.258	
1/15/2019	1090	<1.19	4.86	<0.638	18.3	1.89	4460	60.4	<5.94	<128	<1	9.46	0.262	
2/26/2019	641	<1.34	2.92	<0.670	27.8	0.985	3510	54	<33.5	<67	<1	8.35	<0.244	
3/14/2019	808	<1.32	3.52	<0.662	34.9	1.5	5150	72.4	<0.644	<66.2	<1	8.29	0.376	
4/30/2019	772	<2.39	3.58	<0.598		1.28	4000	60.8	0.796	<12	<1	7.57	<0.220	
5/28/2019	788	<2.56	3.98	<0.640	26.5	1.16	3770	57.5	<6.40	<12.8	<1	6.16	0.351	
6/17/2019	466	<2.58	2.64	<0.646	20.6	0.801	3490	47.8	<0.646	<64.6	<1	3.78	0.229	
7/9/2019	1280	<1.2	4.01	<0.647	36.7	1.42	4780	65.1	<6.47	<12.9	<1	8.29	0.251	
9/17/2019	8060	<1.2	186	0.74	30.5	5.26	16000	290	<0.666	<1.33	<1	34.1	0.247	
10/15/2019	1600	<1.2	5.1	<0.47	38.1	1.8	5700	85	<1.2	<12	<0.12	12	0.368	
11/25/2019	2200	<1.2	7	<0.48	32.4	2	6700	99	<1.2	<12	<0.12	13	0.232	
1/9/2020	1500	<1.3	6.5	<0.5	46.6	1.5	5000	98	<1.3	<13	<0.13	11	0.303	
2/28/2020	1500	<0.63	4.8	<0.48	28.4	1.6	5000	83	<1.2	<12	<0.63	12	0.338	
3/20/2020	1400	<1.2	5.2	0.18	32.3	1.7	5300	72	<0.12	<12	<0.12	11	0.258	
4/15/2020	2500	<1.2	6.2	<0.48	51.3	2.1	7000	120	<1.2	<12	<0.12	15	0.421	
5/22/2020	2.2	<1.4	6.6	<0.56	61.6	2.1	6.9	110	<1.4	<14	<0.14	15	0.408	
6/23/2020	2500	<1.1	6.3	<0.52	28.7	2.2	6700	110	<1.3	<13	0.16	14	0.388	
7/27/2020	3100	<1.3	8.5	0.36	53.5	3.3	9300	170	<0.13	<13	<0.13	18	0.507	
9/15/2020	3100	<1.1	7.7	<0.5	42.2	2.5	8400	140	<1.3	13	<0.11	18	0.279	
10/20/2020	1900	<1.07	6.3	<0.45	35	1.9	6200	96	<1.1	<11.2	<0.11	12	0.43	
11/17/2020	1900	<1.2	4.8	<0.481	27.4	1.7	5800	92	<1.19	<12	<0.12	13	0.265	
12/15/2020	2690	<1.26	6.08	<0.469	41.8	2.11	7200	114	<1.17	<11.7	<0.126	16.6	0.296	
1/29/2021	2430	<1.1	5.96	<0.528	26.4	1.88	6900	98	<1.32	<13.2	<0.11	14.8	0.238	
2/23/2021	2500	<1.36	5.66	<0.544	28	2	7000	100	<1.36	<13.6	<0.136	14	0.356	
3/3/2021	2750	<1.25	6.76	<0.502	108	2.65	8200	110	<1.25	<12.5	<0.125	16.3	0.582	
3/24/2021	2730	<1.34	6.25	<0.555	61.3	2.34	8000	64	<1.39	<13.4	<0.134	14.9	0.359	
3/24/2021	2100	<1.19	7.71	<0.477	42.6	2.03	6800	92	<1.19	<11.9	<0.119	12.7	0.41	
4/15/2021	3210	<1.28	6.67	<0.497	46.8	2.76	9000	120	<1.24	<12.4	<0.128	17.2	0.583	
4/15/2021	5450	<1.36	14.4	<0.601	98.1	4.62	13000	310	<1.5	<15	<0.136	28	0.917	
5/25/2021	2440	<1.13	5.87	<0.469	34.8	2.01	6400	99	<1.17	<11.7	<0.113	14.8	0.302	
6/21/2021		<1.32		<0.593		2.61					<0.132	15.2	0.293	
6/29/2021		<1.33		<0.534							<0.133	7.27		
6/29/2021		<1.33		<0.531							0.152	15.8		
6/29/2021		<1.35		<0.54							<0.135	18.7		
6/29/2021		<1.34		<0.535							0.184	18.6		
7/21/2021		<1.31		<0.461							<0.131	13.9		
7/21/2021		<1.39		<0.555							<0.139	11.2		
7/21/2021		<1.36		<0.543							<0.136	10.1		
8/24/2021		<1.39		<0.558							<0.139	12		
8/24/2021		<1.38		<0.551							<0.138	20		
8/24/2021		<1.37		<0.55							<0.137	19.4		
8/24/2021		<1.22		<0.49							0.125	17.9		
9/29/2021	1980	<1.29	9.55	<0.526	27.8	1.53	5600	86	<1.31	<13.1	<0.129	12.4	0.354	
9/29/2021	4070	<1.39	15.3	<0.558	97.8	2.95	10000	98	<1.39	<13.9	0.188	22.3	0.643	
10/25/2021		<1.28		<0.514										

CGS	Analyte unit limit	CLEMSON SIZE DISTRIBUTION					ADDITIONAL CHECKS					
		No. 8	No. 16	No. 30	No. 50	No. 100	No. 200	pH	Cl ppm	Moisture %	TOC ppm	Particle Size micron
		90%			50%	25%						
	AVG	82.77459	75.18672	68.29967	61.46525	53.51016	39.404138	7.066667	1174.928	13.5981	894.75	36.74957447
1/22/2015									38.44			
2/4/2015		99.79	99.71	99.55	98.22	91.39	45.56	7	364	5.35	593	53.04
2/4/2015		51.39	46.56	43.03	41.06	39.94	38.16	7	1112	32.25	1934	33.06
3/10/2015												
3/13/2015												
4/8/2015												
5/14/2015								7	39.57		470	
5/29/2015		97.43	96.84	96.07	93.39	80.12		7	51.48	8.26	351	
6/18/2015		95.26	92.88	90.91	87.29	75.73		7	43.92		902	
6/25/2015		93.13	88.89	85.37	82.04	75.9		7	44.54	9.61	772	
6/30/2015		83.62	78.79	75.22	68.64	58.05	43.42	7	31.28	13.96	1061	
7/13/2015		93.42	91.15	89.22	86.74	74.55	55.78	7	45.87	12.33	598	
7/23/2015		96.89	95.13	93.48	90.5	78.19	56.69	7	46.93	13.47	404	
8/5/2015		96.37	94.38	92.56	88.77	76.57	58.65	7	45.8	11.33	381	
8/26/2015		93.79	90.94	88.71	84.16	71.4	53.76			12.75		
9/29/2015		93.86	91.16	89.12	85.72	64.22	43.36		43.42	10.14		
10/28/2015								7	2280		434	46.97
11/13/2015		94.53	92.33	90.35	87.99	83.41	70.61	7	412	17.08	400	44.59
11/19/2015		88.2	84.55	81.59	79.12	75.56	64.19	7	636	19.24	417	44.58
12/16/2015		95.72	94.59	93.41	90.6	83.46	56.08	7	204	9.96	451	49.8
3/16/2016		95	92.58	90.81	89.12	85.26	59.56	7	936	14.21		42.2
4/19/2016		83.85	75.75	67.62	61.04	53.5	28.83			7.72		
5/4/2016		89.05	85.44	82.66	79.2	70.8	42.7			8.86		
5/18/2016		92.69	88.73	84.98	80.83	69.38	31.84	7	546	8.68	1037	35.78
6/24/2016		92.21	84.64	80.23	74.75	59.02	35.71	7	936	10.34	1185	39.91
7/8/2016												
8/31/2016		89.58	85.11	81.36	76.55	67.39	34.73	7	1376	7.48	1220	34.5
9/29/2016		86.73	81.62	77.7	71.76	61.02	50.71			13.56		
11/9/2016		82.84	75.37	68.15	59.15	52.26	45.99	7		14.33	769	37.43
1/10/2017		82.05	69.86	58.74	52.63	50.01	41.15	7	560	15.88	600	35.79
1/31/2017		88.08	81.63	73.51	61.75	49.04	37.64			12.73		
4/11/2017		79.74	71.03	63.88	57.68	54.72	47.82	7	1192	11.91	537	37.81
5/2/2017		78.41	67.4	57.88	48.61	39	30.39	7	<62	13.58	1206	12.7
6/12/2017		78.9	64.75	50.66	43.45	40.16	34.53	7		15.7		
7/11/2017		85.59	84.11	81.31	78.73	75.97	64.02	7		26.53		
7/31/2017		87.51	80.39	70.49	56.5	47.45	39.83	7		14.42		
8/31/2017		75.62	63.77	51.7	39.75	33.77	28.87	7	1636	15.6	735	37.9
10/4/2017		82.72	74.32	65.99	54.62	38.55	27.03			11.5		
11/3/2017		96.6	95.56	94.7	93.4	83	51.96			10.36		
12/5/2017		89.11	83.13	74.18	61.06	47.08	33.83			11.69		
1/19/2018		65.61	46.8	33.86	25.63	21.88	19.41	8		14.53		
2/19/2018		85.38	76.77	69.42	63.58	60.05	53.69	7		12.8		37.15
3/13/2018		89.85	83.4	74.72	67.11	62.53	53.08	8	3710	15.86	728	41.04
5/8/2018		81.03	69.25	56.24	45.8	38.14	30.39	7	3710	13.61	451	35.48
7/11/2018								7		14.35		34.04
8/7/2018		74.76	61	46.49	35.85	31.22	27.64	7	1936	14.4	1082	35.2
9/4/2018		86.83	78.63	67.94	55.64	41.48	30.02	7	1782		904	35.26
1/15/2019								7	950	9.76	703	32.86
2/26/2019		85.32	77.43	67.93	57.39	50.37	43.64	7	1782	15.03	558	40.07
3/14/2019		80.56	70.37	60.38	51.14	42.65	32.32	7	>1292		798	38.21
4/30/2019		90.55	84.44	78.26	70.15	56.82	32.38	7	1034	9.11	735	40.39
5/28/2019								7	1292		1140	34.15
6/17/2019								7	1034	11.75	560	41.67
7/9/2019		76.62	61.52	49.55	42.4	38.24	34	7		14.85		
9/17/2019		88.34	82.35	74.52	62.02	50.4	39.43	7	1112	12.27	645	39.05
10/15/2019		85.36	72.2	58.36	45.8	38.95	33.27	8	1550	13.73	806	37.3
11/25/2019								7	1994	15.12	833	36.1
1/9/2020								8	1080	13.36	581	28.22
2/28/2020								7	982	14.92	800	33.4
3/20/2020		82.02	73.62	63.84	53.19	42.59	34.17	7	1994	12.49	846	37.53
4/15/2020		76.61	60.92	47.18	38.66	35.4	32.57	7	2550	16.09	1063	38.33
5/22/2020		67.46	44.26	35.05	26.38	23.42	10.51	7	8858	16.83	981	32.18
6/23/2020		77.8	63.79	49.55	38.66	32.04	26.38					
7/27/2020		79.93	72.17	65.65	59.09	52.73	35.36	7	1522	7.52	1378	33.71
9/15/2020		85.18	77.9	71.53	65.23	58.94	43.54	7	123	7.54	656	40.31
10/20/2020		84.95	75.89	65.02	53.36	41.83	31.81	7	971	11.63	1202	38.57
11/17/2020		81.18	73.58	67.25	62.93	59.39	52.58	7	867	15.92	1466	34.59
12/15/2020		78.77	69.86	61.47	51.6	40.05	29.62	7	1882	11.57	1242	29.71
1/29/2021		72.27	57.05	46.68	40.97	38.13	34.84	7	310	15.26	1146	33.82
2/23/2021		53.82	46.44	43.21	40.69	38.45	35.3	8	310	17.97	931	34.7
3/3/2021		39.92	32.95	29.53	26.61	23.32	18.61	7	941	17.09	3208	29.6
3/24/2021		73.09	62.65	55.84	50.02	46.56	43.3	7	1198	20.29	934	34.81
3/24/2021		79.9	67.98	55.41	42.94	34.43	29.18	7	798	14.68	976	33.15
4/15/2021		83.22	73.01	61.84	49.15	37.42	27.26	7	798	12.76	1024	37.81
4/15/2021		33.24	27.07	24.42	22.57	20.82	17.74	6	1405	22.78	1693	32.76
5/25/2021		81.73	73.51	67.71	62.83	59.17	43.74	7	941	3.62	903	37.79
6/21/2021		87.52	81.33	73.83	63.98	56.05	49.31	8	1405	17.44	1240	35.9
6/29/2021		90.05	87.14	80.55	68.76	54.94	36.63	8	867	11.53	1053	34.8
6/29/2021								8	1405	18.58	996	33.51
6/29/2021								8	2302	21.46	936	32.83
6/29/2021								8	867	17.33	1101	35.74
7/21/2021								7	671	14.19	1251	38.7
7/21/2021								7	941	19.4	753	38.48
7/21/2021								7	1198	16.64	753	36.14
8/24/2021								7	867	13.7	1100	36.8
8/24/2021		86.03	78.16	69.27	61.24	54.65	29.3	7	1650	19.76	710	35.19
8/24/2021		62.32	49.71	42.44	37.07	32.56	23.18	7	943	18.98	943	34.46
8/24/2021		63.46	53	46.58	41.84	37.65	24.33	7	1405	18.85	809	33.28
9/29/2021		79.9	71.19	62.82	52.79	43.3	26.53	7	506	10.55	1138	32.47
9/29/2021		44.17	30.5	26.74	24.89	22.72	17.83	7	1943	23.46	880	28.34
10/25/2021		71.53	65.13	60.27	54.5	44.07	30.96	8	631	14.68	997	30.81
10/25/2021		84.66	77.6	69.83	61.22	48.66	26.62	7	614	8.97	944	33.82
11/23/2021		29.57	19.74	13.71	9.48	5.53	2.34	7	410	12.16	691	36.71
11/23/2021		35.75	22.75	16.36	9.86	4.23	1.32	7	440			

APPENDIX C
Santee Cooper Potentiometric Maps, 1997 – 2022

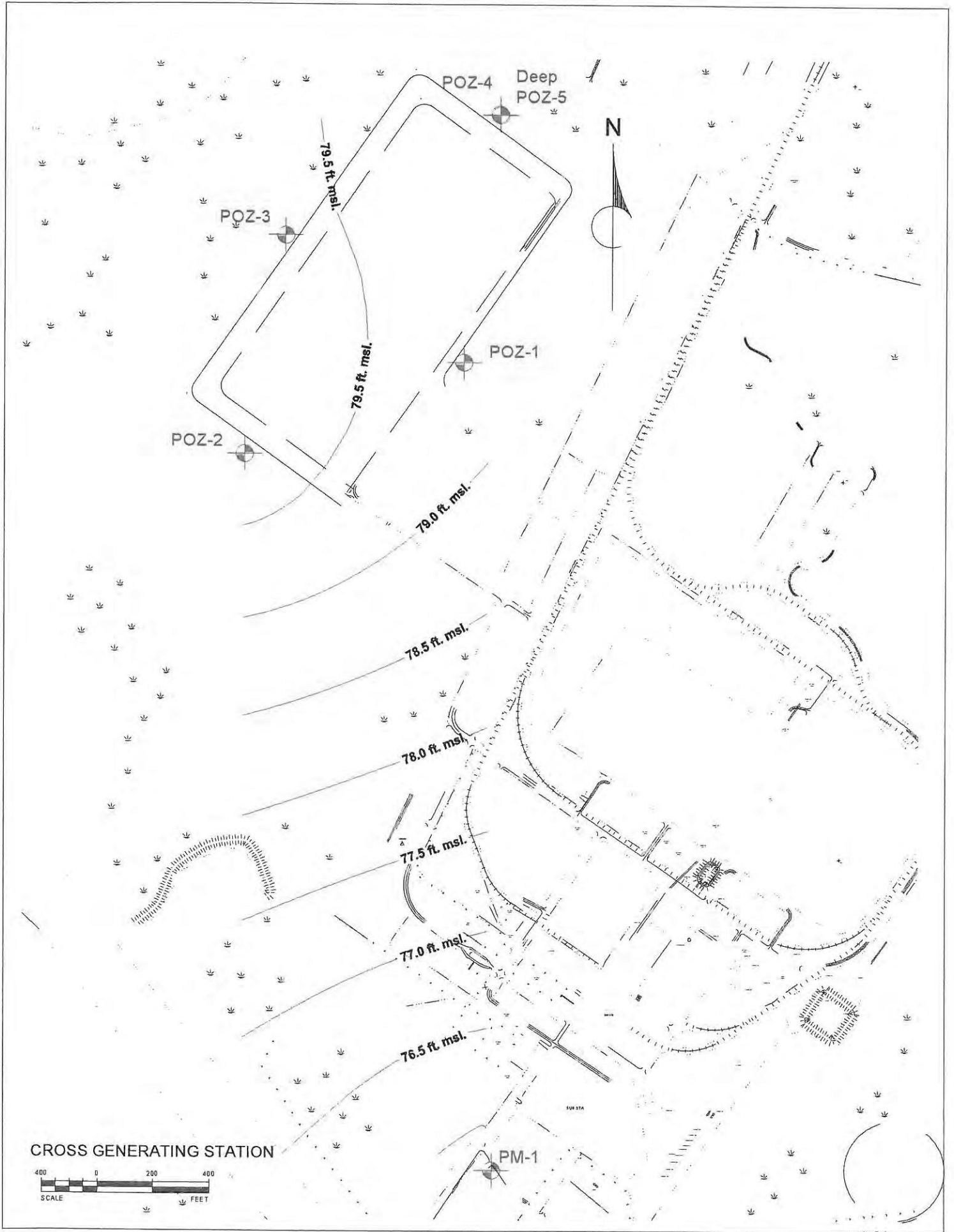


Figure 4 Groundwater Potentiometric Map for March 1999

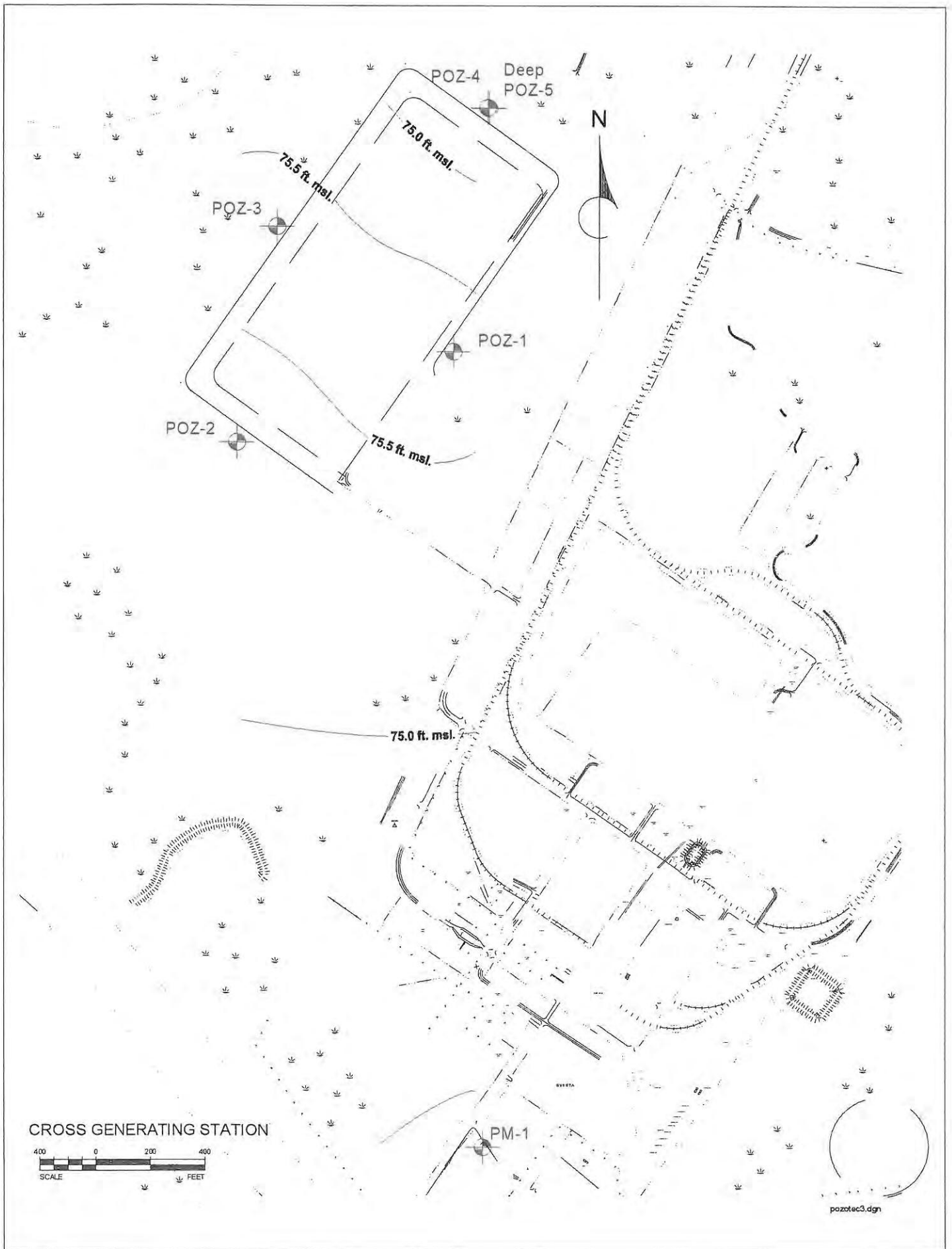


Figure 5 Groundwater Potentiometric Map for July 1999

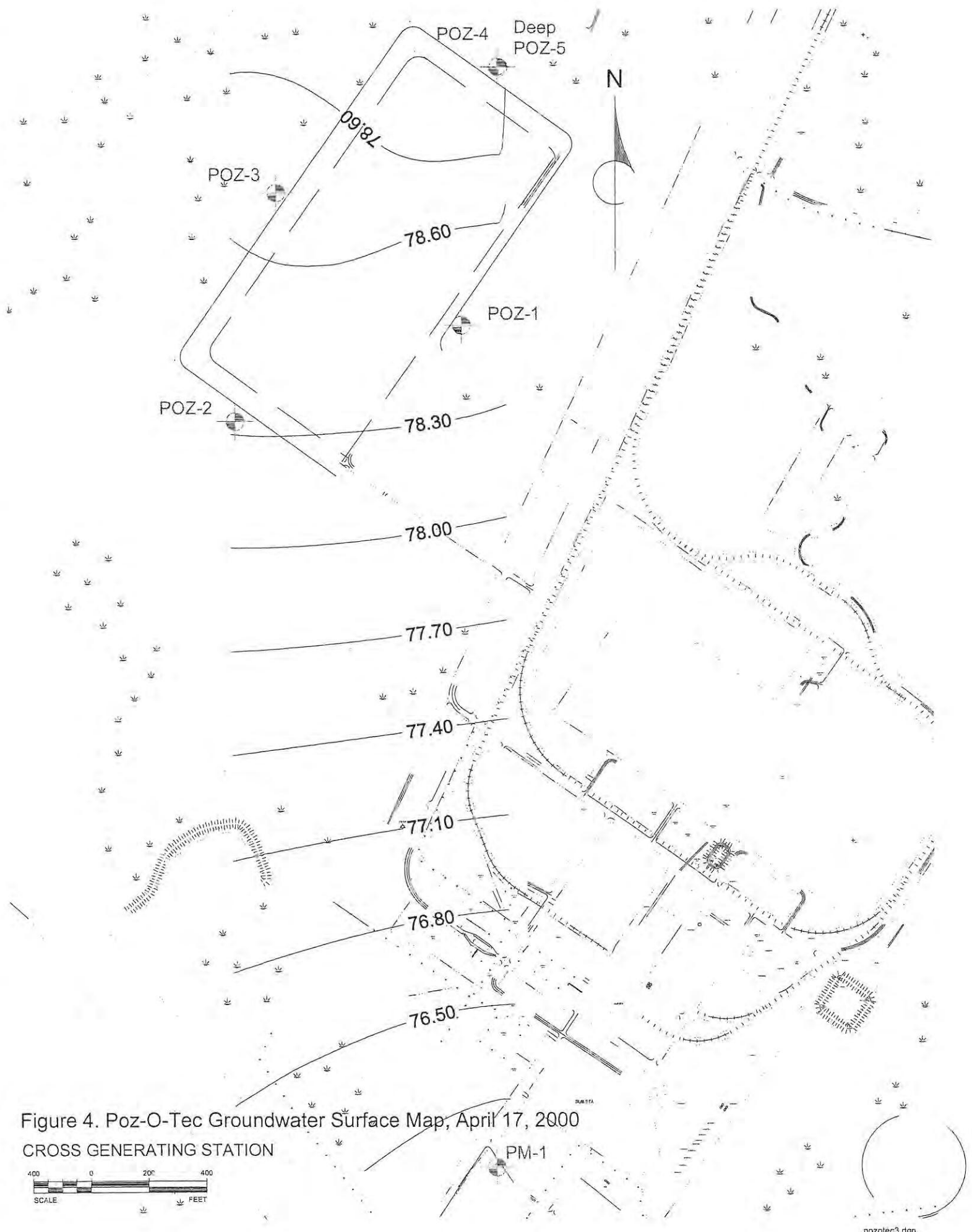


Figure 4. Poz-O-Tec Groundwater Surface Map, April 17, 2000

CROSS GENERATING STATION



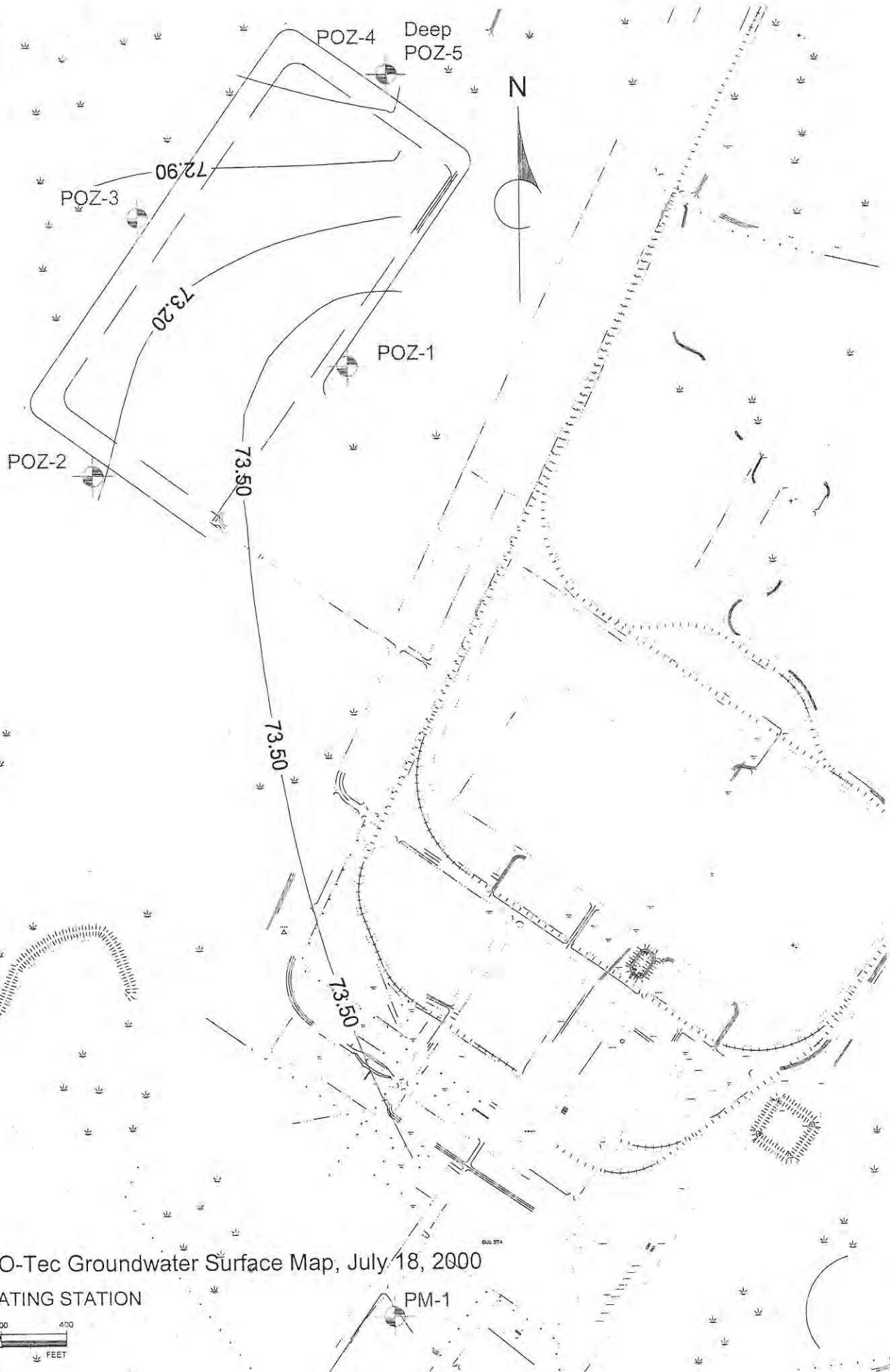
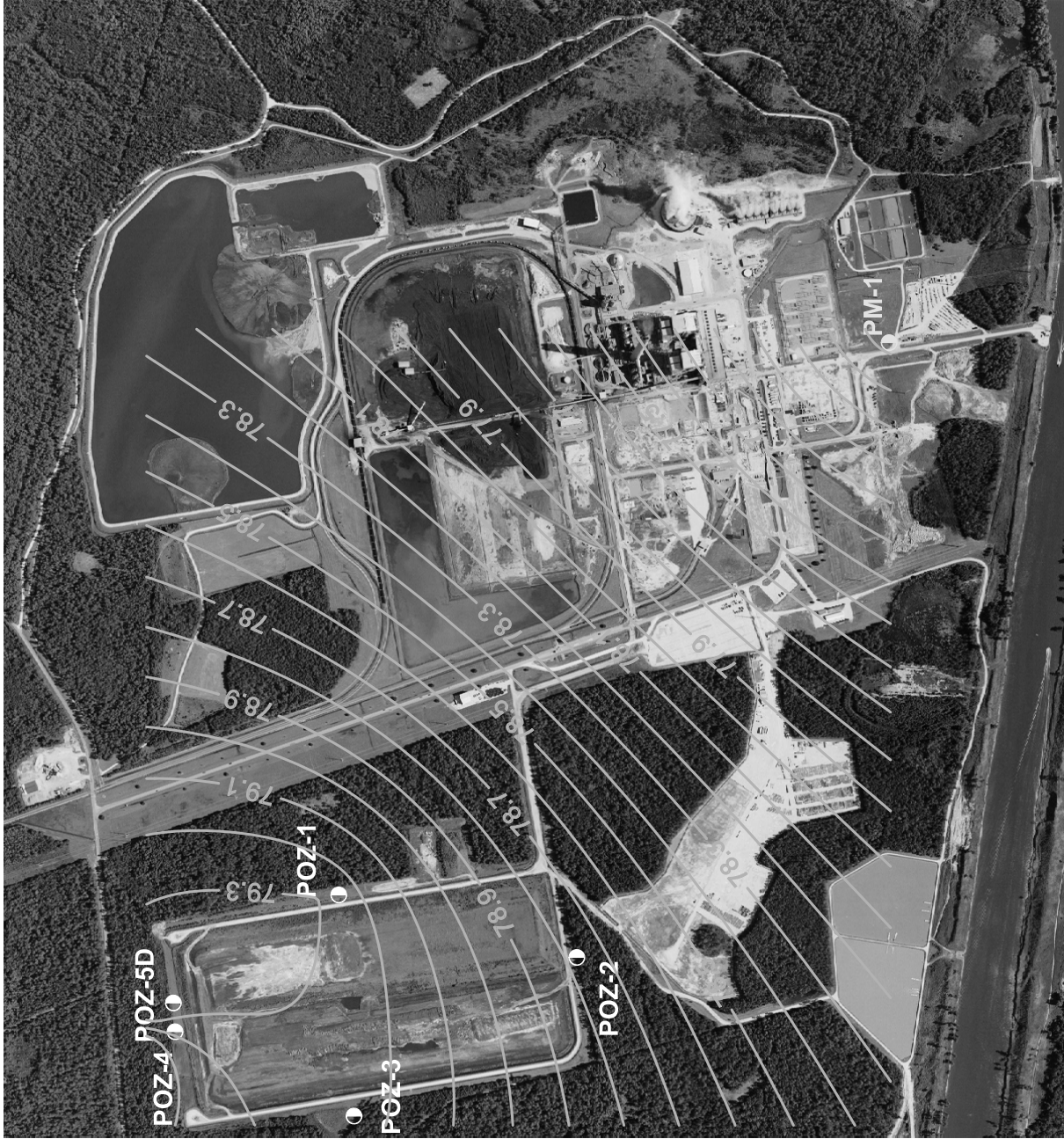


Figure 5. Poz-O-Tec Groundwater Surface Map, July 18, 2000

CROSS GENERATING STATION



Figure 2
Cross Generating Station
PozOTec Landfill
Potentiometric Map
January 2010



● **POZ Well Location**

Well ID	TOC Elevation (feet)	GW Elevation (feet)	GW Depth (feet)	GW Elevation (feet)	Well Depth Elevation (feet)	Concrete Pad Elevation (feet)
Poz-1	92.08	79.3	12.78	64.58	88.58	
Poz-2	83.37	78.8	4.57	66.13	80.48	
Poz-3*	83.54	79.26	4.28	71.04	80.02	
Poz-4	83.63	79.01	4.62	66.63	80.27	
Poz-5D	83.9	79.4	4.5	46.9	80.25	
PM-1	84.43	76.73	7.7	57.91	81.62	

Water levels collected on January 20, 2010.



Date: 12/10/2010, MDH

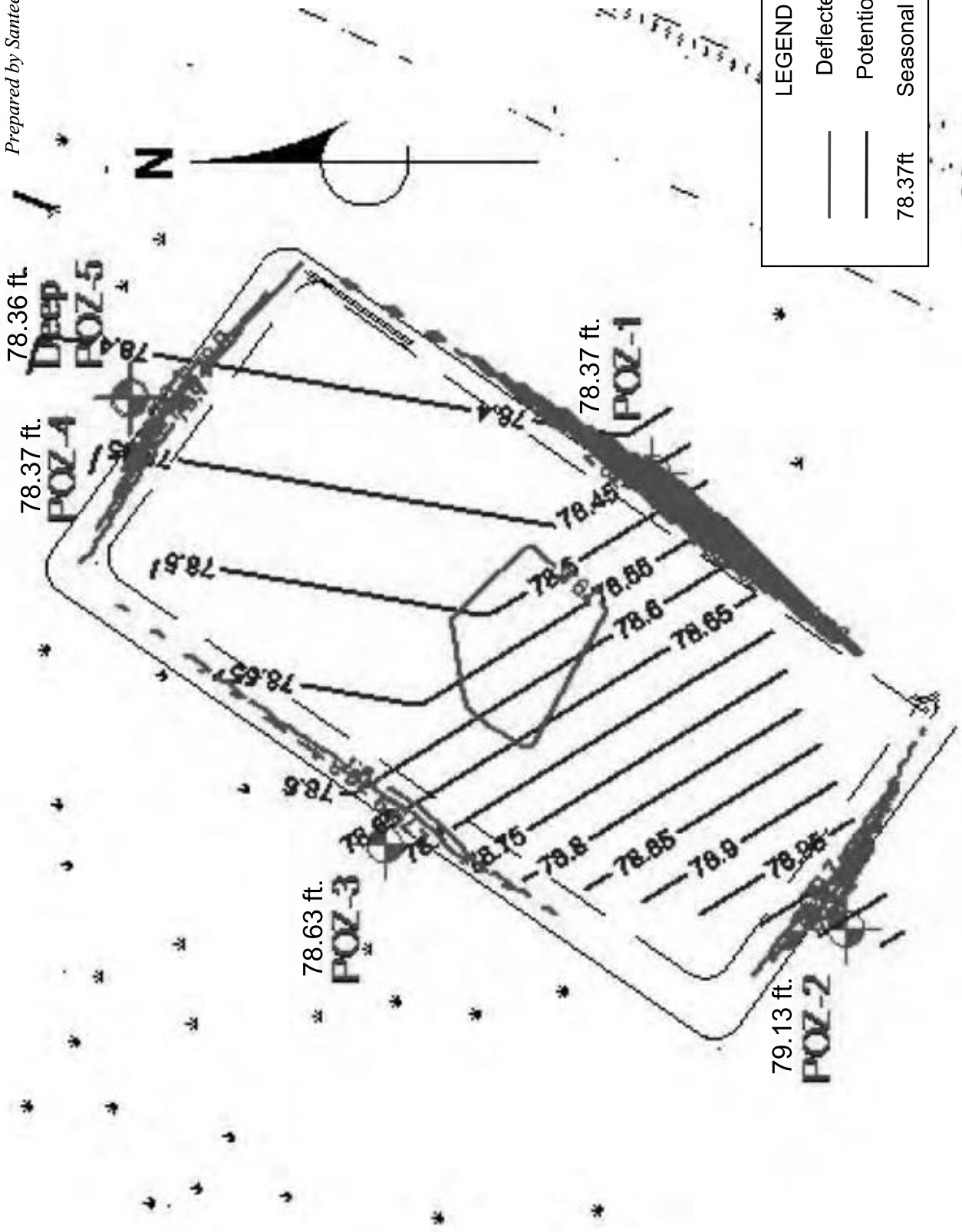


Exhibit C

Poz-O-Tec Seasonal Groundwater Elevation and Ground Surface Elevation

Figure 3
Cross Generating Station
PozOTec Landfill
Potentiometric Map
July 2010



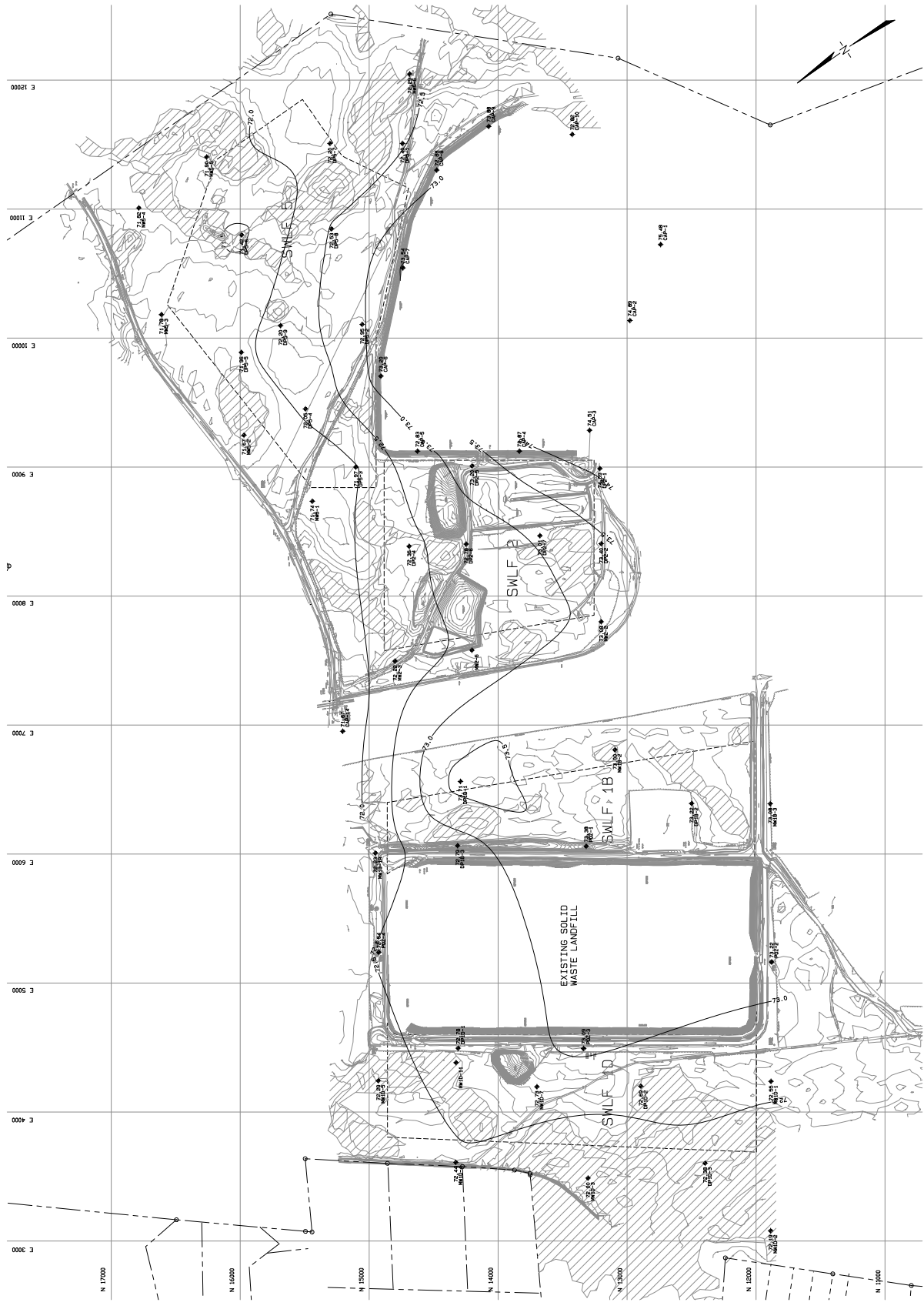
POZ Well Location

Well ID	TOC Elevation (feet)	GW Elevation (feet)	GW Depth (feet)	GW Elevation (feet)	Well Depth Elevation (feet)	Concrete Pad Elevation (feet)
Poz-1	92.08	76.76	15.32	76.76	64.58	88.58
Poz-2	83.37	75.89	7.48	75.89	66.13	80.48
Poz-3*	83.54	75	8.54	75	71.04	80.02
Poz-4	83.63	74.95	8.68	74.95	66.63	80.27
Poz-5D	83.9	75.4	8.5	75.4	46.9	80.25
PM-1	84.43	76.67	7.76	76.67	57.91	81.62

Water levels collected on July 21, 2010.



Date: 12/10/2010, MDH



**GROUNDWATER ELEVATION MAP
DECEMBER 2010**

**SANTEE COOPER CROSS GENERATING STATION
CLASS THREE LANDFILL PROJECT**

GARRETT & MOORE
ENGINEERS AND SURVEYORS

REVISION	DATE

JOB NUMBER
SHEET
FIGURE 6

Figure 2 Cross Generating Station PozOTec Landfill Potentiometric Map January 2011



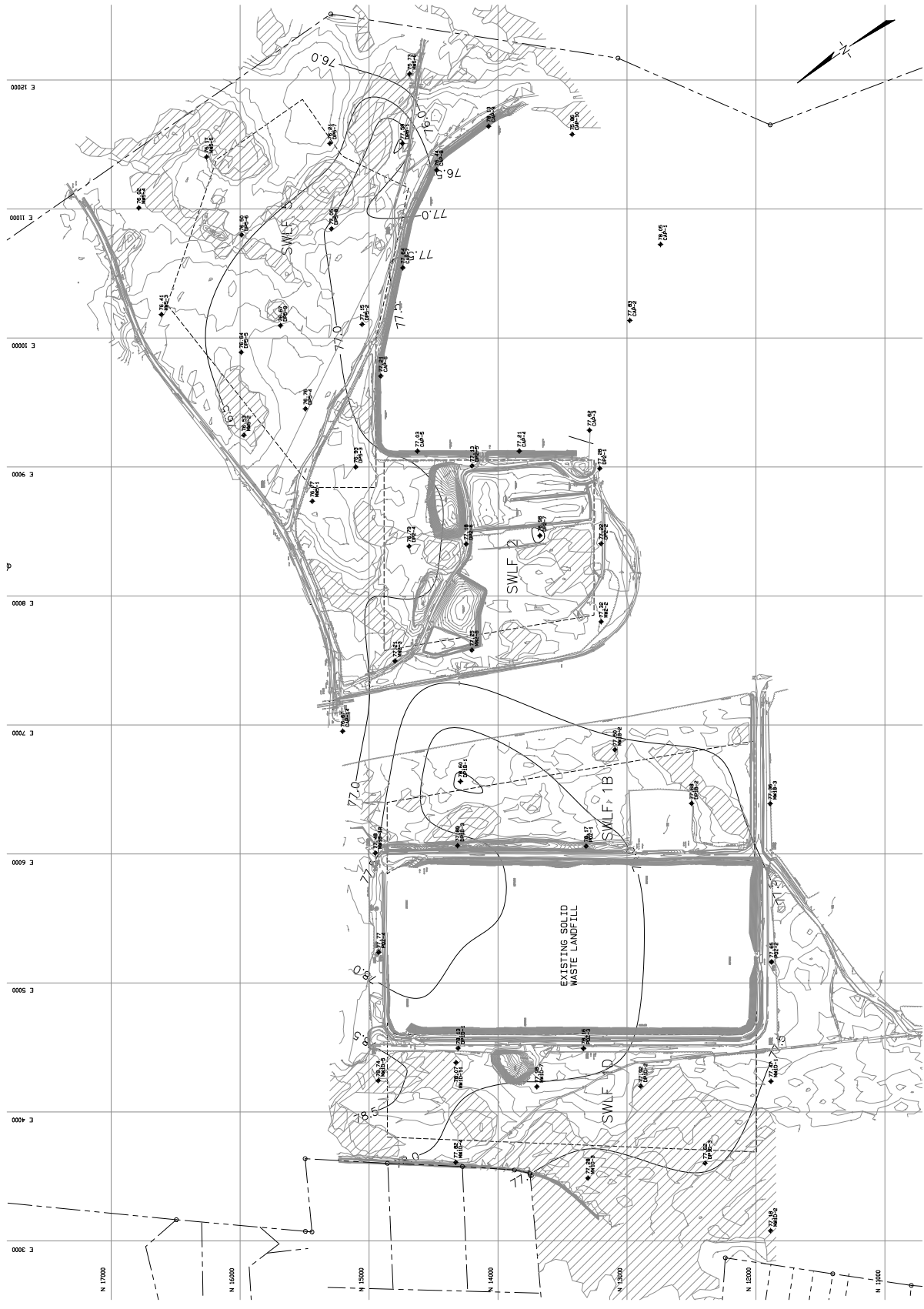
POZ Well Location

Well ID	TOC Elevation (feet)	GW Elevation (feet)	GW Depth (feet)	GW Elevation (feet)	Well Depth (feet)	Concrete Pad Elevation (feet)
Poz-1	91.15	74.88	16.27	74.88	64.58	88.58
Poz-2	82.64	74.1	8.54	74.1	66.13	80.48
Poz-3*	82.61	73.61	9	73.61	71.04	80.02
Poz-4	82.73	74.02	8.71	74.02	66.63	80.27
Poz-5D	82.49	73.84	8.65	73.84	46.9	80.25
PM-1	83.24	74.64	8.6	74.64	57.91	81.62

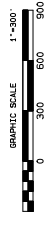
Water levels collected on January 18, 2011.



Date: 11/14/2011, MDH



- LEGEND**
- PROPERTY BOUNDARY
 - ▨ WETLAND
 - ⊕ MMS-6 BOREHOLE / MONITORING WELL LOCATION
 - ⊕ DPS-1 BOREHOLE / MONITORING WELL LOCATION
 - HYDROGEOLOGIC CROSS SECTION LINE
 - ◆ GROUNDWATER ELEVATION READING
 - GROUNDWATER ELEVATION CONTOUR (INTERVAL 0.5 FEET)



GROUNDWATER ELEVATION MAP
SEASONAL HIGH - FEBRUARY 2011

SANTEE COOPER CROSS GENERATING STATION
CLASS THREE LANDFILL PROJECT

GARRETT & MOORE
ENGINEERS AND SURVEYORS

REVISION	DATE

JOB NUMBER
SHEET
FIGURE 7

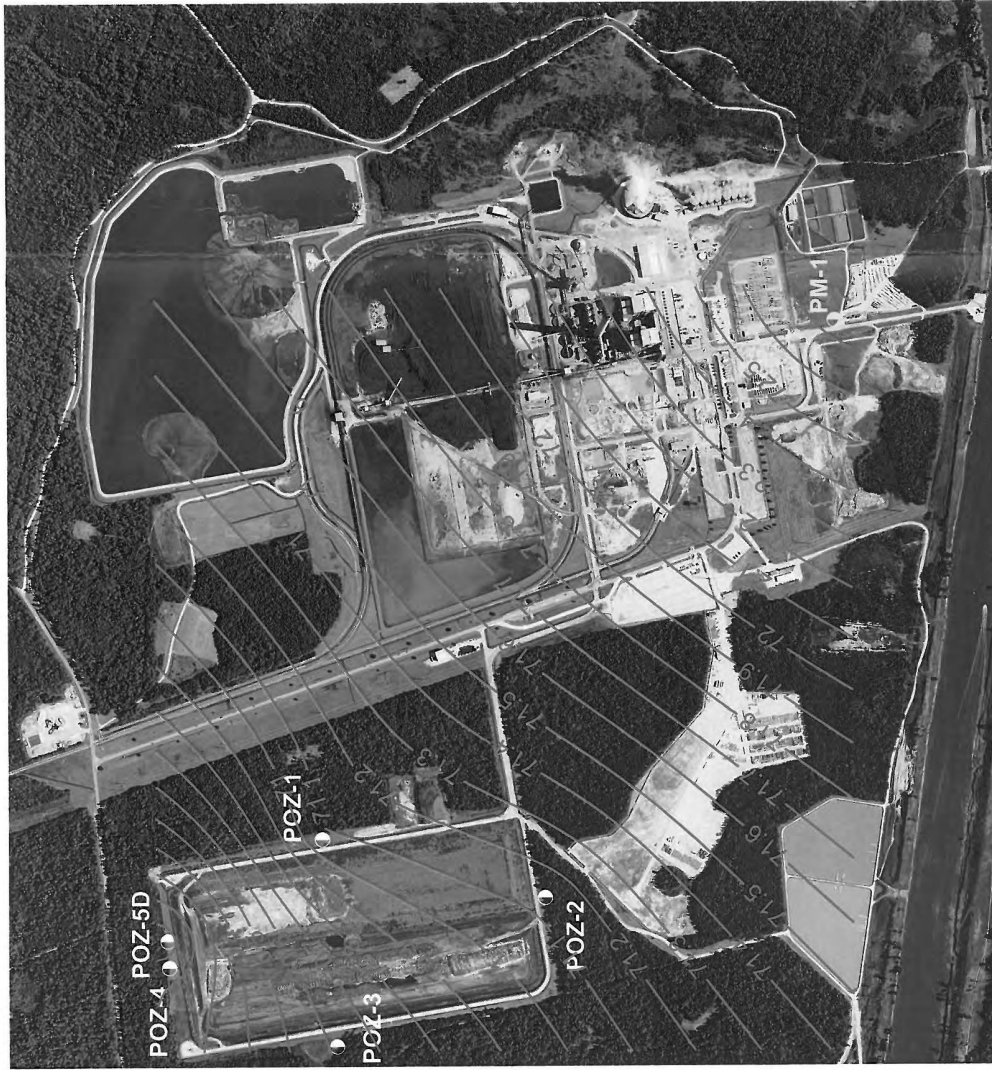


Figure 3
Cross Generating Station
PozOTec Landfill
Potentiometric Map
July 2011

● **POZ Well Location**

Well ID	TOC Elevation (feet)	GW Elevation Depth (feet)	GW Elevation (feet)	Well Depth Elevation (feet)	Concrete Pad Elevation (feet)
Poz-1	91.15	20.06	71.09	64.58	88.58
Poz-2	82.64	11.5	71.14	66.13	80.48
Poz-3	82.61	12	70.61	71.04	80.02
Poz-4	82.73	12.55	70.18	66.63	80.27
Poz-5D	82.49	12.48	70.01	48.9	80.25
PM-1	83.24	10.41	72.83	57.91	81.62

Water levels collected on July 25, 2011.



Date: 11/14/2011, MDH

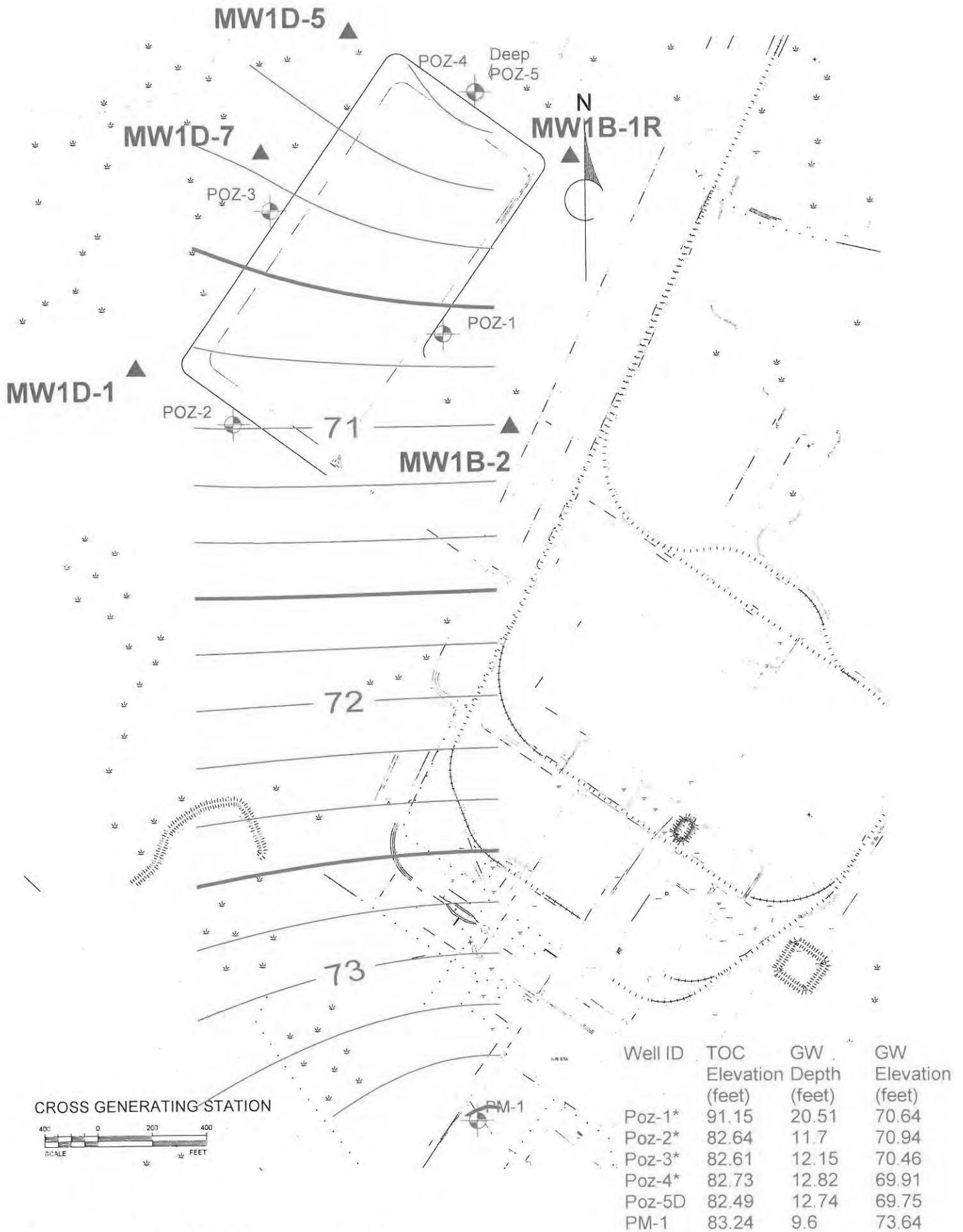


Figure 2 January 2012 Potentiometric Map

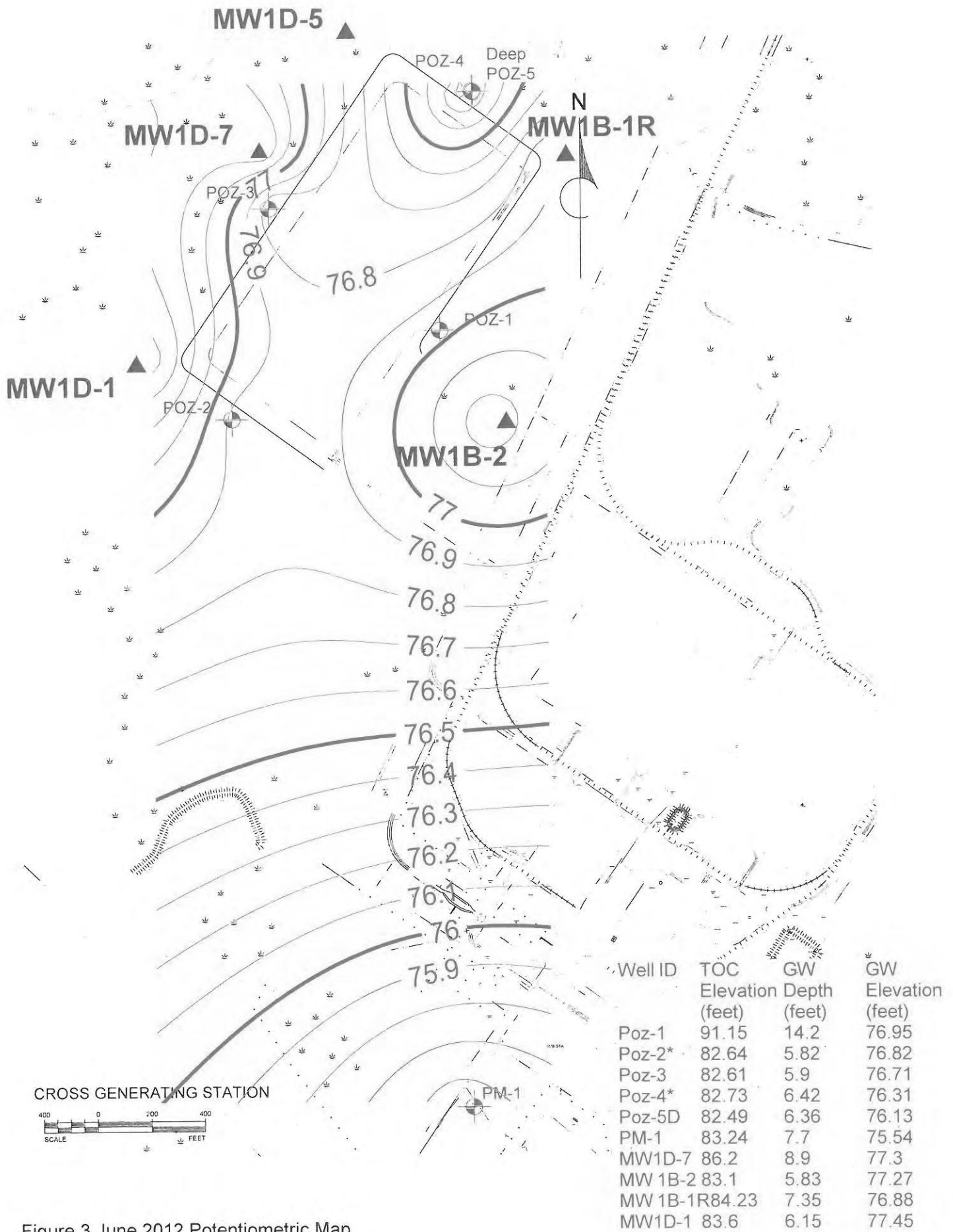


Figure 3 June 2012 Potentiometric Map

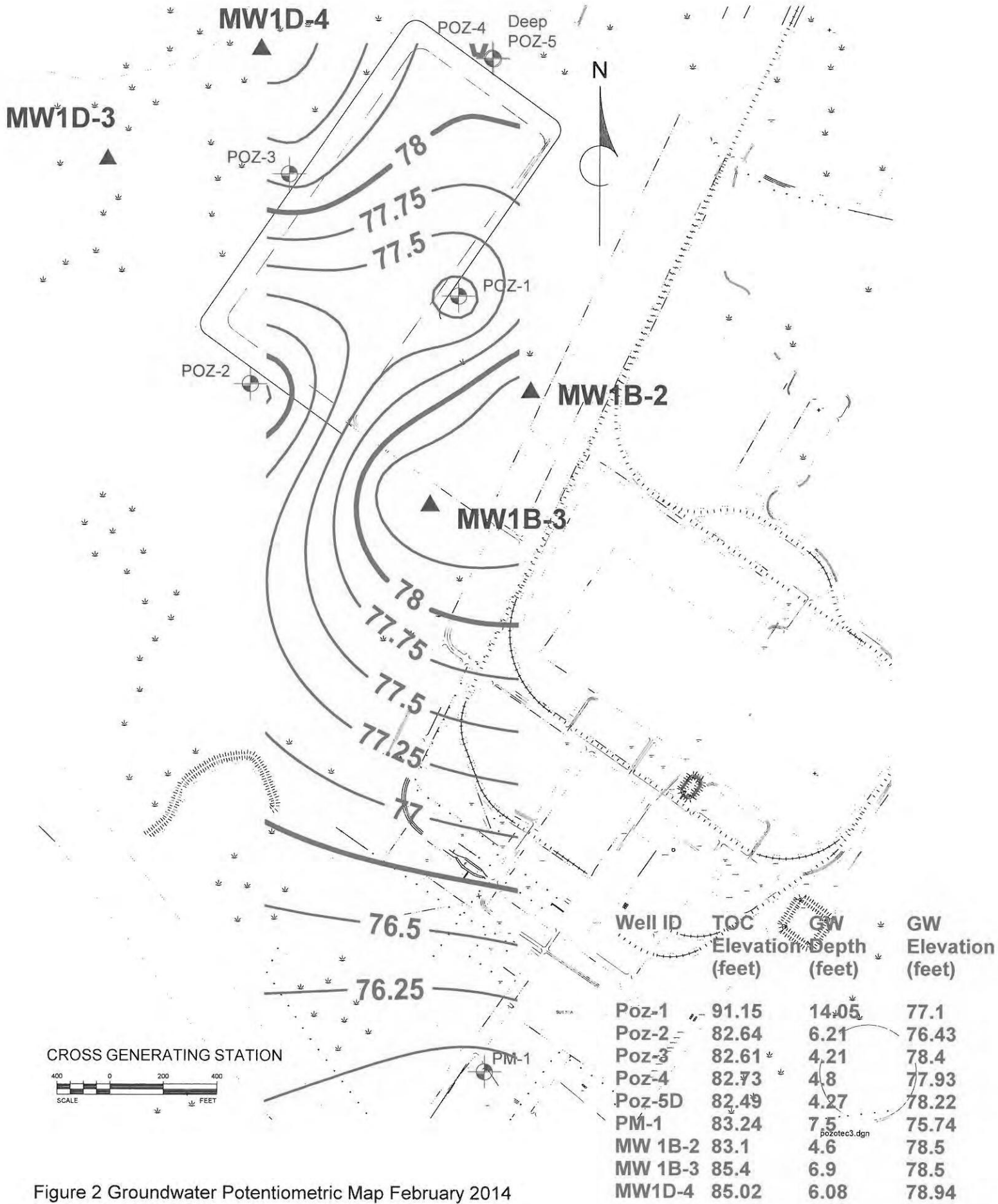


Figure 2 Groundwater Potentiometric Map February 2014

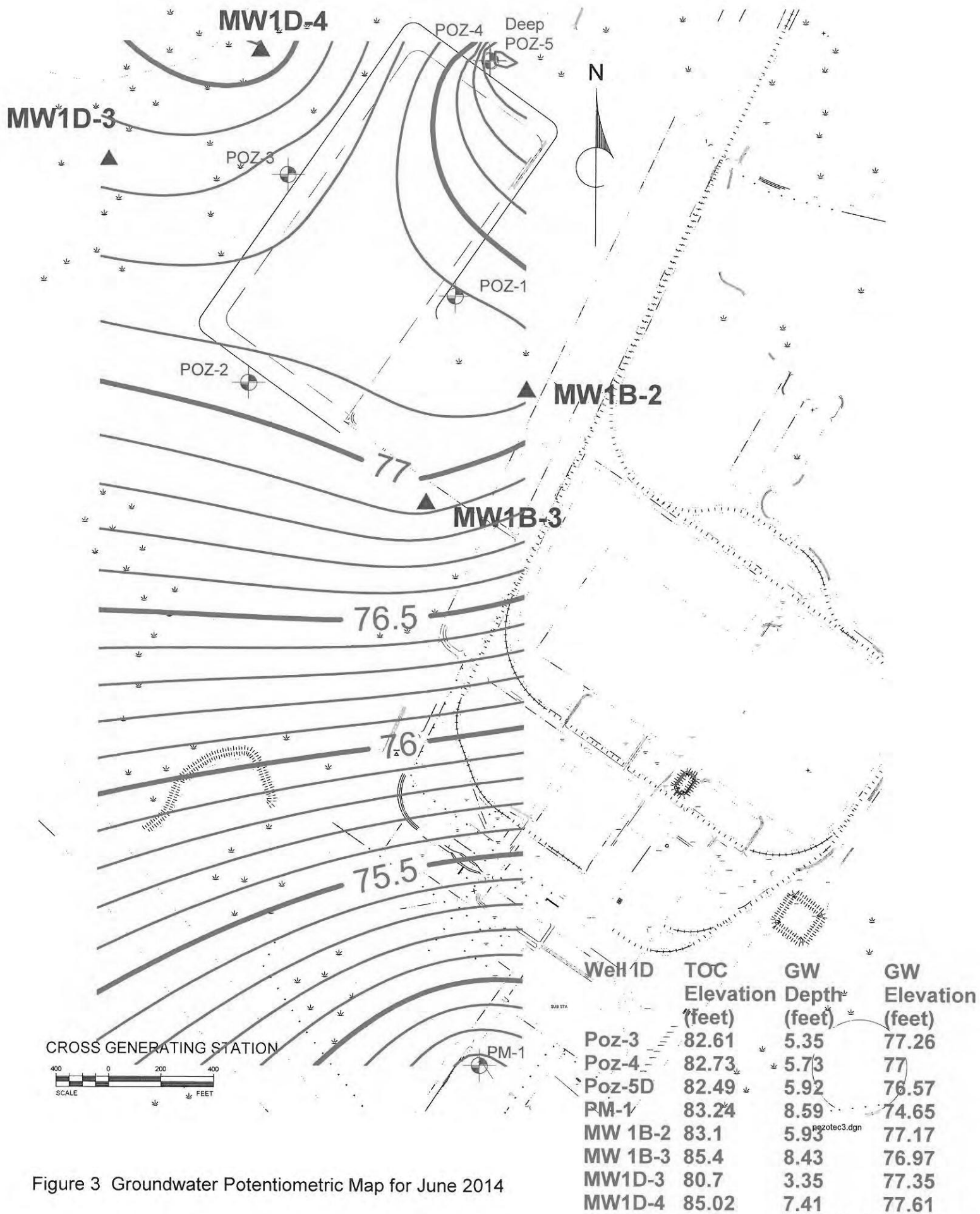


Figure 3 Groundwater Potentiometric Map for June 2014

LEGEND

BACKGROUND WELLS

- PM-1
- CBW-1

CLASS II LANDFILL WELLS

- POZ-3, POZ-4, POZ-5D
- POZ-6, POZ-7

ASH POND

- CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7, CAP-8, CAP-9, CAP-11, CAP-12, CAP-13, CAP-14, PM-2, PM-5

LANDFILL

- CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4, CLF1B-5, CLF1B5D

NOTE: *

IMAGE SOURCE: GOOGLE EARTH (DIGITAL GLOBE) 2015

Groundwater Contour Interval

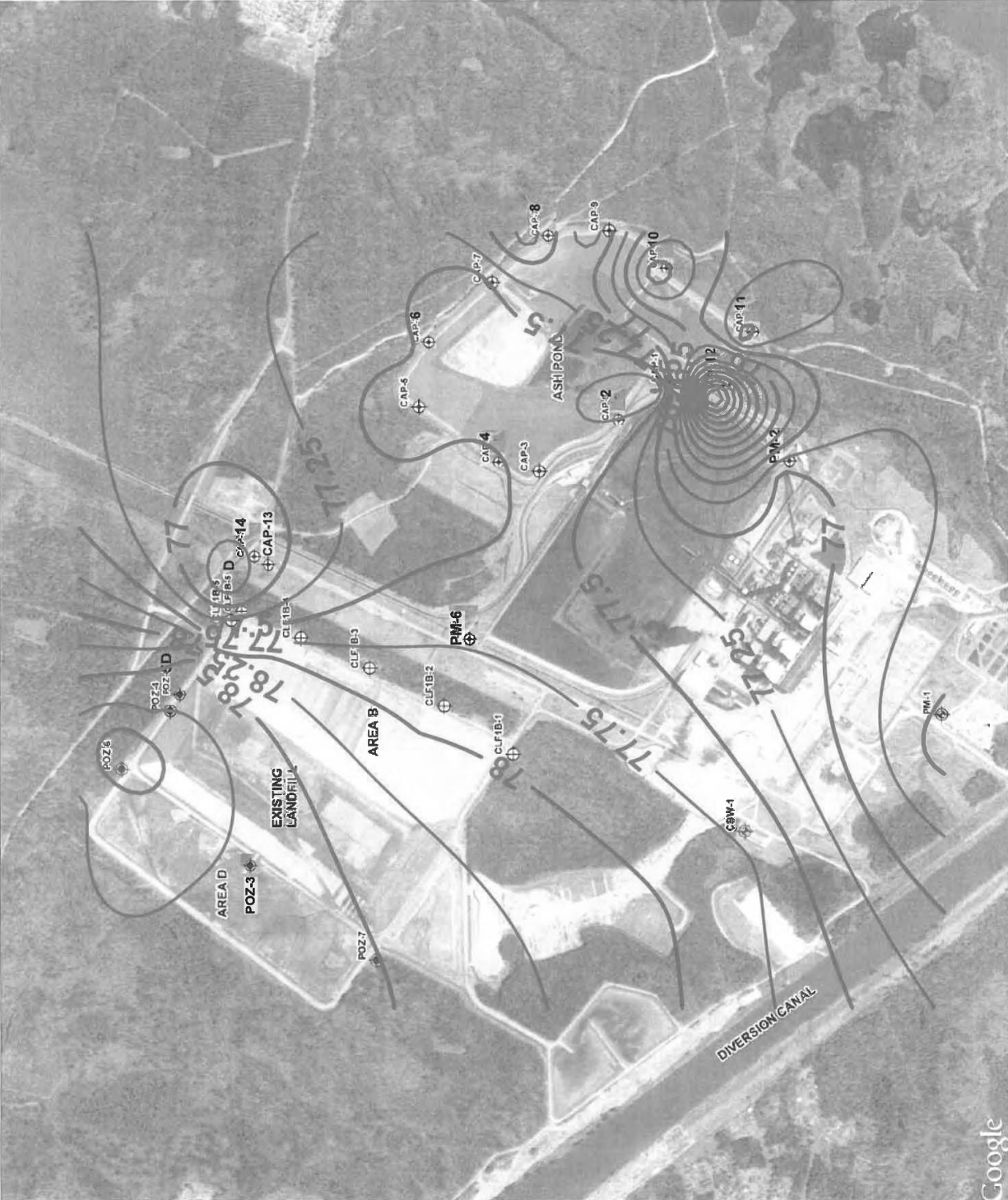
77.2 Groundwater Elevation (msl)

0 1,000 2,000
SCALE IN FEET

Date: 04/21/2019, MDG



**Cross Generating Station
NPDES and Landfill Groundwater Monitoring
February 2019 Potentiometric Map**



LEGEND

BACKGROUND WELLS

- PM-1
- CBW-1

CLASS II LANDFILL WELLS

- POZ-3, POZ-4, POZ-5D
- POZ-6, POZ-7

ASHI POND WELLS

- CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7, CAP-8, CAP-9, CAP-11, CAP-12, CAP-13, CAP-14, PM-2, PM-6

LANDFILL

- CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4, CLF1B-5, CLF1B5D

NOTE:

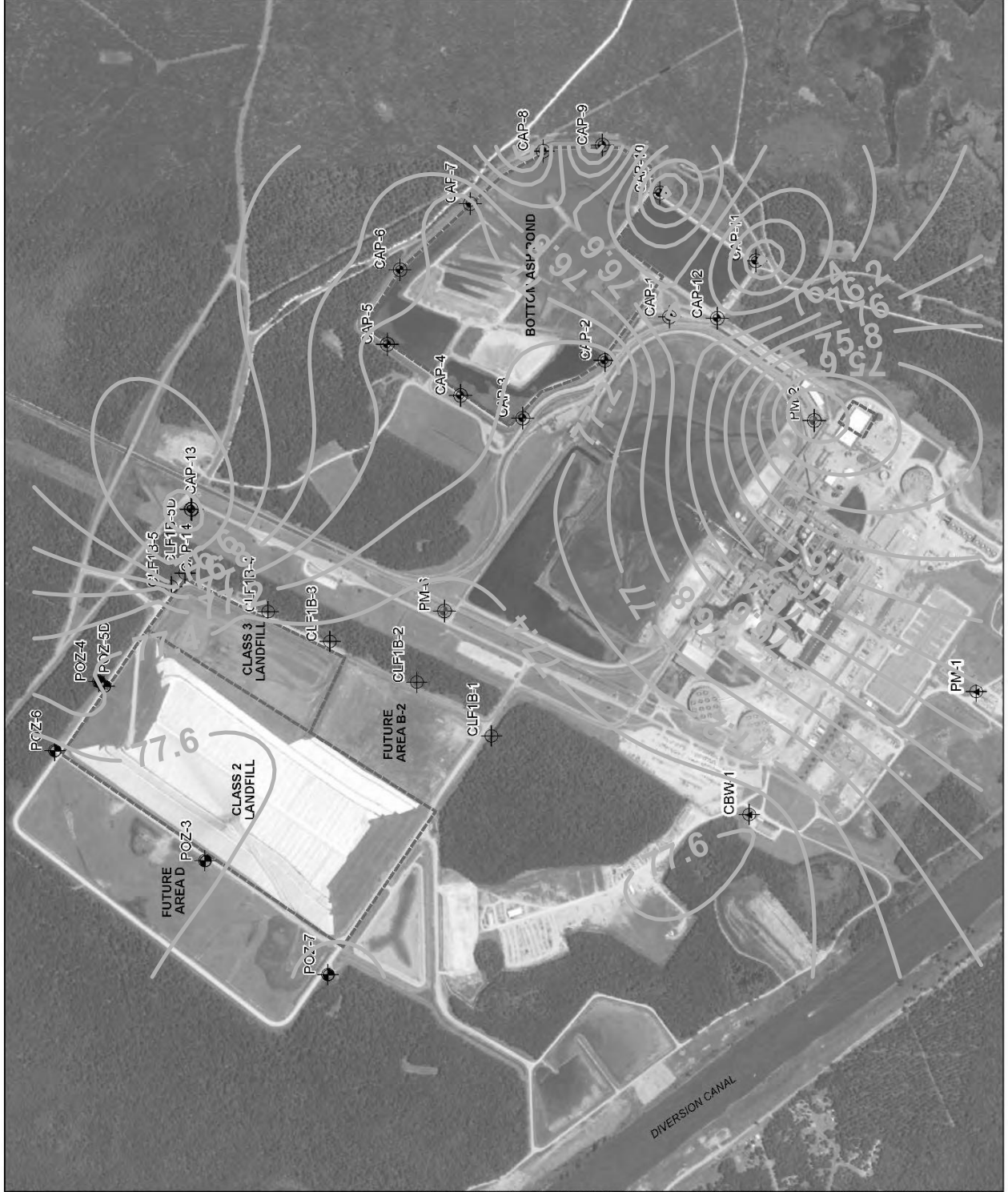
IMAGE SOURCE: GOOGLE EARTH (DIGITAL ELEVATION) 2015

Groundwater Contour Interval
77.2 Groundwater Elevation (msl)



Date: 04/21/2020, MDG

**Cross Generating Station
NPDES and Landfill Groundwater Monitoring
February 2020 Potentiometric Map**



LEGEND

BACKGROUND WELL
PM-1, CBW-1

ACTIVE ASH POND WELL
CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7
CAP-8, CAP-9, CAP-10, CAP-11, CAP-12, CAP-13, CAP-14
OTHER ACTIVE WELLS
PM-2, PM-6

CLASS 3 LANDFILL WELLS (FOR STATE)
CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4,
CLF1B-5, CLF1B-5D

CLASS 2 LANDFILL WELL (FOR STATE)
POZ-3, POZ-4, POZ-5D
POZ-6, POZ-7

CCR BOUNDARY

NOTES

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

Groundwater Contour Interval
77.2
Groundwater Elevation (msl)



Date: 10/21/2020, MDG

**Cross Generating Station
NPDES and Landfill Groundwater Monitoring
June 2020 Potentiometric Map**



LEGEND

- BACKGROUND WELL
PM-1, CBW-1
- ASH POND WELL (FOR NPDES)
CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7,
CAP-8, CAP-9, CAP-10, CAP-11, CAP-12, CAP-13, CAP-14
- CLASS 3 LANDFILL WELLS (FOR STATE)
CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4,
CLF1B-5, CLF1B-5D
- CLASS 2 LANDFILL WELL (FOR STATE)
POZ-3, POZ-4, POZ-5D
POZ-6, POZ-7
- CCR BOUNDARY

NOTES

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

Groundwater Contour Interval
77.2






Groundwater Elevation (msl)
77.2



**Cross Generating Station
NPDES and Landfill Groundwater Monitoring
January 2021 Potentiometric Map**



LEGEND

-  BACKGROUND WELL
 PM-1, CBW-1
-  ASH POND WELL (FOR NPDES)
 CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7, CAP-8, CAP-9, CAP-10, CAP-11, CAP-12, CAP-13, CAP-14
-  CLASS 3 LANDFILL WELLS (FOR STATE)
 CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4, CLF1B-5, CLF1B-5D
-  CLASS 2 LANDFILL WELL (FOR STATE)
 POZ-3, POZ-4, POZ-5D, POZ-6, POZ-7
-  CCR BOUNDARY

NOTES

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

 Groundwater Contour Interval
 Groundwater Elevation (msl)
 77.2



Cross Generating Station
NPDES and Landfill Groundwater Monitoring
June 2021 Potentiometric Map



LEGEND

- BACKGROUND WELL
 PM-1, CBW-1
- ASH POND WELL (FOR NPDES)
 CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7,
 CAP-8, CAP-9, CAP-10, CAP-11, CAP-12, CAP-13, CAP-14
- CLASS 3 LANDFILL WELLS (FOR STATE)
 CLF1B-1, CLF1B-2, CLF1B-3, CLF1B-4,
 CLF1B-5, CLF1B-5D
- CLASS 2 LANDFILL WELL (FOR STATE)
 POZ-3, POZ-4, POZ-5D
 POZ-6, POZ-7
- CCR BOUNDARY

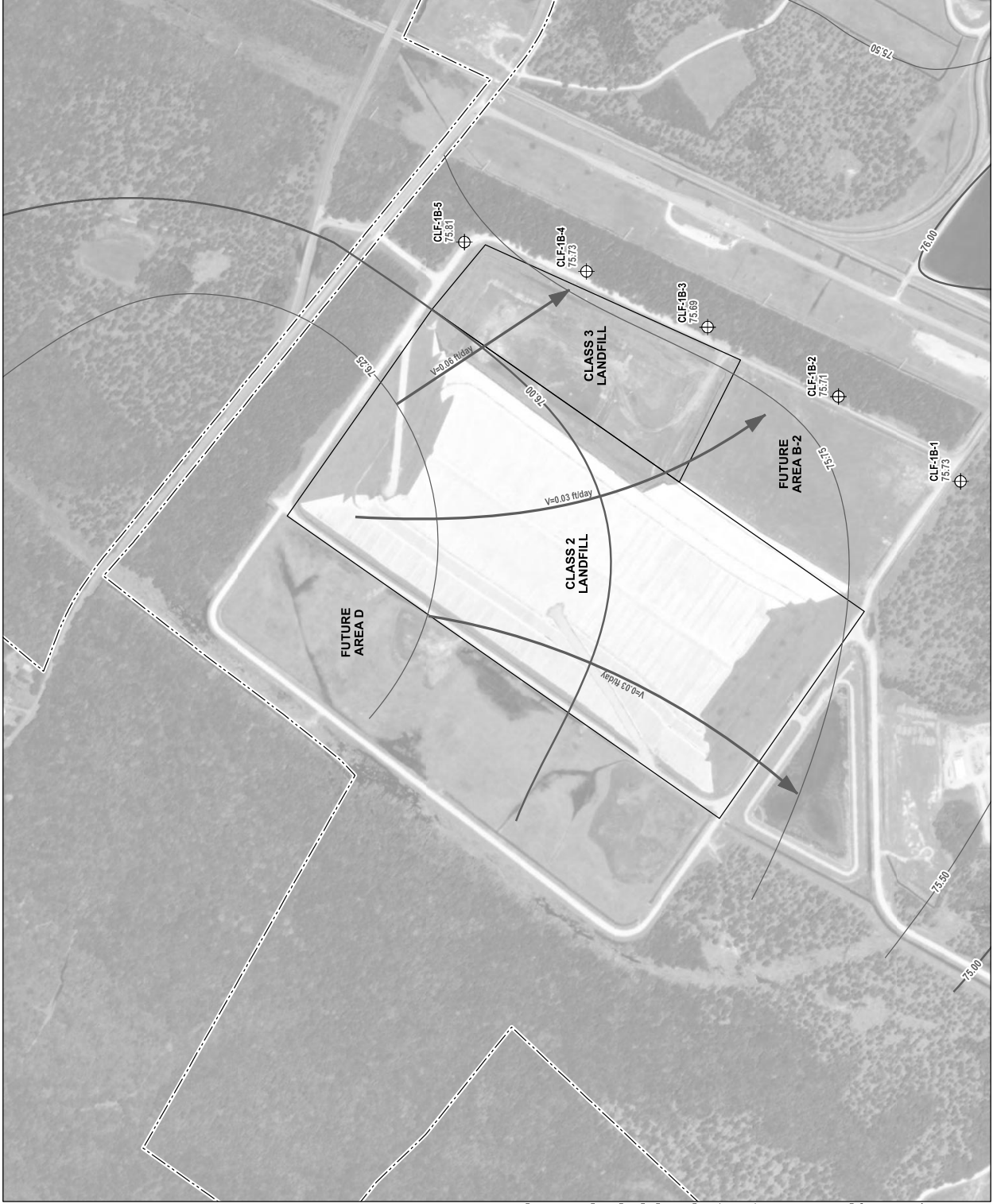
NOTES

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

Groundwater Contour Interval
 77.2 Groundwater Elevation (msl)



Cross Generating Station
NPDES and Landfill Groundwater Monitoring
January 2022 Potentiometric Map



LEGEND

- ⊕ CLASS 3 LANDFILL WELL
- GROUNDWATER ELEVATION CONTOUR, 1-FT INTERVAL
- INTERMEDIATE GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- CCR UNIT BOUNDARY
- - - CROSS GENERATING STATION PROPERTY BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY

NOTES

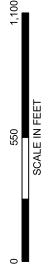
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AVERAGE LINEAR VELOCITY WAS CALCULATED USING:

$$v = \frac{K \Delta h}{n_e \Delta L}$$

3. ABBREVIATIONS:
 ft/day = FEET PER DAY
 V = AVERAGE LINEAR VELOCITY (ft/day)
 K = AVERAGE LINEAR HYDRAULIC CONDUCTIVITY (ft/day)
 Δh/L = HORIZONTAL GRADIENT (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
 FLOW LINE (FL) = DISTANCE IN FEET
4. K = 25 FEET PER DAY (ft/day)
5. $n_e = 0.25$

6. AVERAGE LINEAR VELOCITY FOR THE UNIT (GEOMETRIC MEAN OF VALUES) IS 0.04 FT/DAY.

7. AERIAL IMAGERY SOURCE: ESRI



HALEIGH ALDRICH

SANTEE COOPER
 GENERATING STATION
 PINEVILLE, SOUTH CAROLINA






**POTENTIOMETRIC MAP
 CLASS 3 LANDFILL
 MARCH 17, 2022**

DECEMBER 2022

FIGURE 2



LEGEND

- 
BACKGROUND WELL
 PM-1, CBW-1
- 
ASH POND WELL (FOR NPDES)
 CAP-1, CAP-2, CAP-3, CAP-4, CAP-5, CAP-6, CAP-7, CAP-8, CAP-9, CAP-10, CAP-11, CAP-12, CAP-13, CAP-14
- 
CLASS 3 LANDFILL WELLS (FOR STATE)
 CLFIB-1, CLFIB-2, CLFIB-3, CLFIB-4, CLFIB-5, CLFIB-5D
- 
CLASS 2 LANDFILL WELL (FOR STATE)
 POZ-3, POZ-4, POZ-5D, POZ-6, POZ-7
- 
CCR BOUNDARY

NOTES

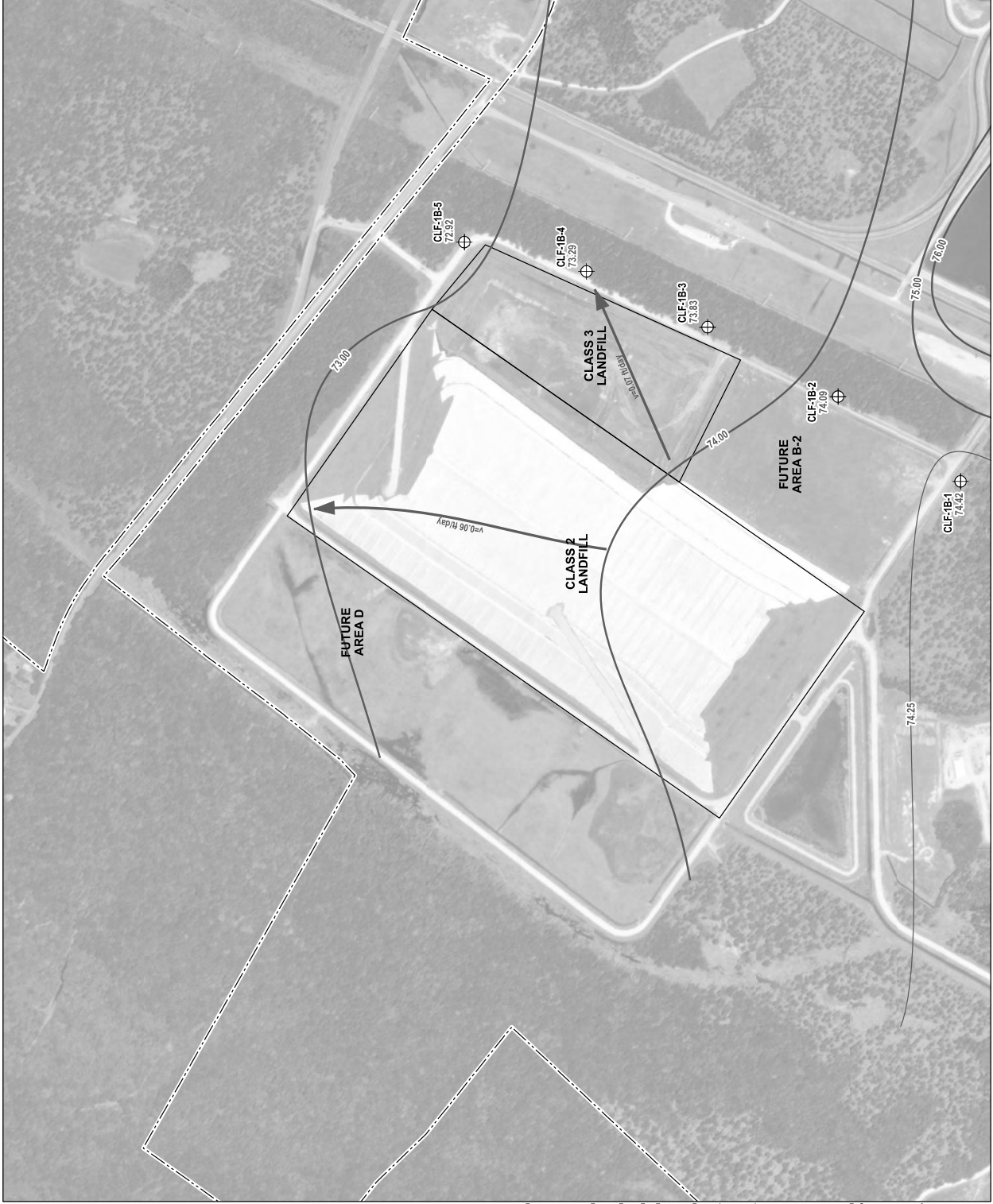
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: ESRI

Groundwater Contour Interval
77.2

Groundwater Elevation (msl)



**Cross Generating Station
NPDES and Landfill Groundwater Monitoring
June 2022 Potentiometric Map**



LEGEND

- CLASS 3 LANDFILL WELL
- GROUNDWATER ELEVATION CONTOUR, 1-FT INTERVAL
- INTERMEDIATE GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- CCR UNIT BOUNDARY
- CROSS GENERATING STATION PROPERTY BOUNDARY
- SANTEE COOPER PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AVERAGE LINEAR VELOCITY WAS CALCULATED USING:

$$v = \frac{K \Delta h}{n_e \Delta L}$$
3. ABBREVIATIONS:
 ft/day = FEET PER DAY
 V = AVERAGE LINEAR VELOCITY (ft/day)
 K = AVERAGE LINEAR VELOCITY (ft/day)
 Δh/L = HORIZONTAL GRADIENT (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
 ΔL = DISTANCE IN FEET
 K = 25 FEET PER DAY (ft/day)
 n_e = 0.25
6. AVERAGE LINEAR VELOCITY FOR THE UNIT (GEOMETRIC MEAN OF VALUES) IS 0.06 FT/DAY.
7. THE NATURE AND EXTENT WELLS USED FOR VERTICAL EXTENT WERE NOT USED FOR CONTOURING THE SHALLOW GROUNDWATER POTENTIOMETRIC SURFACE.
8. AERIAL IMAGERY SOURCE: ESRI



SANTEE COOPER GENERATING STATION
 PINEVILLE, SOUTH CAROLINA

**POTENTIOMETRIC MAP
 CLASS 3 LANDFILL
 JUNE 20, 2022**

DECEMBER 2022

FIGURE 3

APPENDIX D
Stormwater Management Diagrams

APPENDIX E
**Attenuation and Source Zone Depletion of Boron from Coal
Combustion Residuals in Groundwater Abstract**

Attenuation and Source Zone Depletion of Boron from Coal Combustion Residuals in Groundwater

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KEYWORDS: Fate and Transport Modeling, Natural Attenuation, Boron, Source Zone Depletion

ABSTRACT

Boron is an important constituent of CCR leachate. It is ubiquitous and may be found in concentrations exceeding prevailing standards in leachate-impacted groundwater. Because boron generally sorbs weakly to most geologic media, a boron plume often moves passively with groundwater transport, with the dominant attenuation mechanisms being dispersion and dilution. Despite this, boron impacts to groundwater have been observed to attenuate rapidly. For unlined CCR impoundments, this observed attenuation may begin as soon as the ponds are taken out of service and prior to any remedial activities. This likely reflects depletion of the finite amount of mobile boron remaining in the impounded CCR material. In evaluating and ranking the effectiveness of remedies such as excavation or capping, most groundwater models consider CCR material to be an inexhaustible source of contaminants. This may be adequate for constituents with more limited mobility, but this assumption significantly over-estimates the impact of boron on groundwater quality over time. Here, modeling methods for source zone depletion are reviewed. Results are compared to case studies of rapidly attenuating boron groundwater impacts.

INTRODUCTION

Even though boron is not yet an Appendix IV constituent in the Federal CCR rule, it is an Appendix IV constituent in many states. Boron frequently occurs in groundwater at sites with former and active CCR landfills and impoundments, often above State regulatory criteria. Therefore, boron may drive remedial actions or trigger other sampling requirements. Since boron is relatively inert in groundwater, numerical groundwater transport models are relatively simple, conservative and therefore well suited to assess and rank potential remedies.

Boron is naturally abundant in present day seawater, with a typical marine concentration of approximately 4.5 mg/L. Consequently, boron is abundant in most natural brines, and appears in evaporite deposits as the mineral borax (historically mined in dry lakebeds in the western United States and used as an ingredient in detergents). Boron is also naturally abundant in coals; in a USGS compilation of domestic coals, boron had a median concentration of 35.7 mg/kg with some coals in excess of 300 mg/L (EPRI, 2020). We speculate that Paleozoic Illinois Basin coals may have higher boron content because of their marine affiliation, but this distinction is not made in the EPRI publication. When burned, boron in coal is concentrated in coal combustion residuals (CCRs). Fly ash tends to have higher boron concentrations than bottom ash, with typical fly ash values in the range of 100-1000 mg/kg. This abundant CCR boron is highly leachable and experiences little retardation by aquifer solids, making boron a common indicator of early release of CCR leachate to groundwater.

BORON ATTENUATION

In comparison to the recalcitrant groundwater plumes of more reactive species, many boron plumes attenuate rapidly. In some cases this attenuation may begin as soon as the responsible ash pond is removed from service and may have a comparable or greater apparent effect than active groundwater remediation. This seems to be particularly the case for coarse grained alluvial aquifers adjacent to rivers (e.g., Figure 1).

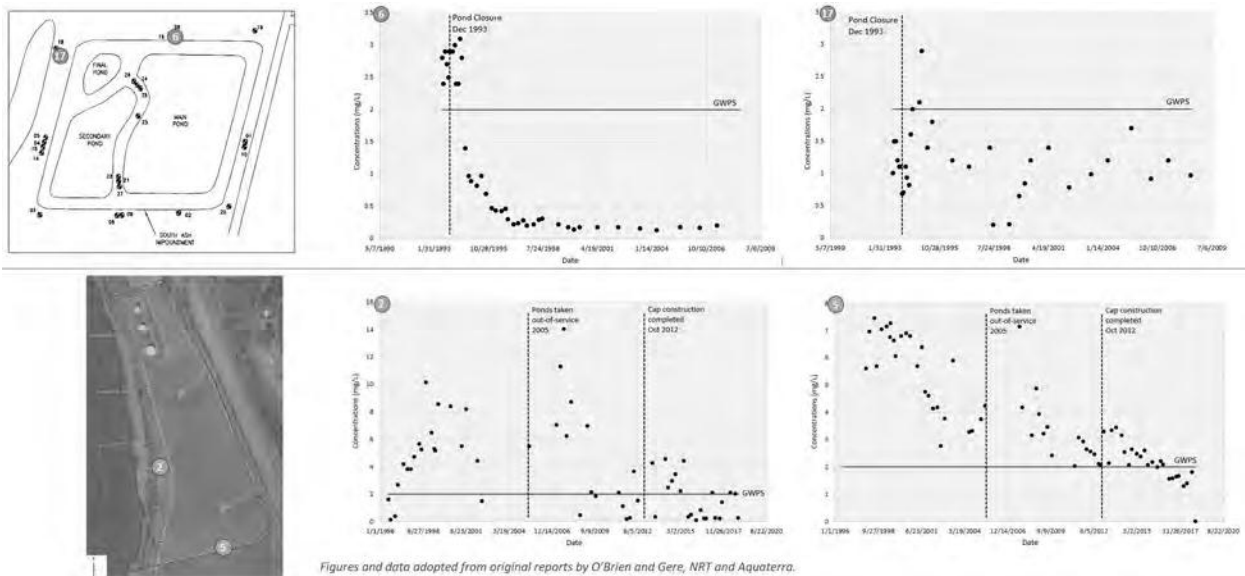


Figure 1: Two examples of rapid boron attenuation in groundwater following pond closure (confidential locations).

RANKING EFFECTIVENESS OF REMEDIES

Combined groundwater flow and contaminant transport models are often used to rank the effectiveness of post-closure remedies such as capping, removal, and hydraulic

control. Groundwater flow is usually simulated using MODFLOW (standard modeling code from United States Geological Survey); contaminant transport models are built on this using program such as MT3DMS (e.g., Zheng, 2012). The model is calibrated to historical concentration and head data; the remedy is applied to the present day in the simulation, and then the model is run forward into the future to create a forecast. The metric analyzed is usually the time required to reach a key regulatory criterion at a simulated point of compliance. The standard output is then a series of predictive concentration trends at the point of compliance, ranked by the time required to achieve compliance (Figure 2).

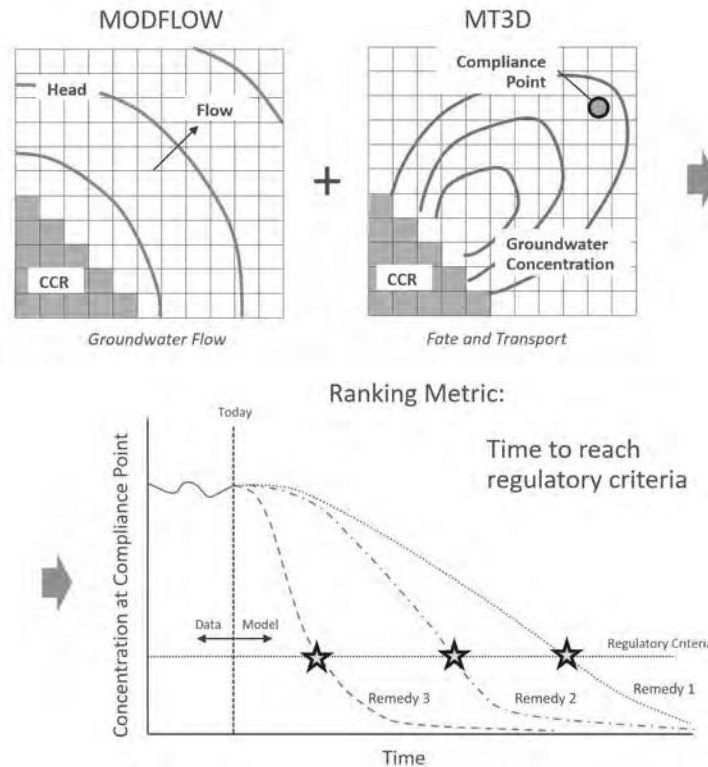


Figure 2: Ranking Remedial Strategies with Modeling

This metric-focused modeling approach has proven very useful for high level analysis but may obscure the larger picture of the planned remedy. It can be advantageous to accompany this analysis with modeled animations of plume growth, attenuation, and remediation. For purposes of illustration, we present such an example for a hypothetical model of boron plume remediation (Figure 3).

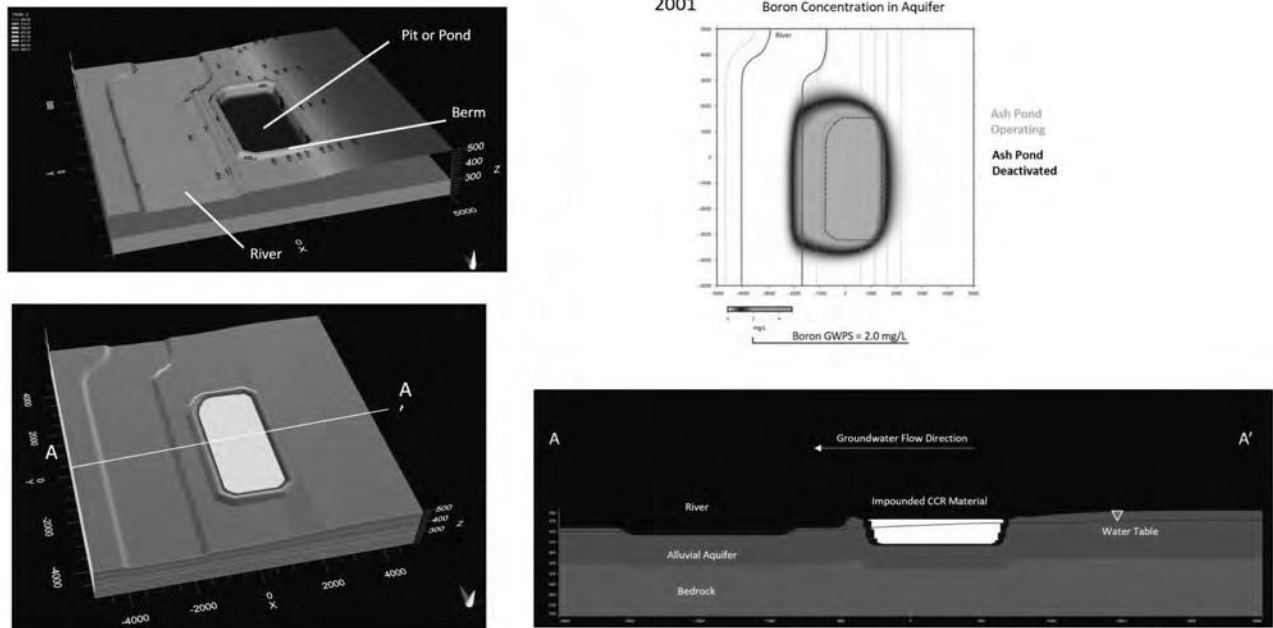


Figure 3: Visuals for illustrating remediation strategy, hypothetical scenario (static images)

One typical strategy often employed in this modeling is to treat the CCR material somewhat independently from the rest of the aquifer. In this approach, the CCR material may be a hydraulic component of the aquifer in MODFLOW but is treated as a flux boundary condition in MT3DMS: contaminant loading from the CCR to the aquifer is calculated a function of vertical infiltration through the CCR material and concentration of the constituent measured in site leachate or estimated from databases of leachate concentrations. This directly facilitates the ranking of capping remedies, as the infiltration rate through various cap designs can be reliably calculated. However, this effectively treats the CCR as an inexhaustible source of the constituent. For some non-reactive constituents like boron, it is likely that the CCR will become depleted over time; more so for sites with CCR situated below the water table enabling significant lateral flow through the CCR material. Including such a depleting CCR boron source to the model adds another dimension, as the parameters controlling boron transport must be assigned to both the aquifer and CCR material.

BORON TRANSPORT IN CCR

Most groundwater transport modeling is performed by assuming a linear equilibrium partitioning between water and aquifer solids by sorption. This is parameterized primarily via the partition coefficient (K_d). For a given amount of mass in the system, the partition coefficient defines the equilibrium concentrations in the aqueous and solid phases (mobile vs. immobile domains). With the typical linear approximation, sorption capacity of the aquifer solids is not limited by the mass of the constituent already sorbed, and transfer between domains is instantaneous. These are major assumptions

to be sure. While more sophisticated treatments are available, this approximation has been a reliable workhorse for including the effects of retardation during contaminant migration for many situations.

The chemical behavior of the constituent is of primary importance for sorption, but the composition of aquifer solids and groundwater chemistry are also very important. The organic carbon content of aquifer solids is often one of the most important controls of sorption for organic compounds, such that the partition coefficient is usually given as the product of the organic carbon content of the aquifer solids and a chemical specific water/organic carbon partition coefficient. This organic carbon methodology is reliable for clastic soils and sedimentary rock containing variable amounts of organic matter but can be somewhat rootless in igneous/metamorphic bedrock aquifers where sorption is more a function of inorganic mineralogy. The type of solid organic carbon can also be a factor. For example, Grathwohl (1990) found that increased diagenetic alteration (“coalification”) of woody organic matter increased the organic carbon partition coefficient for chlorinated solvents by up to three orders of magnitude (Figure 4).

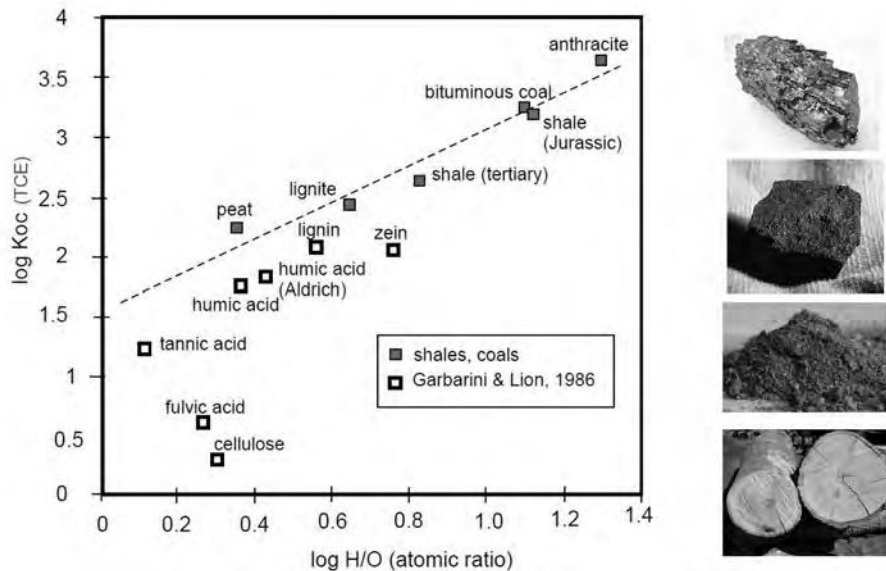


Figure 4: Effect of diagenetic alteration of woody organic matter on organic carbon partition coefficient of chlorinated solvents. After Grathwohl (1990).

It is unclear if the same would apply for more inert CCR-derived metals, but this does further underscore the point that the natural aquifer properties are at least as important as the chemical properties of the constituent.

There are numerous published values for measured boron partition coefficients in natural aquifers (e.g., EPRI 2005; 2020). From these compilations, linear partition coefficients of $K_d = 0.1 - 1.0$ L/kg are typical for natural aquifers. Note that there are a number of literature values given Langmuir Isotherm parameters for boron instead of linear partition coefficients. Langmuir Isotherms allow for decreased sorption at higher concentrations as the solid media becomes saturated.

From other compilations of data from CCR sites, typical CCR contact and pore water boron concentrations are on the order of 10 mg/L (EPRI, 2020). From the same compilations, typical dry bulk boron content of CCR materials is on the order of 100 mg/kg. Using a first order fugacity partitioning calculation (e.g., MacKay and Paterson, 1982) and some assumed physical properties for an aquifer composed of CCR material (porosity = 30%, bulk density = 1.6. kg/L, 100% water saturation), this suggests a partition coefficient (Kd) on the order of 10 L/kg. This is higher than those measured for natural aquifers, although not more than an order of magnitude so. However, there are two important caveats: this is assuming equilibrium partitioning with no saturation effects, and (more importantly) not all of the boron in the bulk CCR material may be accessible for dissolution. If not all of the boron in the bulk CCR material may be accessible for dissolution, a Kd value lower than 10 L/kg is likely more appropriate. This is the motivation for a closer look at the occurrence of boron in CCRs.

ORIGIN OF BORON IN CCR

Boron occurs in CCR as both a solid-solution in the glass phase (borosilicate glass), or as a surface coating of polyborate on CCR granules (EPRI, 1998). Note that CCR materials may have some unusual modes of porosity such as micron-sized hollow glassy spherules that are normally not encountered in natural aquifers (Figure 5).

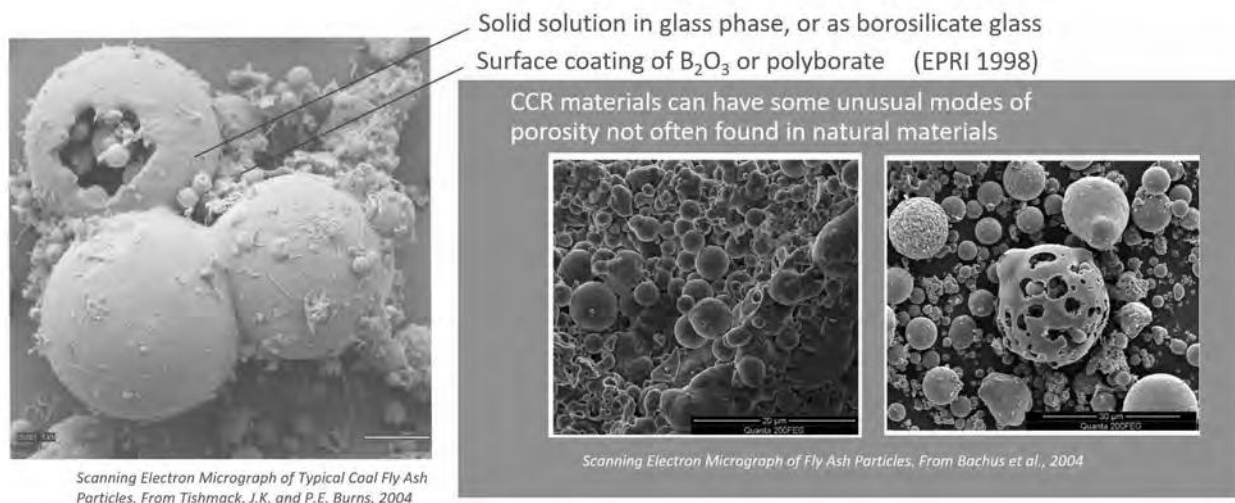


Figure 5: Boron occurrence and unusual modes of porosity in CCR

A laboratory study from James et al. (1982) found for a range of US CCRs, only between 5 and 65% of bulk solid boron was leachable. From examples in EPRI (2005 and references therein), the majority of mobile boron is typically removed in the very earliest parts of leaching experiments: in one example, 90% of all recovered boron was removed in the first two pore volume flushes. This suggests that the source of most available boron is the easily washed polyborate surface coatings, while the solid solution glass phase boron remains immobile. Further evidence of this can be found from inspection of the various EPRI compilations referenced above. The highest

concentrations of CCR-derived boron are found in porewater from dry-managed fly ash (Figure 6).

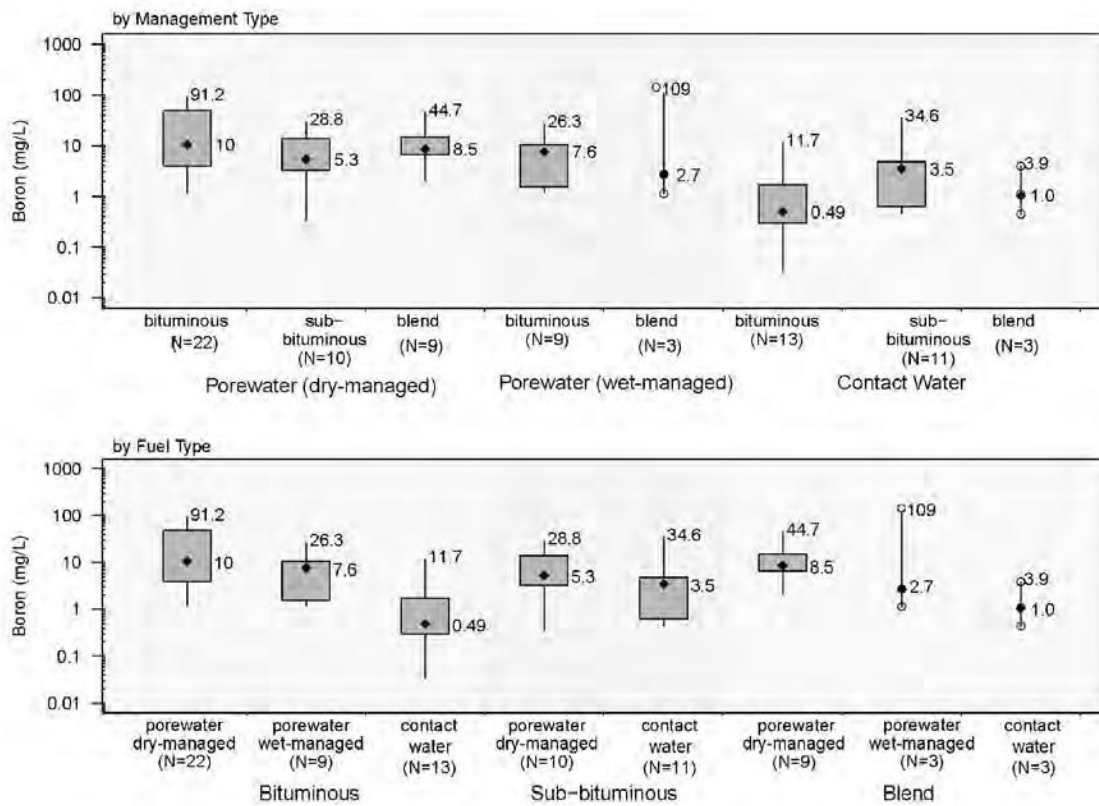


Figure 6: CCR-derived aqueous boron concentrations; from EPRI 2020.

For wet-handled CCRs, some of this available boron may be washed off by sluice water during transport to the impoundment, potentially making wet-handled CCR a less potent source of boron in leachate. Conceptually, this also helps explain the rapid attenuation of some boron plumes following pond closure. Once the pond stops receiving new CCR, the only source of additional boron to the aquifer is the available boron for dissolution from the existing CCR. Based on some of the above referenced experiments, this boron may be substantially depleted after a few volumes of pore water have been exchanged. More appropriate site-specific K_d values for the CCR material may be obtained through leaching experiments.

Since there is likely no rate-limiting diffusive processes taking place in the washing of grain coatings by water flowing through the CCR material, such a weakly sorbed depleting source can be readily represented by standard MT3DMS modeling. However, care must be taken to assure that the mass of boron in the solid phase is realistically high. It should also be noted that this is not necessarily a good approximation for the source zone depletion of other chemical species which may be entering leachate by diffusion from the CCR solid matrix.

CONCLUSIONS

It has been observed that CCR derived boron in groundwater may attenuate rapidly once impoundments are removed from active service, sometimes with more apparent effectiveness than active groundwater remediation programs. Numerical groundwater flow and transport modeling is often used to forecast the effectiveness of such remedies. For a variety of reasons, the CCR is often modeled as a separate entity than the natural aquifer. Modeling this requires that typical aquifer transport properties (most notably the partition coefficient; K_d) be assigned to both the natural aquifer and CCR. More appropriate site-specific K_d values for the CCR material may be obtained through leaching experiments. Examination of boron partition coefficient leads to an examination of the occurrence of boron in CCR. Boron found in CCR leachate likely began as a polyborate coating on glassy CCR granules. This coating may be easily washed off, which is inferred to be the primary mechanism for CCR source zone depletion in boron and helps to explain rapid pre-remedy attenuation of some plumes. Such source zone depletion can be readily modeled with programs such as MT3DMS, together with appropriate site-specific K_d values.

REFERENCES

Bachus, R., M. Terzariol, C. Pasten, S. Chong, S. Dai, M. Cha, S. Kim, J. Jang, E. Papadopoulos, S. Roshankhah, L. Lei, A. Garcia, J. Park, A. Sivaram, F. Santamarina, X. Ren, and J. Santamarina. 2019. *Journal of Geotechnical and Geoenvironmental Engineering*. 145(3), 11 pp.

Brandenburg, J., C. Payne, M. Einarson, P. Bennett and M.Y.J Chu. 2019. Upscaling of Chlorinated Solvent and 1,4-Dioxane Degradation Data from Detailed Fluvial/Alluvial Stratigraphy to a Site Conceptual Model for Monitored Natural Attenuation. Battelle Bioremediation Symposium, Baltimore MD.

EPRI, 1998. Leaching of Inorganic Constituents from Coal Combustion By-Products Under Field and Laboratory Conditions, Volume 1. Final Report TR-111773-V1, November.

EPRI, 2005. Chemical Constituents in Coal Combustion Product Leachate: Boron.

EPRI, Palo Alto, CA: 2005. 1005258.

EPRI, 2006. Characterization of Field Leachates at Coal Combustion Product Management Sites: Arsenic, Selenium, Chromium and Mercury Speciation. EPRI, Palo Alto, CA and U.S. Department of Energy, Pittsburgh, PA. 1012578.

EPRI, 2010. Comparison of Coal Combustion Products to Other Common Materials: Chemical Characteristics. EPRI, Palo Alto, CA: 2010. 1020556.

EPRI, 2020. Chemical Constituents in Coal Combustion Products: Boron. EPRI, Palo Alto, CA: 2020. 3002018777.

James, W., C. Grahm, M. Glascock and A. Hanna, 1982 Water-leachable boron from coal ashes. Environmental Science and Technology, v.16, pp. 195-197

Mackay, D. and S. Paterson, 1982. Fugacity Revisited: The fugacity approach to environmental transport. Environmental Science and Technology, v.16 no.12, pp. 654A-660A

Tishmack, J.K. and P.E. Burns, 2004. The chemistry and mineralogy of coal and coal combustion products. Energy, Waste, and the Environment: A Geochemical Perspective. Geochemical Society of London Special Publication Special Publications, 236, pp. 223-246.

Zheng, C., M. Hill, G. Cao, and R. Ma, 2012. MT3DMS: Model use, calibration, and validation. Transactions of the ASABE, v. 55, no. 4. pp. 1549-1559.

APPENDIX F
June 2022 Statistical Evaluation
(Haley & Aldrich)



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TECHNICAL MEMORANDUM

December 26, 2022
File No. 131539-012

SUBJECT: Statistical Evaluation of the Summer 2022 Semiannual Groundwater Detection Monitoring Data, Cross Generating Station, Class 3 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93 and §257.94 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the summer 2022 semiannual detection monitoring event for Cross Generating Station (CGS) Class 3 Landfill. Data for this groundwater sampling event were validated on September 28, 2022 by Santee Cooper.

BACKGROUND

The CGS Class 3 Landfill began receiving waste in December 2015. After completion of baseline sampling, the initial statistical analysis for the CGS Class 3 Landfill identified statistically significant increases (SSIs) above the Groundwater Protection Standards (GWPS) for Appendix III constituents in downgradient monitoring wells. Subsequently, an alternate source demonstration (ASD) completed in April 2018 concluded the closed Class 2 Landfill, which is immediately adjacent to the Class 3 Landfill, is the source for the Appendix III SSIs (boron, calcium, chloride, pH, sulfate, and total dissolved solids [TDS]). As a result, the Class 3 Landfill remained in detection monitoring. Intrawell statistical evaluations have been conducted for the Appendix III constituents since the ASD.

Recent analytical testing results were evaluated to determine if SSIs exist above the GWPS of Appendix III groundwater monitoring constituents. Using intrawell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to background values.

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 SSI of Appendix III parameters compared to background groundwater quality of the CCR Unit. The intrawell evaluation compares the most recent values from each compliance well against a background dataset composed of its own historical data.

To statistically evaluate the analytical results, the background upper prediction limit (UPL), which is a type of prediction interval method, was selected to evaluate the Appendix III data, and additionally, the lower prediction limit (LPL) was selected to evaluate the pH. The prediction interval method is one of the methods outlined in the Rule. A prediction interval procedure establishes a concentration limit for each constituent from the distribution of the background data, with a specified confidence level (e.g., 95 percent). The upper endpoint of a concentration limit is called the UPL and lower endpoint of a

concentration limit is called the LPL. Depending on the background data distribution, parametric or non-parametric prediction limits procedures are used to evaluate groundwater monitoring data using this method. Parametric prediction limits use normally distributed data or normalized data via a transformation of the sample background data.

If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the prediction limit. If all the background data are non-detect, a maximum reporting limit (RL) may serve as an approximate UPL. We note that depending on the available sample size, UPLs generated from non-parametric or maximum reporting limits may not achieve the same target statistical confidence limits of the parametric UPLs.

Per the document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009* (the Unified Guidance), background concentrations for the June 2022 semiannual sampling event were based on statistical evaluation of analytical results collected through January 2021. The background dataset will be updated again after the 2023 first semiannual sampling event, in accordance with the Unified Guidance.

RESULTS OF APPENDIX III DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix III constituent detections from downgradient well samples were compared to their respective GWPS (Table I) using intrawell comparisons. SSIs for the following were identified:

- Boron SSIs for CLF1B-3 and CLF1B-5
- Chloride SSIs for CLF1B-2 and CLF1B-4
- Fluoride SSI for CLF1B-3

Even though fluoride in CLF1B-3 and boron in CLF1B-5 showed SSIs for the intrawell statistical evaluation, the analytical concentrations for these constituents were below their respective Maximum Contaminant Levels (MCLs) and are not SSIs when evaluated using interwell statistical analysis.

As noted in the 2018 ASD, groundwater flow velocity in the uppermost aquifer near the Class 2 and Class 3 Landfills is approximately 30 feet per year. The distance between the eastern edge of the Class 2 Landfill and the Class 3 Landfill monitoring well network varies from 500 to 800 feet, representing between 17 and 27 years for a release from the Class 2 Landfill to reach the Class 3 Landfill monitoring wells. The Class 2 Landfill began receiving waste over 40 years ago. Appendix III constituent leaching was expected to subside when closure (June 2016) and water management improvements (January 2020) were completed for the Class 2 Landfill. However, based on the calculated groundwater flow velocity and levels of constituent concentrations, elevated concentrations could continue to flow through the Class 3 Landfill monitoring wells until 2043. Historical trends in concentrations will continue to be evaluated during subsequent sampling events. Based on these statistical results, the Class 3 Landfill will continue in detection monitoring.

Enclosures:

Table I – CGS Class 3 Landfill Summer 2022 Semiannual Detection Monitoring Data

TABLE

TABLE I
CGS CLASS 3 LANDFILL
SUMMER 2022 SEMIANNUAL DETECTION 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 MIC/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 2022 Concentration (mg/L)	Detect?	Inter-well Analysis		Intra-well Analysis	
																						Background Limit (Upper Prediction Limit)	SSI	Background Limit (Upper Prediction Limit)	SSI
CEW-1	18/20	10%	0.015-0.04	0.0218	0.02085	0.0324	0.032	0.00004122	0.00642	0.2946	NA	mg/L	N	0	0	No	No	Stable	Non-parametric	0.015					
CEW-1	10/20	50%	0.015-0.02	0.0177	0.015	0.024	0.049	0.00005904	0.007684	0.4334	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.015	0.048				
CEW-1	3/20	85%	0.015-0.015	0.0148	0.015	0.01505	0.016	0.00001276	0.00113	0.07631	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.015	0.016				
CEW-1	17/20	15%	0.015-0.015	0.0178	0.0161	0.02099	0.038	0.00029233	0.005406	0.3043	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.020	0.020				
CEW-1	20/20	0%	-	0.0443	0.0395	0.082	0.12	0.0005964	0.02442	0.5517	NA	mg/L	N	0	0	Yes	No	Increasing	Non-parametric	0.120	Y				
CEW-1	20/20	0%	-	0.0202	0.019	0.0273	0.0322	0.00001403	0.003746	0.1853	NA	mg/L	N	0	0	No	No	Stable	Non-parametric	0.027	Y				
CEW-1	16/20	20%	0.015-0.015	0.0171	0.016	0.01935	0.026	0.00007137	0.002672	0.1562	NA	mg/L	N	0	0	Yes	No	Increasing	Non-parametric	0.026	Y				
CEW-1	21/21	0%	-	17.3	27	30.51	42.2	19.34	4.397	0.1624	NA	mg/L	N	0	0	Yes	No	Stable	Normal	47.33					
CEW-1	21/21	0%	-	27.3	16.4	27	37	43.88	6.624	0.3839	NA	mg/L	N	0	0	No	No	Decreasing	Normal	47.33					
CEW-1	19/19	0%	-	175	189.2	191	59.92	7.741	0.04413	NA	mg/L	N	0	0	0	0	No	No	Decreasing	Normal	0.18	Y			
CEW-1	19/19	0%	-	137	131	157.8	210	370.2	19.24	0.1404	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.14	Y				
CEW-1	18/18	0%	-	177	181.5	232.1	244	1730	41.59	0.2353	NA	mg/L	N	0	0	No	No	Increasing	Normal	0.33	Y				
CEW-1	19/19	0%	-	106	102	144	180	561.3	31.69	0.2341	NA	mg/L	N	0	0	Yes	No	Increasing	Non-parametric	0.14	Y				
CEW-1	20/20	0%	-	236	233	279.5	289	1541	39.25	0.1666	NA	mg/L	N	0	0	No	No	Increasing	Normal	0.29	Y				
CEW-1	21/21	0%	-	2.94	2.95	3.44	3.79	0.1394	0.3456	0.174	NA	mg/L	N	0	0	No	No	Increasing	Non-parametric	13.50					
CEW-1	21/21	0%	-	12.6	12.7	15.4	15.5	0.2422	0.585	0.0645	NA	mg/L	N	0	0	No	No	Stable	Normal	42.40	Y				
CEW-1	20/20	0%	-	38.4	38.9	42.21	42.4	7.834	2.799	0.0728	NA	mg/L	N	0	0	No	No	Stable	Normal	89.30	Y				
CEW-1	20/20	0%	-	74.4	75.25	89.35	90.2	130.4	11.42	0.1535	NA	mg/L	N	0	0	Yes	No	Increasing	Non-parametric	22.80	Y				
CEW-1	20/20	0%	-	27.4	23.65	36.55	81.2	169.6	13.02	0.4752	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	100.00	Y				
CEW-1	20/20	0%	-	63.9	52.9	99.9	100	378.2	19.45	0.3044	NA	mg/L	N	0	0	No	No	Increasing	Non-parametric	166.00	Y				
CEW-1	21/21	0%	-	125	118	168	174	656.1	25.22	0.2014	NA	mg/L	N	0	0	No	No	Increasing	Normal	188.97	Y				
CEW-1	19/19	0%	-	0.221	0.22	0.291	0.33	0.001765	0.04202	0.1901	4	mg/L	N	0	0	No	No	Decreasing	Non-parametric	0.30					
CEW-1	0/19	100%	0.1-0.1	0.1	0.1	0.1	0	0	0	0	4	mg/L	N	0	0	NA	NA	Stable	Non-parametric	0.14	Y				
CEW-1	10/19	47%	0.1-0.1	0.132	0.12	0.172	0.19	0.000714	0.02672	0.2198	4	mg/L	N	0	0	NA	NA	Stable	Non-parametric	0.10	Y				
CEW-1	6/19	68%	0.1-0.1	0.109	0.1	0.142	0.16	0.0002877	0.01696	0.1557	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.20	Y				
CEW-1	12/19	37%	0.1-0.1	0.12	0.12	0.155	0.2	0.0007935	0.02652	0.2135	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.10	Y				
CEW-1	3/19	84%	0.1-0.1	0.103	0.1	0.121	0.13	0.0006725	0.008201	0.0795	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.10	Y				
CEW-1	3/19	84%	0.1-0.1	0.104	0.1	0.123	0.15	0.000148	0.01216	0.1167	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.10	Y				
CEW-1	21/21	0%	-	4.31	4.32	4.5	4.58	0.01709	0.1307	0.0935	NA	pH units	N	0	0	No	No	Stable	Non-parametric	6.78	Y				
CEW-1	26/26	0%	-	5.13	5.19	5.47	5.58	0.05840	0.2418	0.02715	NA	pH units	N	0	0	No	No	Stable	Non-parametric	6.85	Y				
CEW-1	20/20	0%	-	6.62	6.62	6.91	6.84	0.01802	0.1342	0.02028	NA	pH units	N	0	0	No	No	Increasing	Normal	6.78	Y				
CEW-1	20/20	0%	-	6.69	6.9	7.881	7.09	0.01566	0.1251	0.01814	NA	pH units	N	0	0	No	No	Stable	Normal	6.85	Y				
CEW-1	20/20	0%	-	6.69	6.72	6.826	6.94	0.01456	0.1207	0.01803	NA	pH units	N	0	0	No	No	Stable	Normal	6.73	Y				
CEW-1	20/20	0%	-	7.11	7.11	7.371	7.38	0.01993	0.1412	0.01984	NA	pH units	N	0	0	No	No	Stable	Normal	6.93	Y				
CEW-1	21/21	0%	-	6.6	6.66	6.76	6.83	0.04742	0.2534	0.08838	NA	pH units	N	0	0	Yes	No	Decreasing	Normal	6.66	Y				
CEW-1	21/21	0%	-	79.4	78.3	90.1	115	114.1	10.68	0.1345	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	115.00					
CEW-1	21/21	0%	-	12.6	10.5	25.5	26.5	32.5	5.701	0.4531	NA	mg/L	N	0	0	No	No	Decreasing	Non-parametric	149.00	Y				
CEW-1	20/20	0%	-	141	137.5	154.3	159	98.26	9.913	0.07053	NA	mg/L	N	0	0	No	No	Stable	Normal	15.30	Y				
CEW-1	20/20	0%	-	14.5	13.6	19.74	22.4	6.412	2.532	0.174	NA	mg/L	N	0	0	Yes	No	Stable	Non-parametric	355.00	Y				
CEW-1	20/20	0%	-	164	170	349.3	355	8064	89.8	0.5476	NA	mg/L	N	0	0	No	No	Increasing	Normal	26.60	Y				
CEW-1	20/20	0%	-	17.8	15.7	31.26	34.3	36.94	6.078	0.341	NA	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric	262.00	Y				
CEW-1	21/21	0%	-	175	177	278	291	6165	78.52	0.4485	NA	mg/L	N	0	0	No	No	Increasing	Normal	414.24	Y				
CEW-1	20/21	5%	40-40	132	178.8	181.2	173	34.25	0.2733	NA	mg/L	N	0	0	0	0	Yes	No	Stable	Normal	260.58				
CEW-1	24/25	4%	40-40	132	130	200	206	1591	39.88	0.3013	NA	mg/L	N	0	0	No	No	Stable	Normal	583.80	Y				
CEW-1	20/20	0%	-	585	582.8	648.8	651.7	1167	34.15	0.05842	NA	mg/L	N	0	0	No	No	Stable	Normal	715.00	Y				
CEW-1	20/20	0%	-	482	480.6	597.5	597.5	3555	59.63	0.1237	NA	mg/L	N	0	0	No	No	Stable	Normal	633.06	Y				
CEW-1	20/20	0%	-	811	602.8	1063	1063	572.5	1167000	1080	1.333	mg/L	N	0	0	Yes	No	Stable	Non-parametric	791.20	Y				
CEW-1	20/20	0%	-	383	377.5	515.7	552.5	6983	77.99	0.2037	NA	mg/L	N	0	0	No	No	Increasing	Normal	490.00	Y				
CEW-1	21/21	0%	-	910	921.2	1155	1176	32750	181	0.1989	NA	mg/L	N	0	0	Yes	No	Increasing	Normal	1148.00	Y				