

**2021 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
SLURRY POND 3 & 4
WINYAH GENERATING STATION**

**by Santee Cooper
Moncks Corner, South Carolina**

January 31, 2022 (Amended March 2, 2022)

Table of Contents	Page
1. Annual Groundwater Monitoring Report Summary	1
2. 40 CFR §257.90 Applicability	1
2.1 40 CFR § 257.90(a)	1
2.2 40 CFR § 257.90(e) – Summary	1
2.2.1 Status of the Groundwater Monitoring Program	2
2.2.2 Key Actions Completed	2
2.2.3 Problems Encountered	3
2.2.4 Actions to Resolve Problems	3
2.2.5 Project Key Activities for Upcoming Year	3
2.3 40 CFR § 257.90(e) – Information	3
2.3.1 40 CFR § 257.90(e)(1)	3
2.3.2 40 CFR § 257.90(e)(2)	4
2.3.3 40 CFR § 257.90(e)(3)	4
2.3.4 40 CFR § 257.90(e)(4)	4
2.3.5 40 CFR § 257.90(e)(5)	5

Table No.	Title
1	Summary of Analytical Results

Figure No.	Title
1	Location of Slurry Pond 3 & 4 Groundwater Monitoring Wells for CCR Compliance

Appendix A – Statistical Analysis

Appendix B – Laboratory Analytical Reports

1. Annual Groundwater Monitoring Report Summary

The South Carolina Public Service Authority (Santee Cooper) has prepared this 2021 Annual Groundwater Monitoring Corrective Action Report for Slurry Pond 3 & 4 at the Winyah Generating Station (WGS). This 2021 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 April 17, 2015, (CCR Rule), specifically subsection § 257.90(e)(1) through (6).

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, 2021), Slurry Pond 3 & 4 continued to operate under an assessment monitoring program in accordance with § 257.95, which was initiated on July 16, 2018. As required by § 257.93(h)(2), the statistical analysis to determine if statistically significant levels (SSLs) of one or more Appendix IV constituent are present downgradient of Slurry Pond 3 & 4 identified SSLs above the groundwater protection standards (GWPS) for arsenic and lithium. The SSLs for arsenic and lithium were addressed through completion of a successful alternate source demonstration (ASD) which was certified on October 9, 2019. The successful ASD, provided in the 2019 Annual Groundwater Report, allowed this CCR unit to remain in assessment monitoring. SSLs of Appendix IV constituents were not identified in downgradient monitoring wells for this unit during the semiannual monitoring events completed in 2021. Therefore, at the end of the current annual reporting period (December 31, 2021), Slurry Pond 3 & 4 remains in the assessment monitoring program. As such, an assessment of corrective measures, evaluating the nature and extent of contamination, holding a public meeting, selecting a remedy, and initiating remedial activities are not required.

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)

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.

Slurry Pond 3 & 4 at WGS is an existing surface impoundment and subject to the groundwater monitoring and corrective action requirements set forth by the EPA in 40 CFR § 257.90 through § 257.98. This document satisfies the requirement under § 257.90(e) which requires the CCR Unit Owner/Operator to prepare an Annual Groundwater Monitoring and Corrective Action Report.

2.2 40 CFR § 257.90(e) - SUMMARY

Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For the preceding calendar year, the annual report must document the status of the

groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1).

This Annual Report documents the activities completed in 2021 for Slurry Pond 3 & 4 at WGS 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 § 257.95, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

Statistically significant increases (SSI) of Appendix III constituents were identified downgradient of Slurry Pond 3 & 4, and the notification was provided on January 15, 2018. An ASD was conducted by Haley & Aldrich, Inc. and a report was provided to Santee Cooper in April 2018. Haley & Aldrich reviewed the field sampling and equipment calibration logs and the field indicator parameters and at that time, did not identify deviations or errors in sampling. They also conducted quality assurance/quality control reviews of the laboratory data and the statistical evaluation and did not identify any laboratory errors. The review by Haley & Aldrich did not identify errors or contributing sources that could serve as an ASD for the SSIs observed in the CCR well network for Slurry Pond 3 & 4. As a result, an Assessment Monitoring program was initiated as required by § 257.94(e)(2).

As required by § 257.93(h)(2), the statistical evaluation of the detected Appendix IV constituents determined there were statistically significant exceedances of groundwater protection standards (GWPS) for arsenic and lithium. Therefore, an assessment of corrective measures and nature and extent was initiated per §257.95(g)(3). An alternate source demonstration was also initiated at that time. Haley & Aldrich documented naturally occurring conditions that exist within the uppermost shallow alluvial aquifer responsible for mobilizing naturally occurring arsenic and lithium. Additional details are documented in the ASD report provided as an appendix to the 2019 Annual Groundwater Monitoring and Corrective Action Report. Because of the successful ASD Slurry Pond 3 & 4 remained in assessment monitoring and completing an assessment of corrective measures, evaluating the nature and extent of contamination, holding a public meeting, selecting a remedy, and initiating remedial activities were not required.

For the assessment monitoring events in 2021, SSLs of Appendix IV constituents above GWPS were not identified in groundwater downgradient of this unit. Therefore, this CCR unit will remain in Assessment Monitoring in 2022.

2.2.2 Key Actions Completed

The following key actions were completed in 2021:

- Prepared 2020 Annual Report including:
 - The Annual Report was placed in the facility's operating record pursuant to § 257.105(h)(1);

- Pursuant to § 257.106(h)(1), the notification was sent to the relevant State Director within 30 days of the Annual Report being placed in the facility's operating record [§ 257.106(d)];
- Pursuant to § 257.107(h)(1), the Annual Report was posted to the CCR Website within 30 days of the Annual Report being placed in the facility's operating record [§ 257.107(d)];
- Collected and analyzed two rounds of groundwater samples (February and July) in accordance with § 257.95(b) and § 257.95(d)(1) and recorded the concentrations in the facility's operating record as required by § 257.95(d)(1). Groundwater monitoring results are summarized in Table 1 and laboratory analytical results are provided in Appendix B; and
- Completed statistical evaluations to determine if SSLs of GWPS were present for detected Appendix IV constituents in accordance with § 257.93(h)(2) (Appendix A).

2.2.3 Problems Encountered

Problems such as damaged wells or issues with sample collection or lack of sampling were not encountered at Slurry Pond 3 & 4 in 2021.

2.2.4 Actions to Resolve Problems

No problems needed resolution.

2.2.5 Project Key Activities for Upcoming Year

Key activities to be completed in 2022 include the following:

- Conduct semi-annual groundwater monitoring consistent with § 257.98 (a)(1) and § 257.95.
- Statistical analysis of analytical data to determine if SSLs of the detected Appendix IV constituents are present.
- Additional characterization of nature and extent as needed § 257.95(g)(1).
- Prepare the 2022 annual report; place it in the record as required by § 257.105(h)(1), notify the state [§ 257.106(d)]; and post to website [§ 257.107(d)].

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 Slurry Pond 3 & 4 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;

Groundwater monitoring wells were not installed or decommissioned in 2021.

2.3.3 40 CFR § 257.90(e)(3)

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

In accordance with § 257.95(b) and § 257.95(d)(1), two independent samples from each background and downgradient monitoring well were collected and analyzed. A summary table including the sample names, dates of sample collection, reason for sample collection, and monitoring data obtained for the groundwater monitoring program for Slurry Pond 3 & 4 is presented in Table 1 of this report. In addition, and in accordance with § 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 of the Appendix III constituents was completed by January 15, 2018. Baseline analytical data collected from background monitoring wells WBW-1 and WAP-1 were combined to develop Upper Tolerance Limits (UTLs). The UTLs for each Appendix III constituent were compared to the analytical results for the downgradient monitoring wells WAP-4, WAP-14, WAP-15, and WAP-16. Constituents with analytical results exceeding the UTLs were identified as SSIs over background for the respective Appendix III constituent. This statistical analysis determined that statistically significant increases of boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids were present downgradient of Slurry Pond 3 & 4. An evaluation of alternate sources for SSIs was initiated and completed on April 13, 2018 as provided in § 257.94(e)(2). A source causing the SSI over background levels other than the CCR unit was not identified at that time and an Assessment Monitoring program was initiated on July 16, 2018.

The Assessment Monitoring program has been established to meet the requirements of 40 CFR § 257.95. As required by § 257.95, the statistical evaluation of the detected Appendix IV constituents determined there were SSLs above GWPS for arsenic and lithium. Therefore, an assessment of corrective measures and a nature and extent was initiated per §257.95(g)(3) on May 15, 2019. However, prior to completing the assessment of corrective measure and the evaluation of the nature and extent of arsenic and lithium, Haley & Aldrich documented naturally occurring conditions that exist within the uppermost shallow alluvial aquifer responsible for the mobilizing naturally occurring arsenic and lithium and certified the ASD on October 9, 2019. Based on the statistical evaluation for the 2021 data, no new SSLs were identified (Appendix A). Therefore, at the end of the current annual reporting period (December 31, 2021), Slurry Pond 3 & 4 will remain in assessment monitoring in 2022.

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.

Other information including development of groundwater protection standards, recording groundwater monitoring results in the operating record, and an evaluation of alternate sources is discussed in preceding sections.

As specified in § 257.93(c), the groundwater flow rate was calculated to be 0.026 ft/day (9.5 ft/yr) for February - March 2021 and 0.034 ft/day (12 ft/yr) for July 2021. Pond closure operations have contributed to a dynamic environment in which historic radial groundwater flow direction may be altered on a permanent or temporary basis. Data from 2021 suggests this may have occurred, but the evaluation was inconclusive because pond water levels were not measured. Groundwater levels will continue to be monitored throughout 2022, including measurements of pond water levels, to determine if flow direction has changed or if additional piezometers or monitoring wells are necessary.

TABLES

**TABLE 1 - Summary of Analytical Results
Winyah Generating Station Slurry Pond 3 and 4 Assessment Monitoring**

Well ID	Purpose	Date of Sample Event	Laboratory Sample ID Number	Appendix III Constituents										Appendix IV Constituents														Field Parameters										
				Boron	Calcium	Chloride	Fluoride	Sulfate	Total Dissolved Solids	pH	Antimony	Arsenic	Barium	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226	Radium 228	Radium 226/Radium 228 Combined Calculation	Selenium	Thallium	Depth to Groundwater	Groundwater Elevation	pH	Specific Conductivity	Temperature	Oxidation Reduction Potential	Turbidity	Dissolved Oxygen		
				ug/L	mg/L	mg/L	mg/L	mg/L	SM 2540C	SU	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	Feet (btoc)	Feet (msl)	SU	uS	C	mv	NTU	ppm
				Method	EPA 6010D	EPA 6020B	EPA 300.0	EPA 300.0	EPA 300.0	SM 2540C		EPA 6020B	EPA 6020B	EPA 6010D	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6010D	EPA 7470	EPA 6010D	EPA 903.1 Mod	EPA 904.0	EPA 903.1 Mod	EPA 6020B	EPA 6020B	Feet (btoc)	Feet (msl)	SU	uS	C	mv <td>NTU</td> <td>ppm</td>	NTU	ppm	
				GWPS/US EPA MCL/RSL	---	---	---	4	---	---	---	6	10	2000	2000	4	5	100	6	4	15	40	2	100	---	---	5	50	2	---	---	---	---	---	---	---	---	
Site Background Wells																																						
WAP-1	Background	2/15/2021	AE96379		24	2.1	7.18	<0.10	24.6	67.5	4.2	<5.0	8.3		52.9	<0.50	<0.50	<5.0	1.5	<0.10	<1.0	<10	<0.2	<10	0.422	1.34	1.76	<10.0	<1.0	4.16	25.28	4.2	85	14.13	227	0	0.65	
WAP-1	Background	7/20/2021	AF09050		26	2.2	8.76	<0.10	27.8	78.75	4.24	<5.0	<5.0		54.7	<0.50	<0.50	<5.0	1.6	<0.10	<1.0	<10	<0.2	<10	1.05	3.96	5.01	<10.0	<1.0	6.14	1.05	23.3	4.24	88	28.33	133	0.9	0.44
WAP-1	total samples				2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
WBW-1	Background	2/15/2021	AE96412		<15	0.51	1.77	<0.10	6.41	32.5	4.2	<5.0	<5.0		9.7	<0.50	<0.50	<5.0	<0.50	<0.10	<1.0	<10	<0.2	<10	0.453	1.24	1.69	<10.0	<1.0	3.32	28.65	4.2	28	14.41	339	0	0.72	
WBW-1	Background	7/20/2021	AF09083		<15	1.2	4.62	<0.10	5.84	68.75	4.77	<5.0	<5.0		23.7	<0.50	<0.50	<5.0	2.3	<0.10	<1.0	<10	<0.2	<10	0.602	0.024	0.626	<10.0	<1.0	18.27	13.7	4.77	42	24.72	121	0	0.68	
WBW-1	total samples				2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Slurry Pond 3 & 4 Wells																																						
WAP-4	Assessment	2/23/2021	AE96382			55.6	7.02	<0.10	9.16	238.8	7.12	<5.0	<5.0		47.8	<0.50	<0.50	<5.0	<0.50	<0.10	<1.0	<10	<0.2	<10	1.45	0.524	1.97	<10.0	<1.0	5.9	14.44	7.12	298	19.76	-38	11.3	0.4	
WAP-4	Assessment	7/19/2021	AF09053		180	54.4	9.41	<0.10	10.2	308.8	7.19	<5.0	<5.0		42	<0.50	<0.50	<5.0	<0.50	<0.10	<1.0	<10	<0.2	<10	1.4	-1.03	1.4	<10.0	<1.0	7.29	13.05	7.19	296	26.26	-109	0	0.58	
WAP-4	total samples				1	2	2	2	2	2	2	1	2	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2	1	2	2	2	2	2	2	2	2	
WAP-14	Assessment	2/25/2021	AE96394		6000	697	880	0.59	645	3056	7.16	<5.0	12.5	50.7		<0.50	<0.50	<5.0	<0.50	0.59	<1.0	<10	<0.2	<10	0.982	1.4	2.38	<10.0	<1.0	3.8	10.89	7.16	3590	22.67	-336	0	10.2	
WAP-14	Duplicate	2/25/2021	AE96395		6200	724	906	0.62	653	3156		<5.0	12.6	52.5		<0.50	<0.50	<5.0	<0.50	0.62	<1.0	<10	<0.2	<10	1.25	2.32	3.58	<10.0	<1.0									
WAP-14	Assessment	7/10/2021	AF09065		8600	1060	1560	0.28	977	5172	7.33		14.1		50.3		<0.50	<0.50	<5.0	<0.50	0.28	<1.0	<10	<0.2	<10	1.21	0.453	1.67	<10.0	<1.0	4.46	10.23	7.33	5950	25.91	-385	0	3.94
WAP-14	Duplicate	7/10/2021	AF09066		8700	1068	1590	0.28	1030	5419			13.3		49.6		<0.50	<0.50	<5.0	<0.50	0.28	<1.0	<10	<0.2	<10	1.15	2.67	3.81	<10.0	<1.0								
WAP-14	total samples				4	4	4	4	4	4	4	2	4	2	4	2	4	4	4	4	4	4	2	4	4	4	4	4	2	2	2	2	2	2	2	2	2	
WAP-14A	CMA/NE	2/25/2021	AE96396								6.98		<5.0																2.04	11.91	6.98	4410	23.96	-372	48.5	9.77		
WAP-14A	CMA/NE	7/10/2021	AF09067								6.92		<5.0																3.04	10.91	6.92	4610	26.73	-352	0	4.63		
WAP-14A	total samples				0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	
WAP-14B	CMA/NE	2/25/2021	AE96397								6.63		<5.0																4.48	4.75	6.63	3570	26.4	-358	0	7.7		
WAP-14B	CMA/NE	7/19/2021	AF09068								6.57		<5.0																5.44	3.79	6.57	3710	22.05	-380	3.8	2.59		
WAP-14B	total samples				0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	
WAP-14C	CMA/NE	2/25/2021	AE96398								6.75		<5.0																8.38	5.5	6.75	898	21.39	-121	0	4.03		
WAP-14C	CMA/NE	7/19/2021	AF09069								6.92		<5.0																10.33	3.55	6.92	1120	24.03	-132	0	0.54		
WAP-14C	total samples				0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	
WAP-15	Assessment	2/25/2021	AE96399		3400	240	421	0.14	169	1185	6.47	<5.0	<5.0	234		<0.50	<0.50	<5.0	<0.50	0.14	<1.0	23	<0.2	<10	2.34	2.01	4.35	<10.0	<1.0	6.18	14.23	6.47	1580	22.24	-107	0	0.52	
WAP-15	Assessment	7/19/2021	AF09070		1000	102	177	0.12	75.1	656.2	5.97		<5.0		120		<0.50	<0.50	<5.0	<0.50	0.12	<1.0	<10	<0.2	<10	0.983	-0.396	0.983		7.02	13.39	5.97	704	23.66	-42	0	0.55	
WAP-15	total samples				2	2	2	2	2	2	2	1	2	1	1	1	1	1	2	2	2	2	1	1	2	2	2	2	1	1	2	2	2	2	2	2	2	
WAP-16	Assessment	3/4/2021	AE96400		1600	191	153	0.24	188	1008	6.72	<5.0	<5.0	97.9		<0.50	<0.50	<5.0	<0.50	0.24	<1.0	<10	<0.2	<10	1.49	0.524	2.01	<10.0	<1.0	6.5	18.56	6.72	1440	21.59	-77	9.9	0.44	
WAP-16	Assessment	7/20/2021	AF09071		1500	234	238	0.15	248	1205	6.59		<5.0		94.5		<0.50	<0.50	<5.0	<0.50	0.15	<1.0	<10	<0.2	<10	1.52	1.78	3.31		6.91	18.17	6.59	1700	27.3	-89	0	1.91	
WAP-16	total samples				2	2	2	2	2	2	2	1	2	1	1	1	1	2	2	2	2	1	1	2	2	2	2	2	1	1	2	2	2	2	2	2	2	





All groundwater samples collected from the monitoring wells for Assessment Monitoring in 2021 for the constituents listed in Appendix III and Appendix IV 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), and Rogers & Callco, Inc. (Certification # 23105001).

Notes: 1. Some groundwater monitoring wells are sampled for both Federal CCR and State Permit program compliance. Applicable analytical results from the State Permit program have been included in this summary table. All background and downgradient compliance wells have been sampled to meet § 257.95. 2. The Corrective Measures Assessment/Nature & Extent (CMA/NE) wells were not sampled to comply with § 257.95(g)(iv) as the CCR Unit had already moved out of the CMA/NE monitoring program. These wells continue to provide additional insight to the nature & extent of the plume during corrective action. Moving forward, all CMA/NE wells will be sampled to comply with § 257.95(g)(iv) or § 257.98(a)(1).

FIGURES

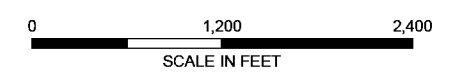
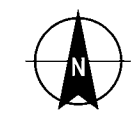


LEGEND

-  BACKGROUND WELL
-  SLURRY POND 3&4 MONITORING WELL
-  CCR UNIT BOUNDARY
-  PROPERTY BOUNDARY

NOTES

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



SANTEE COOPER
 WINYAH GENERATING STATION
 GEORGETOWN, SOUTH CAROLINA

**LOCATION OF SLURRY POND 3 & 4
 GROUNDWATER MONITORING WELLS
 FOR CCR COMPLIANCE**

Appendix A – Statistical Analysis



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

TECHNICAL MEMORANDUM

July 28, 2021
File No. 132892-016

SUBJECT: 2021 Semi-annual Groundwater Assessment Monitoring Data
Statistical Evaluation
Winyah Generating Station
Slurry Pond 3 & 4

Pursuant to Title 40 Code of Federal Regulations (40 CFR) § 257.93 and 257.95 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the February 2021 semi-annual assessment monitoring event for Slurry Pond 3&4 at the Winyah Generating Station (WGS). The statistical evaluation discussed in this memorandum was conducted to continue to evaluate the Appendix IV groundwater monitoring constituents for the presence of statistically significant levels (SSLs) above Groundwater Protection Standards (GWPS) consistent with the requirements in 40 CFR § 257.95.

Utilizing a combination of interwell and intrawell evaluations, data from the groundwater sampling events for the downgradient monitoring wells were compared to the GWPS established from the background dataset for the upgradient monitoring wells (WAP-1 and WBW-1) for detected Appendix IV constituents. GWPS for each of the Appendix IV constituents have been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or background concentration. The results of the groundwater assessment monitoring statistical evaluation are discussed below and provided in Table I.

Statistical Evaluation of Appendix IV Constituents

The Rule provides four specific options for statistical evaluation of groundwater quality data collected at a coal combustion residual (CCR) unit (40 CFR §257.93(f) (1-4)). The statistical method used for these evaluations, tolerance limit (TL), was certified by Haley & Aldrich, Inc. on October 14, 2017. The TL method, as determined applicable for this sampling event, was used to evaluate potential SSLs above GWPS. Background levels for each constituent listed in Appendix IV were computed as upper tolerance limits (UTL), and a minimum 95 percent confidence coefficient and 95 percent coverage. The most recent groundwater sampling event from each compliance well was compared to the corresponding GWPS to determine if a SSL existed.

STATISTICAL EVALUATION

Either an interwell or intrawell evaluation was used to determine SSLs. A successful alternate source demonstration was completed for arsenic (WAP-14) and lithium (WAP-15). As a result, an intrawell

evaluation was used for these constituents at these locations. Interwell evaluations were performed for the other Appendix IV constituents detected downgradient of Slurry Pond 3 & 4. Interwell evaluation compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data, and the intrawell evaluation compares the most recent values from each compliance well against a background dataset composed of its own historical data. Because the CCR unit has transitioned into assessment monitoring, statistical evaluations were not conducted on Appendix III (detection monitoring) semi-annual assessment monitoring data.

The parametric TL methods were used to complete statistical evaluations of the referenced dataset. The TL procedure is one in which a concentration limit for each constituent is established from the distribution of the background data, with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is called the UTL. Depending on the data distribution, parametric or non-parametric TL procedures are used to evaluate groundwater monitoring data using this method. Parametric TLs utilize normally distributed data or normalized data via a transformation of the sample background data used to construct the limit. 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 TL. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

These statistical evaluations were conducted using a background dataset for all detected Appendix IV constituents using parametric TL. If an Appendix IV constituent concentration from the February 2021 sampling event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate if a SSL was present. The LCL is the lower end of the confident interval range, which is an estimated concentration range intended to contain the true mean or median of the population from which the sample is drawn. The confidence interval range is designed to locate the true population mean or median with a high degree of statistical confidence, or conversely, with a low probability of error.

The UTLs were calculated from the background well dataset using Chemstat software after testing for outlier sample results that would warrant removal from the dataset based on likely error in sampling or measurement. Both visual and statistical outlier tests for the background data were performed using Chemstat and U.S. Environmental Protection Agency's ProUCL 5.1 software, and a visual inspection of the data was performed using box plots and distribution plots for the downgradient sample data. No sample data were identified as outliers that warranted removal from the dataset.

BACKGROUND DISTRIBUTIONS

The groundwater analytical results for each sampling event from the background sample location (WAP-1 and WBW-1) were combined to calculate the UTL for each detected Appendix IV constituent. The variability and distribution of the pooled dataset was evaluated to determine the method for UTL calculation. Per the document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009*, background concentrations were updated for the February 2020 semi-annual sampling event based on statistical evaluation of analytical results collected through February 2020. The background dataset will be updated again in February 2022 per the Unified Guidance.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

The sample concentrations from the downgradient wells for each of the detected Appendix IV constituents from the February 2021 assessment monitoring event were compared to their respective GWPS (Table I). A sample concentration greater than the GWPS is considered to represent a SSL. Based on previous compliance sampling event, statistical evaluations, and associated alternative source demonstrations, an intrawell comparison is utilized for WAP-14 and WAP-15 for arsenic and lithium respectively. Interwell comparisons are being utilized for all other well and constituent evaluations. Based on this statistical evaluation SSLs above GWPS were not identified at the WGS Slurry Pond 3&4 and Slurry Pond 3/4 will remain in assessment monitoring.

Tables:

Table I – Summary of Assessment Monitoring Statistical Evaluation – February 2021

TABLES

CCR Appendix-IV: Radium-226 & 228 (pCi/L)																							
WBW-1	8/15	47%	0-4	3.07	4	4.302	4.33	2.396	1.548	0.5042	5	pCi/L	N	0	0	No	No	Decrease	Non-parametric	6.0	6.0	N	FALSE
WAP-01	10/15	33%	4-4	3.43	4	5.809	5.97	2.591	1.61	0.4694	5	pCi/L	Y	2	0	Yes	No	Decrease	Non-parametric			N	FALSE
WAP-04	13/16	19%	4-4	3.48	4	5.735	5.99	2.739	1.655	0.4751	5	pCi/L	Y	3	0	Yes	No	Stable	Normal	1.970	Y	N	FALSE
WAP-14	14/16	12%	4-4	3.93	4.165	6.26	7.4	3.051	1.747	0.445	5	pCi/L	Y	4	0	No	No	Stable	Normal	2.380	Y	N	FALSE
WAP-15	16/16	0%	-	4.75	4.74	6.665	6.92	1.899	1.378	0.2902	5	pCi/L	Y	6	0	Yes	No	Stable	Normal	4.350	Y	N	FALSE
WAP-16	15/16	6%	4-4	4.21	4.215	7.305	8.4	4.362	2.089	0.496	5	pCi/L	Y	6	0	No	No	Stable	Normal	2.010	Y	N	FALSE
CCR Appendix-IV: Selenium, Total (mg/L)																							
WBW-1	0/14	100%	0.01-0.02	0.0114	0.01	0.02		0.0001319	0.003631	0.3177	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.020	0.050	N	FALSE
WAP-01	0/16	100%	0.01-0.02	0.0112	0.01	0.02		0.0001167	0.003416	0.3036	0.05	mg/L	N	0	0	NA	NA	NA	NA			N	FALSE
WAP-04	0/17	100%	0.005-0.02	0.0106	0.01	0.02		0.0001526	0.003906	0.3689	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.010	N	N	FALSE
WAP-14	1/13	92%	0.01-0.02	0.0109	0.01	0.02	0.0021	0.0002093	0.004575	0.4185	0.05	mg/L	N	0	0	No	No	NA	Non-parametric	0.010	N	N	FALSE
WAP-15	1/13	92%	0.01-0.02	0.0108	0.01	0.02	0.00095	0.0002272	0.004767	0.4397	0.05	mg/L	N	0	0	No	No	NA	Non-parametric	0.010	N	N	FALSE
WAP-16	0/13	100%	0.005-0.02	0.0112	0.01	0.02		0.0001731	0.00416	0.373	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.010	N	N	FALSE
CCR Appendix-IV: Thallium, Total (mg/L)																							
WBW-1	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	0.001	N	FALSE
WAP-01	0/13	100%	0.0001-0.001	0.000931	0.001	0.001		6.231E-08	0.0002496	0.2682	0.002	mg/L	N	0	0	NA	NA	NA	NA			N	FALSE
WAP-04	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N	N	FALSE
WAP-14	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N	N	FALSE
WAP-15	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N	N	FALSE
WAP-16	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	0.001	N	N	FALSE



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

TECHNICAL MEMORANDUM

November 8, 2021
File No. 132892-016

SUBJECT: 2021 Semi-annual Groundwater Assessment Monitoring Data
Statistical Evaluation
Winyah Generating Station
Slurry Pond 3 & 4

Pursuant to Title 40 Code of Federal Regulations (40 CFR) § 257.93 and 257.95 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained for the July 2021 semi-annual assessment monitoring event for Slurry Pond 3&4 at the Winyah Generating Station (WGS). The statistical evaluation discussed in this memorandum was conducted to continue to evaluate the Appendix IV groundwater monitoring constituents for the presence of statistically significant levels (SSLs) above Groundwater Protection Standards (GWPS) consistent with the requirements in 40 CFR § 257.95.

Utilizing a combination of interwell and intrawell evaluations, data from the groundwater sampling events for the downgradient monitoring wells were compared to the GWPS established from the background dataset for the upgradient monitoring wells (WAP-1 and WBW-1) for detected Appendix IV constituents. GWPS for each of the Appendix IV constituents have been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or background concentration. The results of the groundwater assessment monitoring statistical evaluation are discussed below and provided in Table I.

Statistical Evaluation of Appendix IV Constituents

The Rule provides four specific options for statistical evaluation of groundwater quality data collected at a coal combustion residual (CCR) unit (40 CFR §257.93(f) (1-4)). The statistical method used for these evaluations, tolerance limit (TL), was certified by Haley & Aldrich, Inc. on October 14, 2017. The TL method, as determined applicable for this sampling event, was used to evaluate potential SSLs above GWPS. Background levels for each constituent listed in Appendix IV were computed as upper tolerance limits (UTL), and a minimum 95 percent confidence coefficient and 95 percent coverage. The most recent groundwater sampling event from each compliance well was compared to the corresponding GWPS to determine if a SSL existed.

STATISTICAL EVALUATION

Either an interwell or intrawell evaluation was used to determine SSLs. A successful alternate source demonstration was completed for arsenic (WAP-14) and lithium (WAP-15). As a result, an intrawell

evaluation was used for these constituents at these locations. Interwell evaluations were performed for the other Appendix IV constituents detected downgradient of Slurry Pond 3 & 4. Interwell evaluation compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data, and the intrawell evaluation compares the most recent values from each compliance well against a background dataset composed of its own historical data. Because the CCR unit has transitioned into assessment monitoring, statistical evaluations were not conducted on Appendix III (detection monitoring) semi-annual assessment monitoring data.

The parametric TL methods were used to complete statistical evaluations of the referenced dataset. The TL procedure is one in which a concentration limit for each constituent is established from the distribution of the background data, with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is called the UTL. Depending on the data distribution, parametric or non-parametric TL procedures are used to evaluate groundwater monitoring data using this method. Parametric TLs utilize normally distributed data or normalized data via a transformation of the sample background data used to construct the limit. 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 TL. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

These statistical evaluations were conducted using a background dataset for all detected Appendix IV constituents using parametric TL. If an Appendix IV constituent concentration from the July 2021 sampling event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate if an SSL was present. The LCL is the lower end of the confident interval range, which is an estimated concentration range intended to contain the true mean or median of the population from which the sample is drawn. The confidence interval range is designed to locate the true population mean or median with a high degree of statistical confidence, or conversely, with a low probability of error.

The UTLs were calculated from the background well dataset using Chemstat software after testing for outlier sample results that would warrant removal from the dataset based on likely error in sampling or measurement. Both visual and statistical outlier tests for the background data were performed using Chemstat and U.S. Environmental Protection Agency's ProUCL 5.1 software, and a visual inspection of the data was performed using box plots and distribution plots for the downgradient sample data. No sample data were identified as outliers that warranted removal from the dataset.

BACKGROUND DISTRIBUTIONS

The groundwater analytical results for each sampling event from the background sample location (WAP-1 and WBW-1) were combined to calculate the UTL for each detected Appendix IV constituent. The variability and distribution of the pooled dataset was evaluated to determine the method for UTL calculation. Per the document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, March 2009*, background concentrations were updated for the February 2020 semi-annual sampling event based on statistical evaluation of analytical results collected through February 2020. The background dataset will be updated again in February 2022 per the Unified Guidance.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

The sample concentrations from the downgradient wells for each of the detected Appendix IV constituents from the July 2021 assessment monitoring event were compared to their respective GWPS (Table I). A sample concentration greater than the GWPS is considered to represent a SSL. Based on previous compliance sampling event, statistical evaluations, and associated alternative source demonstrations, an intrawell comparison is utilized for WAP-14 and WAP-15 for arsenic and lithium respectively. Interwell comparisons are being utilized for all other well and constituent evaluations. Based on this statistical evaluation SSLs above GWPS were not identified at the WGS Slurry Pond 3&4 and Slurry Pond 3/4 will remain in assessment monitoring.

Tables:

Table I – Summary of Assessment Monitoring Statistical Evaluation – July 2021

TABLES

Appendix B – Laboratory Analytical Reports



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96379 **Location:** GW Well WAP-1 **Date:** 02/15/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-1 **Time:** 13:37

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	8.3	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Barium	52.9	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Boron	24.0	ug/L	12/30/1999	R&C	EPA 6010D
Calcium	2.1	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Cobalt	1.5	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Iron	4930	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	12/30/1999	R&C	EPA 7470
Lithium	<10	ug/L	12/30/1999	R&C	EPA 6010D
Molybdenum	<10	ug/L	12/30/1999	R&C	EPA 6010D
Lead	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Radium 226	0.422	pCi/L	03/12/2021	GEL	EPA 903.1 Mod
Radium 228	1.34	pCi/L	03/03/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.76	pCi/L	03/16/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	7.18	mg/L	02/18/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	02/18/2021	KCWELLS	EPA 300.0
Sulfate	24.6	mg/L	02/18/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	67.50	mg/L	02/19/2021	KCWELLS	SM 2540C
pH	4.20	SU	02/15/2021	DEW/MDG	
Spec. Cond.	85.0	uS	02/15/2021	DEW/MDG	
Dissolved Oxygen	0.650	ppm	02/15/2021	DEW/MDG	
Oxidation Reduction Potential	227	mv	02/15/2021	DEW/MDG	SM2580
Temp	14.13	C	02/15/2021	DEW/MDG	
Turbidity	0	NTU	02/15/2021	DEW/MDG	
Depth	4.16	Feet	02/15/2021	DEW/MDG	
Elevation	25.28	Feet	03/08/2021	DEWEST	
Aluminum	1.6	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Magnesium	0.79	mg/L	03/09/2021	SJHATCHE	EPA 6020B
Zinc	<10.0	ug/L	03/09/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09050 **Location:** GW Well WAP-1 **Date:** 07/20/2021 **Sample Collector:** MDG/BRT
Loc. Code WAP-1 **Time:** 12:28

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Barium	54.7	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Boron	26.0	ug/L	08/13/2021	R&C	EPA 6010D
Calcium	2.2	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Cobalt	1.6	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Iron	7890	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	08/09/2021	R&C	EPA 7470
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Radium 226	1.05	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	3.96	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	5.01	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	8.76	mg/L	07/28/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	07/28/2021	KCWELLS	EPA 300.0
Sulfate	27.8	mg/L	07/28/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	78.75	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	4.24	SU	07/20/2021	BRT/MDG	
Spec. Cond.	88	uS	07/20/2021	BRT/MDG	
Dissolved Oxygen	0.440	ppm	07/20/2021	BRT/MDG	
Oxidation Reduction Potential	133	mv	07/20/2021	BRT/MDG	SM2580
Temp	28.33	C	07/20/2021	BRT/MDG	
Turbidity	0.900	NTU	07/20/2021	BRT/MDG	
Depth	6.14	Feet	07/20/2021	BRT/MDG	
Elevation	23.30	Feet	08/18/2021	MDGOINGS	
Aluminum	1.1	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Magnesium	0.66	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Zinc	33.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96412 **Location:** GW Well WBW-1 **Date:** 02/15/2021 **Sample Collector:** MDG/DEW
Loc. Code WBW-1 **Time:** 12:21

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Barium	9.7	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Boron	<15	ug/L	12/30/1999	R&C	EPA 6010D
Calcium	0.51	mg/L	03/25/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	12/30/1999	R&C	EPA 7470
Lithium	<10	ug/L	12/30/1999	R&C	EPA 6010D
Molybdenum	<10	ug/L	12/30/1999	R&C	EPA 6010D
Lead	<1.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Radium 226	0.453	pCi/L	03/12/2021	GEL	EPA 903.1 Mod
Radium 228	1.24	pCi/L	03/03/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.69	pCi/L	03/16/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1.77	mg/L	02/18/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	02/18/2021	KCWELLS	EPA 300.0
Sulfate	6.41	mg/L	02/18/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	32.50	mg/L	02/22/2021	KCWELLS	SM 2540C
pH	4.20	SU	02/15/2021	DEW/MDG	
Spec. Cond.	28.0	uS	02/15/2021	DEW/MDG	
Dissolved Oxygen	0.720	ppm	02/15/2021	DEW/MDG	
Oxidation Reduction Potential	339	mv	02/15/2021	DEW/MDG	SM2580
Temp	14.41	C	02/15/2021	DEW/MDG	
Turbidity	0	NTU	02/15/2021	DEW/MDG	
Depth	3.32	Feet	02/15/2021	DEW/MDG	
Elevation	28.65	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09083 **Location:** GW Well WBW-1 **Date:** 07/20/2021 **Sample Collector:** MDG/BRT
Loc. Code WBW-1 **Time:** 11:07

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Barium	23.7	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Boron	<15	ug/L	08/13/2021	R&C	EPA 6010D
Calcium	1.2	mg/L	08/31/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Cobalt	2.3	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Chromium	5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	08/09/2021	R&C	EPA 7470
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Radium 226	0.602	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	0.0240	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	0.626	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	4.62	mg/L	07/28/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	07/28/2021	KCWELLS	EPA 300.0
Sulfate	5.84	mg/L	07/28/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	68.75	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	4.77	SU	07/20/2021	BRT/MDG	
Spec. Cond.	42.0	uS	07/20/2021	BRT/MDG	
Dissolved Oxygen	0.690	ppm	07/20/2021	BRT/MDG	
Oxidation Reduction Potential	121	mv	07/20/2021	BRT/MDG	SM2580
Temp	24.72	C	07/20/2021	BRT/MDG	
Turbidity	0	NTU	07/20/2021	BRT/MDG	
Depth	18.27	Feet	07/20/2021	BRT/MDG	
Elevation	13.70	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96382 **Location:** GW Well WAP-4 **Date:** 02/23/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-4 **Time:** 14:28

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Barium	47.8	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Calcium	55.6	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Iron	2640	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Radium 226	1.45	pCi/L	03/04/2021	GEL	EPA 903.1 Mod
Radium 228	0.524	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.97	pCi/L	03/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	7.02	mg/L	02/26/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	02/26/2021	KCWELLS	EPA 300.0
Sulfate	9.16	mg/L	02/26/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	238.8	mg/L	03/01/2021	KCWELLS	SM 2540C
pH	7.12	SU	02/23/2021	DEW/MDG	
Spec. Cond.	298	uS	02/23/2021	DEW/MDG	
Dissolved Oxygen	0.400	ppm	02/23/2021	DEW/MDG	
Oxidation Reduction Potential	-38.0	mv	02/23/2021	DEW/MDG	SM2580
Temp	19.76	C	02/23/2021	DEW/MDG	
Turbidity	11.3	NTU	02/23/2021	DEW/MDG	
Depth	5.90	Feet	02/23/2021	DEW/MDG	
Elevation	14.44	Feet	03/08/2021	DEWEST	
Aluminum	0.90	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Magnesium	4.1	mg/L	03/09/2021	SJHATCHE	EPA 6020B
Zinc	20.7	ug/L	03/09/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09053	Location: GW Well WAP-4	Date: 07/19/2021	Sample Collector: BRT/CWS
Loc. Code WAP-4		Time: 11:24	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Barium	42.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Boron	180	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	54.4	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Iron	823	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Radium 226	1.40	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	-1.03	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.40	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	9.41	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	10.2	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	308.8	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	7.19	SU	07/19/2021	BRT/CS	
Spec. Cond.	296	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	0.580	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-109	mv	07/19/2021	BRT/CS	SM2580
Temp	26.26	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	7.29	Feet	07/19/2021	BRT/CS	
Elevation	13.05	Feet	08/18/2021	MDGOINGS	
Aluminum	<0.10	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Magnesium	4.1	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Zinc	<10.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96394 **Location:** GW Well WAP-14 **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14 **Time:** 11:10

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.5	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6000	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	697	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	0.982	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	1.40	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	2.38	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	880	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.59	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	645	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3056	mg/L	03/05/2021	KCWELLS	SM 2540C
pH	7.16	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3590	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	10.2	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-336	mv	02/25/2021	DEW/MDG	SM2580
Temp	22.67	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	3.80	Feet	02/25/2021	DEW/MDG	
Elevation	10.89	Feet	03/08/2021	DEWEST	
Barium	50.7	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96395	Location: GW Well WAP-14	Date: 02/25/2021	Sample Collector: MDG/DEW
Loc. Code WAP-14	Duplicate	Time: 11:15	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.6	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6200	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	724	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	1.25	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	2.32	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.58	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Chloride	906	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.62	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	653	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3156	mg/L	03/05/2021	KCWELLS	SM 2540C
Barium	52.5	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09065 **Location:** GW Well WAP-14 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-14 **Time:** 14:22

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8600	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	0.453	pCi/L	08/24/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	977	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5172	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	7.33	SU	07/19/2021	BRT/CS	
Spec. Cond.	5950	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	3.84	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-385	mv	07/19/2021	BRT/CS	SM2580
Temp	25.91	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	4.46	Feet	07/19/2021	BRT/CS	
Elevation	10.23	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09066	Location: GW Well WAP-14	Date: 07/19/2021	Sample Collector: BRT/CWS
Loc. Code WAP-14	DUP	Time: 14:27	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5419	mg/L	07/27/2021	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 - Supervisor Analytical Services



One Riverwood Drive
 P.O. Box 2946101
 Moncks Corner, SC 29461-2901
 (843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96394 **Location:** GW Well WAP-14 **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14 **Time:** 11:10

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.5	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6000	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	697	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	0.982	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	1.40	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	2.38	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	880	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.59	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	645	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3056	mg/L	03/05/2021	KCWELLS	SM 2540C
pH	7.16	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3590	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	10.2	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-336	mv	02/25/2021	DEW/MDG	SM2580
Temp	22.67	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	3.80	Feet	02/25/2021	DEW/MDG	
Elevation	10.89	Feet	03/08/2021	DEWEST	
Barium	50.7	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96395	Location: GW Well WAP-14	Date: 02/25/2021	Sample Collector: MDG/DEW
Loc. Code WAP-14	Duplicate	Time: 11:15	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.6	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6200	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	724	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	1.25	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	2.32	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.58	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Chloride	906	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.62	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	653	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3156	mg/L	03/05/2021	KCWELLS	SM 2540C
Barium	52.5	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09065 **Location:** GW Well WAP-14 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-14 **Time:** 14:22

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8600	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	0.453	pCi/L	08/24/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	977	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5172	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	7.33	SU	07/19/2021	BRT/CS	
Spec. Cond.	5950	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	3.84	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-385	mv	07/19/2021	BRT/CS	SM2580
Temp	25.91	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	4.46	Feet	07/19/2021	BRT/CS	
Elevation	10.23	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample #	AF09066	Location:	GW Well WAP-14	Date:	07/19/2021	Sample Collector:	BRT/CWS
Loc. Code	WAP-14		DUP	Time:	14:27		

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5419	mg/L	07/27/2021	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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96396 **Location:** GW Well WAP-14A **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14A **Time:** 14:48

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	36.0	ug/L	03/04/2021	R&C	EPA 6010D
pH	6.98	SU	02/25/2021	DEW/MDG	
Spec. Cond.	4410	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	9.77	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-372	mv	02/25/2021	DEW/MDG	SM2580
Temp	23.96	C	02/25/2021	DEW/MDG	
Turbidity	48.5	NTU	02/25/2021	DEW/MDG	
Depth	2.04	Feet	02/25/2021	DEW/MDG	
Elevation	11.91	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09067 **Location:** GW Well WAP-14A **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-14A **Time:** 13:46

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	5.5	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	40.0	ug/L	08/10/2021	R&C	EPA 6010D
pH	6.92	SU	07/19/2021	BRT/CS	
Spec. Cond.	4610	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	4.63	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-352	mv	07/19/2021	BRT/CS	SM2580
Temp	26.73	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	3.04	Feet	07/19/2021	BRT/CS	
Elevation	10.91	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96397 **Location:** GW Well WAP-14B **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14B **Time:** 13:56

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	12.0	ug/L	03/04/2021	R&C	EPA 6010D
pH	6.63	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3570	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	7.70	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-358	mv	02/25/2021	DEW/MDG	SM2580
Temp	26.40	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	4.48	Feet	02/25/2021	DEW/MDG	
Elevation	4.75	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09068 **Location:** GW Well WAP-14B **Date:** 07/19/2021 **Sample Collector:** BRT/CWS

Loc. Code WAP-14B **Time:** 16:34

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	15.0	ug/L	08/10/2021	R&C	EPA 6010D
pH	6.57	SU	07/19/2021	BRT/CS	
Spec. Cond.	3710	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	2.59	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-380	mv	07/19/2021	BRT/CS	SM2580
Temp	22.05	C	07/19/2021	BRT/CS	
Turbidity	3.80	NTU	07/19/2021	BRT/CS	
Depth	5.44	Feet	07/19/2021	BRT/CS	
Elevation	3.79	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
 P.O. Box 2946101
 Moncks Corner, SC 29461-2901
 (843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96398 **Location:** GW Well WAP-14C **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14C **Time:** 12:20

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
pH	6.75	SU	02/25/2021	DEW/MDG	
Spec. Cond.	898	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	4.03	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-121	mv	02/25/2021	DEW/MDG	SM2580
Temp	21.39	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	8.38	Feet	02/25/2021	DEW/MDG	
Elevation	5.50	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09069 **Location:** GW Well WAP-14C **Date:** 07/19/2021 **Sample Collector:** BRT/CWS

Loc. Code WAP-14C **Time:** 15:39

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	13.0	ug/L	08/10/2021	R&C	EPA 6010D
pH	6.92	SU	07/19/2021	BRT/CS	
Spec. Cond.	1120	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	0.540	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-132	mv	07/19/2021	BRT/CS	SM2580
Temp	24.03	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	10.33	Feet	07/19/2021	BRT/CS	
Elevation	3.55	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96399 **Location:** GW Well WAP-15 **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-15 **Time:** 15:40

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	3400	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	240	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	23.0	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	2.34	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	2.01	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	4.35	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	421	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.14	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	169	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	1185	mg/L	03/05/2021	KCWELLS	SM 2540C
pH	6.47	SU	02/25/2021	DEW/MDG	
Spec. Cond.	1580	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	0.520	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-107	mv	02/25/2021	DEW/MDG	SM2580
Temp	22.24	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	6.18	Feet	02/25/2021	DEW/MDG	
Elevation	14.23	Feet	03/08/2021	DEWEST	
Barium	234	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09070 **Location:** GW Well WAP-15 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-15 **Time:** 10:30

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Barium	120	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Boron	1000	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	102	mg/L	08/31/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Radium 226	0.983	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Radium 228	-0.396	pCi/L	08/24/2021	GEL	EPA 904.0
Radium 226/228 Combined	0.983	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	177	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.12	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	75.1	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	656.2	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	5.97	SU	07/19/2021	BRT/CS	
Spec. Cond.	704	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	0.550	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-42.0	mv	07/19/2021	BRT/CS	SM2580
Temp	23.66	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	7.02	Feet	07/19/2021	BRT/CS	
Elevation	13.39	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96400 Location: GW Well WAP-16 Date: 03/04/2021 Sample Collector: DEW/ML
Loc. Code WAP-16 Time: 14:27

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	1600.0	ug/L	03/15/2021	R&C	EPA 6010D
Calcium	191	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/12/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/11/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/11/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	1.49	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	0.524	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	2.01	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	153	mg/L	03/10/2021	KCWELLS	EPA 300.0
Fluoride	0.24	mg/L	03/10/2021	KCWELLS	EPA 300.0
Sulfate	188	mg/L	03/10/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	1008	mg/L	03/09/2021	KCWELLS	SM 2540C
pH	6.72	SU	03/04/2021	DEW/ML	
Spec. Cond.	1440	uS	03/04/2021	DEW/ML	
Dissolved Oxygen	0.440	ppm	03/04/2021	DEW/ML	
Oxidation Reduction Potential	-77.0	mv	03/04/2021	DEW/ML	SM2580
Temp	21.59	C	03/04/2021	DEW/ML	
Turbidity	9.90	NTU	03/04/2021	DEW/ML	
Depth	6.50	Feet	03/04/2021	DEW/ML	
Elevation	18.58	Feet	03/08/2021	DEWEST	
Barium	97.9	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09071 **Location:** GW Well WAP-16 **Date:** 07/29/2021 **Sample Collector:** MDG/BRT
Loc. Code WAP-16 **Time:** 15:38

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Barium	94.5	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Boron	1500	ug/L	08/17/2021	R&C	EPA 6010D
Calcium	234	mg/L	08/31/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/17/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Radium 226	1.52	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	1.78	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	3.31	pCi/L	08/25/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	238	mg/L	08/11/2021	KCWELLS	EPA 300.0
Fluoride	0.15	mg/L	08/11/2021	KCWELLS	EPA 300.0
Sulfate	248	mg/L	08/11/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	1205	mg/L	08/10/2021	SJBROWN	SM 2540C
pH	6.59	SU	07/29/2021	BRT/MDG	
Spec. Cond.	1700	uS	07/29/2021	BRT/MDG	
Dissolved Oxygen	1.91	ppm	07/29/2021	BRT/MDG	
Oxidation Reduction Potential	-89.0	mv	07/29/2021	BRT/MDG	SM2580
Temp	27.30	C	07/29/2021	BRT/MDG	
Turbidity	0	NTU	07/29/2021	BRT/MDG	
Depth	6.91	Feet	07/29/2021	BRT/MDG	
Elevation	18.17	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96382 **Location:** GW Well WAP-4 **Date:** 02/23/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-4 **Time:** 14:28

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Barium	47.8	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Calcium	55.6	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Iron	2640	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Radium 226	1.45	pCi/L	03/04/2021	GEL	EPA 903.1 Mod
Radium 228	0.524	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.97	pCi/L	03/24/2021	GEL	EPA 903.1 Mod
Chloride	7.02	mg/L	02/26/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	02/26/2021	KCWELLS	EPA 300.0
Sulfate	9.16	mg/L	02/26/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	238.8	mg/L	03/01/2021	KCWELLS	SM 2540C
pH	7.12	SU	02/23/2021	DEW/MDG	
Spec. Cond.	298	uS	02/23/2021	DEW/MDG	
Dissolved Oxygen	0.400	ppm	02/23/2021	DEW/MDG	
Oxidation Reduction Potential	-38.0	mv	02/23/2021	DEW/MDG	SM2580
Temp	19.76	C	02/23/2021	DEW/MDG	
Turbidity	11.3	NTU	02/23/2021	DEW/MDG	
Depth	5.90	Feet	02/23/2021	DEW/MDG	
Elevation	14.44	Feet	03/08/2021	DEWEST	
Aluminum	0.90	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Magnesium	4.1	mg/L	03/09/2021	SJHATCHE	EPA 6020B
Zinc	20.7	ug/L	03/09/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09053 **Location:** GW Well WAP-4 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-4 **Time:** 11:24

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Barium	42.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Boron	180	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	54.4	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Iron	823	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Radium 226	1.40	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	-1.03	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.40	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	9.41	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	10.2	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	308.8	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	7.19	SU	07/19/2021	BRT/CS	
Spec. Cond.	296	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	0.580	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-109	mv	07/19/2021	BRT/CS	SM2580
Temp	26.26	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	7.29	Feet	07/19/2021	BRT/CS	
Elevation	13.05	Feet	08/18/2021	MDGOINGS	
Aluminum	<0.10	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Magnesium	4.1	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Zinc	<10.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96394 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW
Loc. Code WAP-14 Time: 11:10

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.5	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6000	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	697	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	0.982	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	1.40	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	2.38	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	880	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.59	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	645	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3056	mg/L	03/05/2021	KCWELLS	SM 2540C
pH	7.16	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3590	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	10.2	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-336	mv	02/25/2021	DEW/MDG	SM2580
Temp	22.67	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	3.80	Feet	02/25/2021	DEW/MDG	
Elevation	10.89	Feet	03/08/2021	DEWEST	
Barium	50.7	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96395	Location: GW Well WAP-14	Date: 02/25/2021	Sample Collector: MDG/DEW
Loc. Code WAP-14	Duplicate	Time: 11:15	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.6	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6200	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	724	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	1.25	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	2.32	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.58	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Chloride	906	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.62	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	653	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3156	mg/L	03/05/2021	KCWELLS	SM 2540C
Barium	52.5	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09065 **Location:** GW Well WAP-14 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-14 **Time:** 14:22

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8600	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	0.453	pCi/L	08/24/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	977	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5172	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	7.33	SU	07/19/2021	BRT/CS	
Spec. Cond.	5950	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	3.84	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-385	mv	07/19/2021	BRT/CS	SM2580
Temp	25.91	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	4.46	Feet	07/19/2021	BRT/CS	
Elevation	10.23	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09066	Location: GW Well WAP-14	Date: 07/19/2021	Sample Collector: BRT/CWS
Loc. Code WAP-14	DUP	Time: 14:27	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5419	mg/L	07/27/2021	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 - Supervisor Analytical Services



One Riverwood Drive
 P.O. Box 2946101
 Moncks Corner, SC 29461-2901
 (843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96394 **Location:** GW Well WAP-14 **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14 **Time:** 11:10

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.5	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6000	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	697	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	0.982	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	1.40	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	2.38	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	880	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.59	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	645	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3056	mg/L	03/05/2021	KCWELLS	SM 2540C
pH	7.16	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3590	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	10.2	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-336	mv	02/25/2021	DEW/MDG	SM2580
Temp	22.67	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	3.80	Feet	02/25/2021	DEW/MDG	
Elevation	10.89	Feet	03/08/2021	DEWEST	
Barium	50.7	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96395	Location: GW Well WAP-14	Date: 02/25/2021	Sample Collector: MDG/DEW
Loc. Code WAP-14	Duplicate	Time: 11:15	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	12.6	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	6200	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	724	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	1.25	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	2.32	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.58	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Chloride	906	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.62	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	653	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	3156	mg/L	03/05/2021	KCWELLS	SM 2540C
Barium	52.5	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09065 **Location:** GW Well WAP-14 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS

Loc. Code WAP-14 **Time:** 14:22

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8600	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	0.453	pCi/L	08/24/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	977	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5172	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	7.33	SU	07/19/2021	BRT/CS	
Spec. Cond.	5950	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	3.84	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-385	mv	07/19/2021	BRT/CS	SM2580
Temp	25.91	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	4.46	Feet	07/19/2021	BRT/CS	
Elevation	10.23	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09066	Location: GW Well WAP-14	Date: 07/19/2021	Sample Collector: BRT/CWS
Loc. Code WAP-14	DUP	Time: 14:27	

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5419	mg/L	07/27/2021	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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96396 **Location:** GW Well WAP-14A **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14A **Time:** 14:48

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	36.0	ug/L	03/04/2021	R&C	EPA 6010D
pH	6.98	SU	02/25/2021	DEW/MDG	
Spec. Cond.	4410	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	9.77	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-372	mv	02/25/2021	DEW/MDG	SM2580
Temp	23.96	C	02/25/2021	DEW/MDG	
Turbidity	48.5	NTU	02/25/2021	DEW/MDG	
Depth	2.04	Feet	02/25/2021	DEW/MDG	
Elevation	11.91	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09067 **Location:** GW Well WAP-14A **Date:** 07/19/2021 **Sample Collector:** BRT/CWS

Loc. Code WAP-14A **Time:** 13:46

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	5.5	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	40.0	ug/L	08/10/2021	R&C	EPA 6010D
pH	6.92	SU	07/19/2021	BRT/CS	
Spec. Cond.	4610	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	4.63	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-352	mv	07/19/2021	BRT/CS	SM2580
Temp	26.73	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	3.04	Feet	07/19/2021	BRT/CS	
Elevation	10.91	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
 P.O. Box 2946101
 Moncks Corner, SC 29461-2901
 (843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96397 **Location:** GW Well WAP-14B **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14B **Time:** 13:56

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	12.0	ug/L	03/04/2021	R&C	EPA 6010D
pH	6.63	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3570	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	7.70	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-358	mv	02/25/2021	DEW/MDG	SM2580
Temp	26.40	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	4.48	Feet	02/25/2021	DEW/MDG	
Elevation	4.75	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09068 **Location:** GW Well WAP-14B **Date:** 07/19/2021 **Sample Collector:** BRT/CWS

Loc. Code WAP-14B **Time:** 16:34

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	15.0	ug/L	08/10/2021	R&C	EPA 6010D
pH	6.57	SU	07/19/2021	BRT/CS	
Spec. Cond.	3710	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	2.59	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-380	mv	07/19/2021	BRT/CS	SM2580
Temp	22.05	C	07/19/2021	BRT/CS	
Turbidity	3.80	NTU	07/19/2021	BRT/CS	
Depth	5.44	Feet	07/19/2021	BRT/CS	
Elevation	3.79	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96398 **Location:** GW Well WAP-14C **Date:** 02/25/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-14C **Time:** 12:20

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
pH	6.75	SU	02/25/2021	DEW/MDG	
Spec. Cond.	898	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	4.03	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-121	mv	02/25/2021	DEW/MDG	SM2580
Temp	21.39	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	8.38	Feet	02/25/2021	DEW/MDG	
Elevation	5.50	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09069 **Location:** GW Well WAP-14C **Date:** 07/19/2021 **Sample Collector:** BRT/CWS

Loc. Code WAP-14C **Time:** 15:39

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	13.0	ug/L	08/10/2021	R&C	EPA 6010D
pH	6.92	SU	07/19/2021	BRT/CS	
Spec. Cond.	1120	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	0.540	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-132	mv	07/19/2021	BRT/CS	SM2580
Temp	24.03	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	10.33	Feet	07/19/2021	BRT/CS	
Elevation	3.55	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96399 Location: GW Well WAP-15 Date: 02/25/2021 Sample Collector: MDG/DEW
Loc. Code WAP-15 Time: 15:40

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	3400	ug/L	03/04/2021	R&C	EPA 6010D
Calcium	240	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/08/2021	R&C	EPA 7470
Lithium	23.0	ug/L	03/04/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/04/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	2.34	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	2.01	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	4.35	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	421	mg/L	03/04/2021	KCWELLS	EPA 300.0
Fluoride	0.14	mg/L	03/04/2021	KCWELLS	EPA 300.0
Sulfate	169	mg/L	03/04/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	1185	mg/L	03/05/2021	KCWELLS	SM 2540C
pH	6.47	SU	02/25/2021	DEW/MDG	
Spec. Cond.	1580	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	0.520	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-107	mv	02/25/2021	DEW/MDG	SM2580
Temp	22.24	C	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	6.18	Feet	02/25/2021	DEW/MDG	
Elevation	14.23	Feet	03/08/2021	DEWEST	
Barium	234	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09070 **Location:** GW Well WAP-15 **Date:** 07/19/2021 **Sample Collector:** BRT/CWS
Loc. Code WAP-15 **Time:** 10:30

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Barium	120	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Boron	1000	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	102	mg/L	08/31/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Radium 226	0.983	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Radium 228	-0.396	pCi/L	08/24/2021	GEL	EPA 904.0
Radium 226/228 Combined	0.983	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	177	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.12	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	75.1	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	656.2	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	5.97	SU	07/19/2021	BRT/CS	
Spec. Cond.	704	uS	07/19/2021	BRT/CS	
Dissolved Oxygen	0.550	ppm	07/19/2021	BRT/CS	
Oxidation Reduction Potential	-42.0	mv	07/19/2021	BRT/CS	SM2580
Temp	23.66	C	07/19/2021	BRT/CS	
Turbidity	0	NTU	07/19/2021	BRT/CS	
Depth	7.02	Feet	07/19/2021	BRT/CS	
Elevation	13.39	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96379 **Location:** GW Well WAP-1 **Date:** 02/15/2021 **Sample Collector:** MDG/DEW
Loc. Code WAP-1 **Time:** 13:37

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	8.3	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Barium	52.9	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Boron	24.0	ug/L	12/30/1999	R&C	EPA 6010D
Calcium	2.1	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Cobalt	1.5	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Iron	4930	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	12/30/1999	R&C	EPA 7470
Lithium	<10	ug/L	12/30/1999	R&C	EPA 6010D
Molybdenum	<10	ug/L	12/30/1999	R&C	EPA 6010D
Lead	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/08/2021	SJHATCHE	EPA 6020B
Radium 226	0.422	pCi/L	03/12/2021	GEL	EPA 903.1 Mod
Radium 228	1.34	pCi/L	03/03/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.76	pCi/L	03/16/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	7.18	mg/L	02/18/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	02/18/2021	KCWELLS	EPA 300.0
Sulfate	24.6	mg/L	02/18/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	67.50	mg/L	02/19/2021	KCWELLS	SM 2540C
pH	4.20	SU	02/15/2021	DEW/MDG	
Spec. Cond.	85.0	uS	02/15/2021	DEW/MDG	
Dissolved Oxygen	0.650	ppm	02/15/2021	DEW/MDG	
Oxidation Reduction Potential	227	mv	02/15/2021	DEW/MDG	SM2580
Temp	14.13	C	02/15/2021	DEW/MDG	
Turbidity	0	NTU	02/15/2021	DEW/MDG	
Depth	4.16	Feet	02/15/2021	DEW/MDG	
Elevation	25.28	Feet	03/08/2021	DEWEST	
Aluminum	1.6	mg/L	03/08/2021	SJHATCHE	EPA 6020B
Magnesium	0.79	mg/L	03/09/2021	SJHATCHE	EPA 6020B
Zinc	<10.0	ug/L	03/09/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09050 **Location:** GW Well WAP-1 **Date:** 07/20/2021 **Sample Collector:** MDG/BRT
Loc. Code WAP-1 **Time:** 12:28

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Barium	54.7	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Boron	26.0	ug/L	08/13/2021	R&C	EPA 6010D
Calcium	2.2	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Cobalt	1.6	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Iron	7890	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	08/09/2021	R&C	EPA 7470
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B
Radium 226	1.05	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	3.96	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	5.01	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	8.76	mg/L	07/28/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	07/28/2021	KCWELLS	EPA 300.0
Sulfate	27.8	mg/L	07/28/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	78.75	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	4.24	SU	07/20/2021	BRT/MDG	
Spec. Cond.	88	uS	07/20/2021	BRT/MDG	
Dissolved Oxygen	0.440	ppm	07/20/2021	BRT/MDG	
Oxidation Reduction Potential	133	mv	07/20/2021	BRT/MDG	SM2580
Temp	28.33	C	07/20/2021	BRT/MDG	
Turbidity	0.900	NTU	07/20/2021	BRT/MDG	
Depth	6.14	Feet	07/20/2021	BRT/MDG	
Elevation	23.30	Feet	08/18/2021	MDGOINGS	
Aluminum	1.1	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Magnesium	0.66	mg/L	08/24/2021	SJHATCHE	EPA 6020B
Zinc	33.0	ug/L	08/24/2021	SJHATCHE	EPA 6020B

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS


LAB CERTIFICATION #08552

Sample # AE96412 **Location:** GW Well WBW-1 **Date:** 02/15/2021 **Sample Collector:** MDG/DEW
Loc. Code WBW-1 **Time:** 12:21

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Barium	9.7	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Boron	<15	ug/L	12/30/1999	R&C	EPA 6010D
Calcium	0.51	mg/L	03/25/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	12/30/1999	R&C	EPA 7470
Lithium	<10	ug/L	12/30/1999	R&C	EPA 6010D
Molybdenum	<10	ug/L	12/30/1999	R&C	EPA 6010D
Lead	<1.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/25/2021	SJHATCHE	EPA 6020B
Radium 226	0.453	pCi/L	03/12/2021	GEL	EPA 903.1 Mod
Radium 228	1.24	pCi/L	03/03/2021	GEL	EPA 904.0
Radium 226/228 Combined	1.69	pCi/L	03/16/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	1.77	mg/L	02/18/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	02/18/2021	KCWELLS	EPA 300.0
Sulfate	6.41	mg/L	02/18/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	32.50	mg/L	02/22/2021	KCWELLS	SM 2540C
pH	4.20	SU	02/15/2021	DEW/MDG	
Spec. Cond.	28.0	uS	02/15/2021	DEW/MDG	
Dissolved Oxygen	0.720	ppm	02/15/2021	DEW/MDG	
Oxidation Reduction Potential	339	mv	02/15/2021	DEW/MDG	SM2580
Temp	14.41	C	02/15/2021	DEW/MDG	
Turbidity	0	NTU	02/15/2021	DEW/MDG	
Depth	3.32	Feet	02/15/2021	DEW/MDG	
Elevation	28.65	Feet	03/08/2021	DEWEST	

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09083 **Location:** GW Well WBW-1 **Date:** 07/20/2021 **Sample Collector:** MDG/BRT
Loc. Code WBW-1 **Time:** 11:07

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Barium	23.7	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Boron	<15	ug/L	08/13/2021	R&C	EPA 6010D
Calcium	1.2	mg/L	08/31/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Cobalt	2.3	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Chromium	5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	08/09/2021	R&C	EPA 7470
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Radium 226	0.602	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	0.0240	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	0.626	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	4.62	mg/L	07/28/2021	KCWELLS	EPA 300.0
Fluoride	<0.10	mg/L	07/28/2021	KCWELLS	EPA 300.0
Sulfate	5.84	mg/L	07/28/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	68.75	mg/L	07/26/2021	KCWELLS	SM 2540C
pH	4.77	SU	07/20/2021	BRT/MDG	
Spec. Cond.	42.0	uS	07/20/2021	BRT/MDG	
Dissolved Oxygen	0.690	ppm	07/20/2021	BRT/MDG	
Oxidation Reduction Potential	121	mv	07/20/2021	BRT/MDG	SM2580
Temp	24.72	C	07/20/2021	BRT/MDG	
Turbidity	0	NTU	07/20/2021	BRT/MDG	
Depth	18.27	Feet	07/20/2021	BRT/MDG	
Elevation	13.70	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



One Riverwood Drive
P.O. Box 2946101
Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96400 Location: GW Well WAP-16 Date: 03/04/2021 Sample Collector: DEW/ML
Loc. Code WAP-16 Time: 14:27

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Beryllium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Boron	1600.0	ug/L	03/15/2021	R&C	EPA 6010D
Calcium	191	mg/L	03/22/2021	SJHATCHE	EPA 6020B
Cadmium	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Mercury	<0.2	ug/L	03/12/2021	R&C	EPA 7470
Lithium	<10	ug/L	03/11/2021	R&C	EPA 6010D
Molybdenum	<10	ug/L	03/11/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Antimony	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Selenium	<10.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Thallium	<1.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Radium 226	1.49	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Radium 228	0.524	pCi/L	03/23/2021	GEL	EPA 904.0
Radium 226/228 Combined	2.01	pCi/L	04/01/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	153	mg/L	03/10/2021	KCWELLS	EPA 300.0
Fluoride	0.24	mg/L	03/10/2021	KCWELLS	EPA 300.0
Sulfate	188	mg/L	03/10/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	1008	mg/L	03/09/2021	KCWELLS	SM 2540C
pH	6.72	SU	03/04/2021	DEW/ML	
Spec. Cond.	1440	uS	03/04/2021	DEW/ML	
Dissolved Oxygen	0.440	ppm	03/04/2021	DEW/ML	
Oxidation Reduction Potential	-77.0	mv	03/04/2021	DEW/ML	SM2580
Temp	21.59	C	03/04/2021	DEW/ML	
Turbidity	9.90	NTU	03/04/2021	DEW/ML	
Depth	6.50	Feet	03/04/2021	DEW/ML	
Elevation	18.58	Feet	03/08/2021	DEWEST	
Barium	97.9	ug/L	03/22/2021	SJHATCHE	EPA 6010D

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 - Supervisor Analytical Services

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09071 **Location:** GW Well WAP-16 **Date:** 07/29/2021 **Sample Collector:** MDG/BRT
Loc. Code WAP-16 **Time:** 15:38

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Barium	94.5	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Boron	1500	ug/L	08/17/2021	R&C	EPA 6010D
Calcium	234	mg/L	08/31/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/17/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/31/2021	SJHATCHE	EPA 6020B
Radium 226	1.52	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	1.78	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined	3.31	pCi/L	08/25/2021	GEL	EPA 903.1 Mod
Calculation					
Chloride	238	mg/L	08/11/2021	KCWELLS	EPA 300.0
Fluoride	0.15	mg/L	08/11/2021	KCWELLS	EPA 300.0
Sulfate	248	mg/L	08/11/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	1205	mg/L	08/10/2021	SJBROWN	SM 2540C
pH	6.59	SU	07/29/2021	BRT/MDG	
Spec. Cond.	1700	uS	07/29/2021	BRT/MDG	
Dissolved Oxygen	1.91	ppm	07/29/2021	BRT/MDG	
Oxidation Reduction Potential	-89.0	mv	07/29/2021	BRT/MDG	SM2580
Temp	27.30	C	07/29/2021	BRT/MDG	
Turbidity	0	NTU	07/29/2021	BRT/MDG	
Depth	6.91	Feet	07/29/2021	BRT/MDG	
Elevation	18.17	Feet	08/18/2021	MDGOINGS	

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 - Supervisor Analytical Services



Laboratory Report

Client	Santee Cooper Linda Williams 1 Riverwood Dr. Moncks Corner, SC 29461	Project:	Ground Water
		Work Order:	1021082
		Received:	02/19/2021 10:20

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on February 19, 2021. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Karen Upshur, your Project Manager, at kupshur@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Report Approved By:

Karen Upshur
Project Manager

This report may not be reproduced, except in full, without written permission from Rogers & Callcott, Inc.

PO Box 5655 | Greenville, SC 29606 | 426 Fairforest Way | Greenville, SC 29607 | main 864.232.1556 | fax 864.232.6140

rogersandcallcott.com
an employee-owned company



Certificate of Analysis

South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880

Client Santee Cooper
 Linda Williams
 1 Riverwood Dr.
 Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Received: 02/19/2021 10:20

Sample Number	Sample Description	Matrix	Sampled	Type
1021082-01	AE96379 WAP-1	Ground Water	02/15/21 13:37	Grab
1021082-02	AE96380 WAP-2	Ground Water	02/15/21 14:40	Grab
1021082-03	AE96412 WBW-1	Ground Water	02/15/21 12:21	Grab
1021082-04	AE96403 WAP-18	Ground Water	02/16/21 11:33	Grab
1021082-05	AE96404 WAP-19	Ground Water	02/16/21 14:25	Grab
1021082-06	AE96405 WAP-20	Ground Water	02/16/21 15:30	Grab
1021082-07	AE96407 WAP-22	Ground Water	02/16/21 13:13	Grab
1021082-08	AE96388 WAP-10	Ground Water	02/17/21 13:57	Grab
1021082-09	AE96389 WAP-10 DUP	Ground Water	02/17/21 14:02	Grab
1021082-10	AE96406 WAP-21	Ground Water	02/17/21 12:35	Grab
1021082-11	AE96408 WAP-23	Ground Water	02/17/21 11:26	Grab



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Sample Data

Sample Number 1021082-01
Sample Description AE96379 WAP-1 collected on 02/15/21 13:37

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 11:43	EPA 7470A		MLR	B1B1040
Boron	24	15	ug/L	1.00	02/23/21 19:06	EPA 6010D		MLR	B1B1006
Lithium	ND	10	ug/L	1.00	02/23/21 19:06	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 19:06	EPA 6010D		MLR	B1B1006

Sample Number 1021082-02
Sample Description AE96380 WAP-2 collected on 02/15/21 14:40

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 11:23	EPA 7470A	S7	MLR	B1B1040
Lithium	13	10	ug/L	1.00	02/23/21 20:20	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 20:20	EPA 6010D		MLR	B1B1006

Sample Number 1021082-03
Sample Description AE96412 WBW-1 collected on 02/15/21 12:21

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 11:45	EPA 7470A		MLR	B1B1040
Boron	ND	15	ug/L	1.00	02/23/21 19:26	EPA 6010D		MLR	B1B1006
Lithium	ND	10	ug/L	1.00	02/23/21 19:26	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 19:26	EPA 6010D		MLR	B1B1006

Sample Number 1021082-04
Sample Description AE96403 WAP-18 collected on 02/16/21 11:33

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 11:54	EPA 7470A		MLR	B1B1040
Boron	7500	15	ug/L	1.00	02/23/21 20:03	EPA 6010D		MLR	B1B1006
Lithium	540	10	ug/L	1.00	02/23/21 20:03	EPA 6010D		MLR	B1B1006
Molybdenum	2900	10	ug/L	1.00	02/23/21 20:03	EPA 6010D		MLR	B1B1006



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Sample Number 1021082-05
Sample Description AE96404 WAP-19 collected on 02/16/21 14:25

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 11:57	EPA 7470A		MLR	B1B1040
Boron	3500	15	ug/L	1.00	02/23/21 20:07	EPA 6010D		MLR	B1B1006
Lithium	290	10	ug/L	1.00	02/23/21 20:07	EPA 6010D		MLR	B1B1006
Molybdenum	41	10	ug/L	1.00	02/23/21 20:07	EPA 6010D		MLR	B1B1006

Sample Number 1021082-06
Sample Description AE96405 WAP-20 collected on 02/16/21 15:30

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 12:00	EPA 7470A		MLR	B1B1040
Boron	570	15	ug/L	1.00	02/23/21 20:11	EPA 6010D		MLR	B1B1006
Lithium	290	10	ug/L	1.00	02/23/21 20:11	EPA 6010D		MLR	B1B1006
Molybdenum	140	10	ug/L	1.00	02/23/21 20:11	EPA 6010D		MLR	B1B1006

Sample Number 1021082-07
Sample Description AE96407 WAP-22 collected on 02/16/21 13:13

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	43	10	ug/L	1.00	02/23/21 20:33	EPA 6010D		MLR	B1B1006

Sample Number 1021082-08
Sample Description AE96388 WAP-10 collected on 02/17/21 13:57

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 12:02	EPA 7470A	S7	MLR	B1B1040
Lithium	26	10	ug/L	1.00	02/23/21 20:24	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 20:24	EPA 6010D		MLR	B1B1006



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Sample Number 1021082-09
Sample Description AE96389 WAP-10 DUP collected on 02/17/21 14:02

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 12:05	EPA 7470A	S7	MLR	B1B1040
Lithium	25	10	ug/L	1.00	02/23/21 20:28	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 20:28	EPA 6010D		MLR	B1B1006

Sample Number 1021082-10
Sample Description AE96406 WAP-21 collected on 02/17/21 12:35

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 12:08	EPA 7470A		MLR	B1B1040
Boron	2400	15	ug/L	1.00	02/23/21 20:15	EPA 6010D		MLR	B1B1006
Lithium	ND	10	ug/L	1.00	02/23/21 20:15	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 20:15	EPA 6010D		MLR	B1B1006

Sample Number 1021082-11
Sample Description AE96408 WAP-23 collected on 02/17/21 11:26

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	11	10	ug/L	1.00	02/23/21 20:37	EPA 6010D		MLR	B1B1006



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1B1006 - EPA 3005A

Blank (B1B1006-BLK1)

Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							

LCS (B1B1006-BS1)

Boron	250	15	ug/L	250		98	80-120			
Lithium	255	10	ug/L	250		102	80-120			
Molybdenum	240	10	ug/L	250		97	80-120			

LCS Dup (B1B1006-BSD1)

Boron	250	15	ug/L	250		99	80-120	0.8	20	
Lithium	257	10	ug/L	250		103	80-120	0.7	20	
Molybdenum	250	10	ug/L	250		99	80-120	2	20	

Matrix Spike (B1B1006-MS1) Source: 1021082-01

Boron	250	15	ug/L	250	24	92	75-125			
Lithium	253	10	ug/L	250	ND	101	75-125			
Molybdenum	230	10	ug/L	250	ND	93	75-125			

Matrix Spike (B1B1006-MS2) Source: 1021082-03

Boron	260	15	ug/L	250	ND	97	75-125			
Lithium	262	10	ug/L	250	ND	105	75-125			
Molybdenum	240	10	ug/L	250	ND	97	75-125			

Matrix Spike Dup (B1B1006-MSD1) Source: 1021082-01

Boron	270	15	ug/L	250	24	99	75-125	6	20	
Lithium	268	10	ug/L	250	ND	107	75-125	6	20	
Molybdenum	250	10	ug/L	250	ND	99	75-125	6	20	

Matrix Spike Dup (B1B1006-MSD2) Source: 1021082-03

Boron	260	15	ug/L	250	ND	98	75-125	0.4	20	
Lithium	264	10	ug/L	250	ND	105	75-125	0.5	20	
Molybdenum	240	10	ug/L	250	ND	98	75-125	1	20	



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1B1040 - EPA 7470A										
Blank (B1B1040-BLK1)										
Mercury	ND	0.20	ug/L							
LCS (B1B1040-BS1)										
Mercury	5.0	0.20	ug/L	5.00		101	80-120			
LCS Dup (B1B1040-BSD1)										
Mercury	4.9	0.20	ug/L	5.00		98	80-120	2	20	
Matrix Spike (B1B1040-MS2) Source: 1021082-02										
Mercury	4.1	0.20	ug/L	5.00	ND	82	75-125			S7
Matrix Spike Dup (B1B1040-MSD2) Source: 1021082-02										
Mercury	4.1	0.20	ug/L	5.00	ND	82	75-125	0.6	20	S7



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 3005A ICP Digestion				
EPA 3005A	B1B1006	1021082-01	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-02	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-03	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-04	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-05	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-06	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-07	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-08	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-09	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-10	02/22/2021 10:53	MTH
EPA 3005A	B1B1006	1021082-11	02/22/2021 10:53	MTH
EPA 7470A Mercury Digestion				
EPA 7470A	B1B1040	1021082-01	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-02	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-03	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-04	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-05	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-06	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-08	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-09	02/22/2021 16:38	MLR
EPA 7470A	B1B1040	1021082-10	02/22/2021 16:38	MLR



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1021082
Reported: 02/26/21 13:41

Data Qualifiers and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not reported
- RPD Relative Percent Difference
- S7 Result calculated by Method of Standard Addition due to sample matrix interference and initial spike failures.

Chain of Custody



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

LCWILLIA @santecooper.com _____ / _____ / _____ 121567 / JM02.09.GW1 / 36500

Yes No
1021082
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				
AE96379	WAP-1	2/15/21	1337	NDC/GBN	1	P	G	GW	2	-01				
AE96380	WAP-2	2/15/21	1410							-02				
AE96412	WBW-1	2/15/21	1221							-03				
AE96403	WAP-18	2/16/21	1133							-04				
AE96404	WAP-19		1425							-05				
AE96405	WAP-20		1530							-06				
AE96407	WAP-22	2/16/21	1313							-07				

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrwn</i>	35594	2/18/21	1400	FEDEx			
FEDEx				CJC		2/19/21	1020

Sample Receiving (Internal Use Only)
TEMP (°C): 9.6 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-1P04 <input type="checkbox"/> NH-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"/> Sulfides <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"/> ASTM <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Flashpoint <input type="checkbox"/> Viscosity <input type="checkbox"/> API <input type="checkbox"/> Ethanol Insoluble Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil <input type="checkbox"/> (As, Cd, Cr, Ni, Pb, Hg) <input type="checkbox"/> TSS <input type="checkbox"/> GOFER
--	---	--	--	---	--	--



Chain of Custody

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

1021082 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				
AE96388	WAP-10	2/17/21	1357	DEW/BSB	1	P	G	GW	2	-08		X	X	X
AE96389	WAP-10 DUP	↓	1402	↓	↓	↓	↓	↓	↓	-09		X	X	X
AE96406	WAP-21	2/17/21	1235	↓	↓	↓	↓	↓	↓	-10	X	X	X	X
AE96408	WAP-23	↓	1126	↓	↓	↓	↓	↓	↓	-11		X		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35594	2/18/21	1400				

Sample Receiving (Internal Use Only)
TEMP (°C): 9.6 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"/> Sulfur <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Sediment Sample <input type="checkbox"/> IPT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Carbon <input type="checkbox"/> Metals <input type="checkbox"/> PCBs <input type="checkbox"/> Hg <input type="checkbox"/> SV <input type="checkbox"/> COPPER
--	---	--	---	---	--	---



Sample Receipt Verification

Client: Santee Cooper Date Received: 2/24/21 Work Order: 1021247

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: 816240672635

Receipt Criteria	Y e s	N o	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN: 97050067			X	Ice Cold Packs Dry Ice <u>None</u>
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.	X			
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.			X	

If in-house preservation used – record Lot #			
HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments:

Were non-conformance issues noted at sample receipt? Yes or No
Non-Conformance issue other than noted above:



Laboratory Report

Client	Santee Cooper Linda Williams 1 Riverwood Dr. Moncks Corner, SC 29461	Project:	Ground Water
		Work Order:	1030283
		Received:	03/03/2021 13:20

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on March 03, 2021. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Report Approved By:

Lauren Hollister
Project Manager

This report may not be reproduced, except in full, without written permission from Rogers & Callcott, Inc.

PO Box 5655 | Greenville, SC 29606 | 426 Fairforest Way | Greenville, SC 29607 | main 864.232.1556 | fax 864.232.6140

rogersandcallcott.com
an employee-owned company



Certificate of Analysis

*South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880*

Client Santee Cooper
 Linda Williams
 1 Riverwood Dr.
 Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Received: 03/03/2021 13:20

Sample Number	Sample Description	Matrix	Sampled	Type
1030283-01	AE96387 WAP-9	Ground Water	02/23/21 12:49	Grab
1030283-02	AE96382 WAP-4	Ground Water	02/23/21 14:28	Grab
1030283-03	AE96385 WAP-7	Ground Water	02/24/21 11:02	Grab
1030283-04	AE96381 WAP-3	Ground Water	02/24/21 13:18	Grab
1030283-05	AE96398 WAP-14C	Ground Water	02/25/21 12:20	Grab
1030283-06	AE96397 WAP-14B	Ground Water	02/25/21 13:56	Grab
1030283-07	AE96396 WAP-14C	Ground Water	02/25/21 14:46	Grab
1030283-08	AE96394 WAP-14	Ground Water	02/25/21 11:10	Grab
1030283-09	AE96395 WAP-14DUP	Ground Water	02/25/21 11:15	Grab
1030283-10	AE96399 WAP-15	Ground Water	02/25/21 15:40	Grab



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Sample Data

Sample Number 1030283-01
Sample Description AE96387 WAP-9 collected on 02/23/21 12:49

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:10	EPA 7470A		MLR	B1C0396
Lithium	69	10	ug/L	1.00	03/04/21 17:43	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 17:43	EPA 6010D		MLR	B1C0267

Sample Number 1030283-02
Sample Description AE96382 WAP-4 collected on 02/23/21 14:28

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:12	EPA 7470A		MLR	B1C0396
Lithium	ND	10	ug/L	1.00	03/04/21 17:47	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 17:47	EPA 6010D		MLR	B1C0267

Sample Number 1030283-03
Sample Description AE96385 WAP-7 collected on 02/24/21 11:02

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:15	EPA 7470A		MLR	B1C0396
Lithium	ND	10	ug/L	1.00	03/04/21 17:51	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 17:51	EPA 6010D		MLR	B1C0267

Sample Number 1030283-04
Sample Description AE96381 WAP-3 collected on 02/24/21 13:18

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:26	EPA 7470A		MLR	B1C0396
Lithium	ND	10	ug/L	1.00	03/04/21 17:55	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 17:55	EPA 6010D		MLR	B1C0267



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Sample Number 1030283-05
Sample Description AE96398 WAP-14C collected on 02/25/21 12:20

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	03/04/21 17:20	EPA 6010D		MLR	B1C0267

Sample Number 1030283-06
Sample Description AE96397 WAP-14B collected on 02/25/21 13:56

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	12	10	ug/L	1.00	03/04/21 17:59	EPA 6010D		MLR	B1C0267

Sample Number 1030283-07
Sample Description AE96396 WAP-14C collected on 02/25/21 14:46

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	36	10	ug/L	1.00	03/04/21 18:03	EPA 6010D		MLR	B1C0267

Sample Number 1030283-08
Sample Description AE96394 WAP-14 collected on 02/25/21 11:10

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:29	EPA 7470A		MLR	B1C0396
Boron	6000	150	ug/L	10.0	03/04/21 18:22	EPA 6010D		MLR	B1C0267
Lithium	ND	10	ug/L	1.00	03/04/21 18:37	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 18:37	EPA 6010D		MLR	B1C0267

Sample Number 1030283-09
Sample Description AE96395 WAP-14DUP collected on 02/25/21 11:15

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:32	EPA 7470A		MLR	B1C0396
Boron	6200	150	ug/L	10.0	03/04/21 18:26	EPA 6010D		MLR	B1C0267
Lithium	ND	10	ug/L	1.00	03/04/21 18:41	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 18:41	EPA 6010D		MLR	B1C0267



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Sample Number 1030283-10
Sample Description AE96399 WAP-15 collected on 02/25/21 15:40

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:35	EPA 7470A		MLR	B1C0396
Boron	3400	15	ug/L	1.00	03/04/21 18:45	EPA 6010D		MLR	B1C0267
Lithium	23	10	ug/L	1.00	03/04/21 18:45	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 18:45	EPA 6010D		MLR	B1C0267



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1C0267 - EPA 200.7

Blank (B1C0267-BLK1)

Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							

LCS (B1C0267-BS1)

Boron	240	15	ug/L	250		96	80-120			
Lithium	266	10	ug/L	250		106	80-120			
Molybdenum	220	10	ug/L	250		89	80-120			

LCS Dup (B1C0267-BSD1)

Boron	250	15	ug/L	250		100	80-120	5	20	
Lithium	264	10	ug/L	250		106	80-120	0.7	20	
Molybdenum	230	10	ug/L	250		94	80-120	5	20	

Matrix Spike (B1C0267-MS1)

Source: 1030283-05

Boron	680	15	ug/L	250	400	109	75-125			
Lithium	286	10	ug/L	250	ND	112	75-125			
Molybdenum	230	10	ug/L	250	ND	94	75-125			

Matrix Spike Dup (B1C0267-MSD1)

Source: 1030283-05

Boron	680	15	ug/L	250	400	110	75-125	0.6	20	
Lithium	283	10	ug/L	250	ND	110	75-125	1	20	
Molybdenum	240	10	ug/L	250	ND	98	75-125	4	20	

Post Spike (B1C0267-PS1)

Source: 1030283-05

Boron	0.91		mg/L	0.500	ND	101	75-125			
Lithium	0.531		mg/L	0.500	ND	105	75-125			
Molybdenum	0.47		mg/L	0.500	ND	94	75-125			

Batch B1C0396 - EPA 7470A

Blank (B1C0396-BLK1)

Mercury	ND	0.20	ug/L							
---------	----	------	------	--	--	--	--	--	--	--



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1C0396 - EPA 7470A

LCS (B1C0396-BS1)

Mercury	5.0	0.20	ug/L	5.00		100	80-120			
---------	-----	------	------	------	--	-----	--------	--	--	--

LCS Dup (B1C0396-BSD1)

Mercury	5.0	0.20	ug/L	5.00		101	80-120	1	20	
---------	-----	------	------	------	--	-----	--------	---	----	--

Matrix Spike (B1C0396-MS1) Source: 1030283-03

Mercury	4.8	0.20	ug/L	5.00	ND	97	75-125			
---------	-----	------	------	------	----	----	--------	--	--	--

Matrix Spike Dup (B1C0396-MSD1) Source: 1030283-03

Mercury	5.0	0.20	ug/L	5.00	ND	100	75-125	3	20	
---------	-----	------	------	------	----	-----	--------	---	----	--

Post Spike (B1C0396-PS1) Source: 1030283-03

Mercury	4.0		ug/L	4.00	ND	99	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--

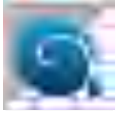


Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 200.7 Metal Digestion				
EPA 200.7	B1C0267	1030283-01	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-02	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-03	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-04	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-05	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-06	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-07	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-08	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-09	03/04/2021 15:59	MTH
EPA 200.7	B1C0267	1030283-10	03/04/2021 15:59	MTH
EPA 7470A Mercury Digestion				
EPA 7470A	B1C0396	1030283-01	03/05/2021 13:44	ELN
EPA 7470A	B1C0396	1030283-02	03/05/2021 13:44	ELN
EPA 7470A	B1C0396	1030283-03	03/05/2021 13:44	ELN
EPA 7470A	B1C0396	1030283-04	03/05/2021 13:44	ELN
EPA 7470A	B1C0396	1030283-08	03/05/2021 13:44	ELN
EPA 7470A	B1C0396	1030283-09	03/05/2021 13:44	ELN
EPA 7470A	B1C0396	1030283-10	03/05/2021 13:44	ELN



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283
Reported: 03/11/21 09:01

Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit
NR Not reported
RPD Relative Percent Difference



Chain of Custody

Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02.09.GR1 / 36500 Rerun request for any flagged QC: Yes No

1030283

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	M	Li	Mo	Hg
AE96387	WAP-9	2/23/21	1249	DEW/MDS	1	P	G	GW	2	-01		X	X	X
AE96382	WAP-4	↓	1428	↓	↓	↓	↓	↓	↓	-02		X	X	X
AE96385	WAP-7	2/24/21	1102	DEW/ATH	↓	↓	↓	↓	↓	-03		X	X	X
AE96381	WAP-3	↓	1318	↓	↓	↓	↓	↓	↓	-04		X	X	X
AE96398	WAP-14C	2/25/21	1220	DEW/MDS	↓	↓	↓	↓	↓	-05		X		
AE96397	WAP-14B	↓	1356	↓	↓	↓	↓	↓	↓	-06		X		
AE96396	WAP-14C	↓	1446	↓	↓	↓	↓	↓	↓	-07		X		
AE96394	WAP-14	2/25/21	1110	DEW/MPF	↓	↓	↓	↓	↓	-08	X	X	X	X
AE96395	WAP-14 DUP	↓	1115	↓	↓	↓	↓	↓	↓	-09	X	X	X	X
AE96399	WAP-15	↓	1540	↓	↓	↓	↓	↓	↓	-10	X	X	X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>[Signature]</i>	35594	3/2/21	1500	FED EX			
FED EX				<i>[Signature]</i>		3/3/21	1320

Sample Receiving (Internal Use Only)
 TEMP (°C): 16.0 Initial: GC
 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"/> Bc <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 TOC DOC TP/TPH NH ₄ -N I Cl NO ₂ Br NO ₃ 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	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 ₄) <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. ASTM Color Acidity Density @ 15°C Viscosity @ 40°C Used Oil Flash Point Metals in oil (ASTM D4052) Ign. GOR
--	--	--	---	---	--	---



Sample Receipt Verification

Client: Santee Cooper Date Received: 03/03/21 Work Order: 1030283

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: 816240672657

Receipt Criteria	Y e s	N o	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN: 97050067			X	Ice Cold Packs Dry Ice <u>None</u>
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.	X			
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.			X	

If in-house preservation used – record Lot #			
HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments: _____

Were non-conformance issues noted at sample receipt? Yes or No
Non-Conformance issue other than noted above: _____



Laboratory Report

Client	Santee Cooper Linda Williams 1 Riverwood Dr. Moncks Corner, SC 29461	Project:	Ground Water
		Work Order:	1030536
		Received:	03/09/2021 12:55

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on March 09, 2021. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Report Approved By:

Lauren Hollister
Project Manager

This report may not be reproduced, except in full, without written permission from Rogers & Callcott, Inc.

PO Box 5655 | Greenville, SC 29606 | 426 Fairforest Way | Greenville, SC 29607 | main 864.232.1556 | fax 864.232.6140

rogersandcallcott.com
an employee-owned company



Certificate of Analysis

South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880

Client Santee Cooper
 Linda Williams
 1 Riverwood Dr.
 Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Received: 03/09/2021 12:55

Sample Number	Sample Description	Matrix	Sampled	Type
1030536-01	AE96413 WBW-A1-1	Ground Water	03/01/21 10:05	Grab
1030536-02	AE96417 WLF-A1-4	Ground Water	03/01/21 11:10	Grab
1030536-03	AE96418 WLF-A1-4 dup	Ground Water	03/01/21 11:15	Grab
1030536-04	AE96416 WLF-A1-3	Ground Water	03/01/21 12:31	Grab
1030536-05	AE96415 WLF-A1-2	Ground Water	03/01/21 13:48	Grab
1030536-06	AE96401 WAP-17	Ground Water	03/02/21 10:48	Grab
1030536-07	AE96402 WAP-17 DUP	Ground Water	03/02/21 10:53	Grab
1030536-08	AE96414 WLF-A1-1	Ground Water	03/02/21 12:53	Grab
1030536-09	AE96419 WLF-A1-5	Ground Water	03/02/21 14:01	Grab
1030536-10	AE96409 WAP-24	Ground Water	03/02/21 11:28	Grab
1030536-11	AE96411 WAP-26	Ground Water	03/02/21 15:13	Grab
1030536-12	AE96410 WAP-25	Ground Water	03/04/21 10:36	Grab
1030536-13	AE96393 WAP-13	Ground Water	03/04/21 11:55	Grab
1030536-14	AE96391 WAP-12	Ground Water	03/04/21 13:09	Grab
1030536-15	AE96392 WAP-12 DUP	Ground Water	03/04/21 13:14	Grab
1030536-16	AE96400 WAP-16	Ground Water	03/04/21 14:27	Grab



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

Sample Data

Sample Number 1030536-01
Sample Description AE96413 WBW-A1-1 collected on 03/01/21 10:05

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	48	15	ug/L	1.00	03/15/21 14:30	EPA 6010D		MLR	B1C0515

Sample Number 1030536-02
Sample Description AE96417 WLF-A1-4 collected on 03/01/21 11:10

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	140	15	ug/L	1.00	03/15/21 15:16	EPA 6010D		MLR	B1C0515

Sample Number 1030536-03
Sample Description AE96418 WLF-A1-4 dup collected on 03/01/21 11:15

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	150	15	ug/L	1.00	03/15/21 15:20	EPA 6010D		MLR	B1C0515

Sample Number 1030536-04
Sample Description AE96416 WLF-A1-3 collected on 03/01/21 12:31

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	59	15	ug/L	1.00	03/15/21 15:24	EPA 6010D		MLR	B1C0515

Sample Number 1030536-05
Sample Description AE96415 WLF-A1-2 collected on 03/01/21 13:48

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	120	15	ug/L	1.00	03/15/21 15:28	EPA 6010D		MLR	B1C0515



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

Sample Number 1030536-06
Sample Description AE96401 WAP-17 collected on 03/02/21 10:48

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:27	EPA 7470A		MLR	B1C0646
Boron	2800	15	ug/L	1.00	03/15/21 15:49	EPA 6010D		MLR	B1C0515
Lithium	160	10	ug/L	1.00	03/11/21 19:11	EPA 6010D		MLR	B1C0515
Molybdenum	110	10	ug/L	1.00	03/11/21 19:11	EPA 6010D		MLR	B1C0515

Sample Number 1030536-07
Sample Description AE96402 WAP-17 DUP collected on 03/02/21 10:53

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:29	EPA 7470A		MLR	B1C0646
Boron	2900	15	ug/L	1.00	03/15/21 15:53	EPA 6010D		MLR	B1C0515
Lithium	150	10	ug/L	1.00	03/11/21 19:15	EPA 6010D		MLR	B1C0515
Molybdenum	110	10	ug/L	1.00	03/11/21 19:15	EPA 6010D		MLR	B1C0515

Sample Number 1030536-08
Sample Description AE96414 WLF-A1-1 collected on 03/02/21 12:53

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	1100	15	ug/L	1.00	03/15/21 15:57	EPA 6010D		MLR	B1C0515

Sample Number 1030536-09
Sample Description AE96419 WLF-A1-5 collected on 03/02/21 14:01

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	1300	15	ug/L	1.00	03/15/21 16:01	EPA 6010D		MLR	B1C0515



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

Sample Number 1030536-10
Sample Description AE96409 WAP-24 collected on 03/02/21 11:28

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	03/11/21 19:57	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:57	EPA 6010D		MLR	B1C0515

Sample Number 1030536-11
Sample Description AE96411 WAP-26 collected on 03/02/21 15:13

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	03/11/21 20:01	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 20:01	EPA 6010D		MLR	B1C0515

Sample Number 1030536-12
Sample Description AE96410 WAP-25 collected on 03/04/21 10:36

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	03/11/21 20:05	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 20:05	EPA 6010D		MLR	B1C0515

Sample Number 1030536-13
Sample Description AE96393 WAP-13 collected on 03/04/21 11:55

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:32	EPA 7470A	S7	MLR	B1C0646
Boron	4400	15	ug/L	1.00	03/15/21 16:05	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 19:27	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:27	EPA 6010D		MLR	B1C0515



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

Sample Number 1030536-14
Sample Description AE96391 WAP-12 collected on 03/04/21 13:09

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:35	EPA 7470A	S7	MLR	B1C0646
Boron	4900	15	ug/L	1.00	03/15/21 16:09	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 19:30	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:30	EPA 6010D		MLR	B1C0515

Sample Number 1030536-15
Sample Description AE96392 WAP-12 DUP collected on 03/04/21 13:14

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:38	EPA 7470A	S7	MLR	B1C0646
Boron	4800	15	ug/L	1.00	03/15/21 16:16	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 19:34	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:34	EPA 6010D		MLR	B1C0515

Sample Number 1030536-16
Sample Description AE96400 WAP-16 collected on 03/04/21 14:27

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:49	EPA 7470A		MLR	B1C0646
Boron	1600	15	ug/L	1.00	03/15/21 14:53	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 16:52	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 16:52	EPA 6010D		MLR	B1C0515



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

**Total Metals
Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1C0515 - EPA 200.7

Blank (B1C0515-BLK1)

Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							

LCS (B1C0515-BS1)

Boron	280	15	ug/L	250		110	80-120			
Lithium	264	10	ug/L	250		106	80-120			
Molybdenum	240	10	ug/L	250		98	80-120			

LCS Dup (B1C0515-BSD1)

Boron	250	15	ug/L	250		100	80-120	10	20	
Lithium	250	10	ug/L	250		100	80-120	6	20	
Molybdenum	250	10	ug/L	250		100	80-120	3	20	

Matrix Spike (B1C0515-MS1) Source: 1030536-01

Boron	290	15	ug/L	250	48	98	75-125			
Lithium	272	10	ug/L	250	ND	109	75-125			
Molybdenum	250	10	ug/L	250	ND	99	75-125			

Matrix Spike (B1C0515-MS2) Source: 1030536-16

Boron	1800	15	ug/L	250	1600	103	75-125			
Lithium	277	10	ug/L	250	ND	109	75-125			
Molybdenum	240	10	ug/L	250	ND	95	75-125			

Matrix Spike Dup (B1C0515-MSD1) Source: 1030536-01

Boron	290	15	ug/L	250	48	96	75-125	1	20	
Lithium	263	10	ug/L	250	ND	105	75-125	3	20	
Molybdenum	250	10	ug/L	250	ND	100	75-125	0.3	20	

Matrix Spike Dup (B1C0515-MSD2) Source: 1030536-16

Boron	1800	15	ug/L	250	1600	113	75-125	1	20	
Lithium	284	10	ug/L	250	ND	112	75-125	2	20	
Molybdenum	240	10	ug/L	250	ND	97	75-125	2	20	



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

**Total Metals
Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1C0515 - EPA 200.7

Post Spike (B1C0515-PS1)

Source: 1030536-01

Boron	0.53		mg/L	0.500	ND	96	75-125			
Lithium	0.515		mg/L	0.500	ND	103	75-125			
Molybdenum	0.49		mg/L	0.500	ND	98	75-125			

Post Spike (B1C0515-PS2)

Source: 1030536-16

Boron	2.1		mg/L	0.500	ND	103	75-125			
Lithium	0.542		mg/L	0.500	ND	108	75-125			
Molybdenum	0.48		mg/L	0.500	ND	96	75-125			

Batch B1C0646 - EPA 7470A

Blank (B1C0646-BLK1)

Mercury	ND	0.20	ug/L							
---------	----	------	------	--	--	--	--	--	--	--

LCS (B1C0646-BS1)

Mercury	4.9	0.20	ug/L	5.00		98	80-120			
---------	-----	------	------	------	--	----	--------	--	--	--

LCS Dup (B1C0646-BSD1)

Mercury	5.0	0.20	ug/L	5.00		101	80-120	3	20	
---------	-----	------	------	------	--	-----	--------	---	----	--

Matrix Spike (B1C0646-MS1)

Source: 1030536-15

Mercury	4.1	0.20	ug/L	5.00	ND	81	75-125			S7
---------	-----	------	------	------	----	----	--------	--	--	----

Matrix Spike Dup (B1C0646-MSD1)

Source: 1030536-15

Mercury	4.1	0.20	ug/L	5.00	ND	81	75-125	0	20	S7
---------	-----	------	------	------	----	----	--------	---	----	----

Post Spike (B1C0646-PS1)

Source: 1030536-15

Mercury	3.3		ug/L	4.00	ND	82	80-120			S7
---------	-----	--	------	------	----	----	--------	--	--	----

Post Spike (B1C0646-PS3)

Source: 1030536-06

Mercury	3.9		ug/L	4.00	ND	98	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--

Post Spike (B1C0646-PS4)

Source: 1030536-07

Mercury	3.9		ug/L	4.00	ND	97	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

**Total Metals
Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1C0646 - EPA 7470A

Post Spike (B1C0646-PS5) Source: 1030536-13

Mercury	3.3		ug/L	4.00	ND	82	80-120			S7
---------	-----	--	------	------	----	----	--------	--	--	----

Post Spike (B1C0646-PS6) Source: 1030536-14

Mercury	3.2		ug/L	4.00	ND	81	80-120			S7
---------	-----	--	------	------	----	----	--------	--	--	----

Post Spike (B1C0646-PS7) Source: 1030536-16

Mercury	3.6		ug/L	4.00	ND	89	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 200.7 Metal Digestion				
EPA 200.7	B1C0515	1030536-01	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-02	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-03	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-04	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-05	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-06	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-07	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-08	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-09	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-10	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-11	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-12	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-13	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-14	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-15	03/10/2021 15:25	MTH
EPA 200.7	B1C0515	1030536-16	03/10/2021 15:25	MTH
EPA 7470A Mercury Digestion				
EPA 7470A	B1C0646	1030536-06	03/10/2021 13:16	ELN
EPA 7470A	B1C0646	1030536-07	03/10/2021 13:16	ELN
EPA 7470A	B1C0646	1030536-13	03/10/2021 13:16	ELN
EPA 7470A	B1C0646	1030536-14	03/10/2021 13:16	ELN
EPA 7470A	B1C0646	1030536-15	03/10/2021 13:16	ELN
EPA 7470A	B1C0646	1030536-16	03/10/2021 13:16	ELN



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030536
Reported: 03/17/21 10:37

Data Qualifiers and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not reported
- RPD Relative Percent Difference
- S7 Result calculated by Method of Standard Addition due to sample matrix interference and initial spike failures.

Chain of Custody



Customer Email/Report Recipient: lcwillia@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02.09.G01 / 36500 Rerun request for any flagged QC Yes No

1030536

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	W	J	MO	HF
AE96413	WBW-A1-1	3/1/21	1005	DEW/ML	1	P	G	GW	2	-01	X			
AE96417	WLF-A1-4		1110							-02	X			
AE96418	WLF-A1-4 DUP		1115							-03	X			
AE96416	WLF-A1-3		1231							-04	X			
AE96415	WLF-A1-2		1348							-05	X			
AE96401	WAP-17	3/2/21	1048	DEW TG/DJ						-06	X	X	X	X
AE96402	WAP-17 DUP		1053							-07	X	X	X	X
AE96414	WLF-A1-1	3/2/21	1253							-08	X			
AE96419	WLF-A1-5		1401							-09	X			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>S. Brown</i>	35594	3/8/21	1200	<i>FEDGX</i>			
<i>FEDGX</i>				<i>OSL</i>		3/9/21	1255

Sample Receiving (Internal Use Only)
TEMP (°C): 17.6 Initial: ea

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/TH/4 <input type="checkbox"/> NH ₃ -N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO ₂ <input type="checkbox"/> Br <input type="checkbox"/> NO ₃ <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	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 ₄) <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"/> Total Oil/Grease <input type="checkbox"/> Sulfur <input type="checkbox"/> Chlorine <input type="checkbox"/> Ash <input type="checkbox"/> Dissolved Metals <input type="checkbox"/> IPT <input type="checkbox"/> Dissolved Metals <input type="checkbox"/> Used Oil <input type="checkbox"/> Phosphorus <input type="checkbox"/> Metals as oil <input type="checkbox"/> (As, Cd, Cr, Hg, Pb) <input type="checkbox"/> IS <input type="checkbox"/> COVER
--	---	--	---	---	--	---

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 #: 121567 / JM02.09.G01 / 36500 Rerun request for any flagged QC: (Yes) No

1030536

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				
AE96409	WAP-24	3/2/21	1128	DEW i3-DJ	1	P	G	GW	2	= 10		X	X	
AE96411	WAP-26	↓	1513	↓	↓	↓	↓	↓	2	- 11		X	X	
AE96410	WAP-25	3/4/21	1036	DEW ML	1	↓	↓	↓	2	- 12		X	X	
AE96393	WAP-13	↓	1155	↓	↓	↓	↓	↓	↓	- 13	X	X	X	X
AE96391	WAP-12	↓	1309	↓	↓	↓	↓	↓	↓	- 14	X	X	X	X
AE96392	WAP-12 DUP	↓	1314	↓	↓	↓	↓	↓	↓	- 15	X	X	X	X
AE96400	WAP-16	↓	1427	↓	↓	↓	↓	↓	↓	- 16	X	X	X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Admission</i>	35594	3/8/21	1200	<i>FEDSO</i>			
<i>FEDSO</i>				<i>CEL</i>		3/19/21	1255

Sample Receiving (Internal Use Only)
TEMP (°C): 17.6 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-TP04 <input type="checkbox"/> NH3-N <input type="checkbox"/> T <input type="checkbox"/> EI <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"/> Radioactive Strontium (R) <input type="checkbox"/> Dissolved Gases <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals in oil <input type="checkbox"/> (As, Pb, Cr, Ni, Hg) <input type="checkbox"/> TV <input type="checkbox"/> COFED
--	--	---	---	---	--	---

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 Verification

Client: Santee Cooper Date Received: 3/9/21 Work Order: 1030536

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: 804137735722

Receipt Criteria	Y e s	N o	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN: 97050067			X	Ice Cold Packs Dry Ice <u>None</u>
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.	X			
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.			X	

If in-house preservation used – record Lot #			
HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments:

Were non-conformance issues noted at sample receipt? Yes or No
Non-Conformance issue other than noted above:



Laboratory Report

Client	Santee Cooper Linda Williams 1 Riverwood Dr. Moncks Corner, SC 29461	Project:	Ground Water
		Work Order:	1080231
		Received:	08/03/2021 09:15

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on August 03, 2021. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Report Approved By:

Lauren Hollister
Project Manager

This report may not be reproduced, except in full, without written permission from Rogers & Callcott, Inc.

PO Box 5655 | Greenville, SC 29606 | 426 Fairforest Way | Greenville, SC 29607 | main 864.232.1556 | fax 864.232.6140

rogersandcallcott.com
an employee-owned company



Certificate of Analysis

South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880

Client Santee Cooper
 Linda Williams
 1 Riverwood Dr.
 Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Received: 08/03/2021 09:15

Sample Number	Sample Description	Matrix	Sampled	Type
1080231-01	AF09053 WAP-4	Ground Water	07/19/21 11:24	Grab
1080231-02	AF09070 WAP-15	Ground Water	07/19/21 10:30	Grab
1080231-03	AF09065 WAP-14	Ground Water	07/19/21 14:22	Grab
1080231-04	AF09066 WAP-14 DUP	Ground Water	07/19/21 14:27	Grab
1080231-05	AF09067 WAP-14A	Ground Water	07/19/21 13:46	Grab
1080231-06	AF09069 WAP-14C	Ground Water	07/19/21 15:39	Grab
1080231-07	AF09068 WAP-14B	Ground Water	07/19/21 16:34	Grab
1080231-08	AF09050 WAP-1	Ground Water	07/20/21 12:28	Grab
1080231-09	AF09051 WAP-2	Ground Water	07/20/21 13:28	Grab
1080231-10	AF09083 WBW-1	Ground Water	07/20/21 11:07	Grab



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Reported: 08/19/21 22:26

Sample Data

Sample Number 1080231-01
Sample Description AF09053 WAP-4 collected on 07/19/21 11:24

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Boron	180	15	ug/L	1.00	08/10/21 16:10	EPA 6010D		MLR	B1H0147
Lithium	ND	10	ug/L	1.00	08/10/21 16:10	EPA 6010D		MLR	B1H0147

Sample Number 1080231-02
Sample Description AF09070 WAP-15 collected on 07/19/21 10:30

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Boron	1000	15	ug/L	1.00	08/10/21 16:13	EPA 6010D		MLR	B1H0147
Lithium	ND	10	ug/L	1.00	08/10/21 16:13	EPA 6010D		MLR	B1H0147

Sample Number 1080231-03
Sample Description AF09065 WAP-14 collected on 07/19/21 14:22

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Boron	8600	75	ug/L	5.00	08/10/21 14:56	EPA 6010D		MLR	B1H0147
Lithium	ND	10	ug/L	1.00	08/10/21 16:17	EPA 6010D		MLR	B1H0147

Sample Number 1080231-04
Sample Description AF09066 WAP-14 DUP collected on 07/19/21 14:27

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Boron	8700	75	ug/L	5.00	08/10/21 14:59	EPA 6010D		MLR	B1H0147
Lithium	ND	10	ug/L	1.00	08/10/21 16:32	EPA 6010D		MLR	B1H0147

Sample Number 1080231-05
Sample Description AF09067 WAP-14A collected on 07/19/21 13:46

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Lithium	40	10	ug/L	1.00	08/10/21 18:40	EPA 6010D	S1	MLR	B1H0482



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Reported: 08/19/21 22:26

Sample Number 1080231-06
Sample Description AF09069 WAP-14C collected on 07/19/21 15:39

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	13	10	ug/L	1.00	08/10/21 15:24	EPA 6010D		MLR	B1H0147

Sample Number 1080231-07
Sample Description AF09068 WAP-14B collected on 07/19/21 16:34

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	15	10	ug/L	1.00	08/10/21 15:28	EPA 6010D		MLR	B1H0147

Sample Number 1080231-08
Sample Description AF09050 WAP-1 collected on 07/20/21 12:28

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/09/21 11:58	EPA 7470A		NAR	B1H0392
Boron	26	15	ug/L	1.00	08/13/21 00:00	EPA 6010D		MLR	B1H0147
Lithium	ND	10	ug/L	1.00	08/10/21 15:31	EPA 6010D		MLR	B1H0147
Molybdenum	ND	10	ug/L	1.00	08/10/21 15:31	EPA 6010D		MLR	B1H0147

Sample Number 1080231-09
Sample Description AF09051 WAP-2 collected on 07/20/21 13:28

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	8300	75	ug/L	5.00	08/10/21 14:21	EPA 6010D		MLR	B1H0147

Sample Number 1080231-10
Sample Description AF09083 WBW-1 collected on 07/20/21 11:07

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/09/21 12:09	EPA 7470A		NAR	B1H0392
Boron	ND	15	ug/L	1.00	08/13/21 00:00	EPA 6010D		MLR	B1H0147
Lithium	ND	10	ug/L	1.00	08/10/21 15:49	EPA 6010D		MLR	B1H0147
Molybdenum	ND	10	ug/L	1.00	08/10/21 15:49	EPA 6010D		MLR	B1H0147



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Reported: 08/19/21 22:26

**Total Metals
Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1H0147 - EPA 3005A

Blank (B1H0147-BLK1)

Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							

LCS (B1H0147-BS1)

Boron	500	15	ug/L	500		99	80-120			
Lithium	519	10	ug/L	500		104	80-120			
Molybdenum	490	10	ug/L	500		99	80-120			

Matrix Spike (B1H0147-MS1) Source: 1080231-05RE1

Boron	7200	75	ug/L	500	6500	142	75-125			S5
Lithium	637	50	ug/L	500	ND	120	75-125			
Molybdenum	520	50	ug/L	500	ND	105	75-125			

Matrix Spike Dup (B1H0147-MSD1) Source: 1080231-05RE1

Boron	7300	75	ug/L	500	6500	145	75-125	0.2	20	S5
Lithium	634	50	ug/L	500	ND	120	75-125	0.5	20	
Molybdenum	520	50	ug/L	500	ND	104	75-125	0.5	20	

Post Spike (B1H0147-PS1) Source: 1080231-05RE1

Boron	9100	75	ug/L	2500	6500	102	75-125			
Lithium	2890	50	ug/L	2500	ND	114	75-125			
Molybdenum	2600	50	ug/L	2500	ND	104	75-125			

Batch B1H0392 - EPA 7470A

Blank (B1H0392-BLK1)

Mercury	ND	0.20	ug/L							
---------	----	------	------	--	--	--	--	--	--	--

LCS (B1H0392-BS1)

Mercury	5.1	0.20	ug/L	5.00		102	80-120			
---------	-----	------	------	------	--	-----	--------	--	--	--

Matrix Spike (B1H0392-MS1) Source: 1080231-08

Mercury	4.9	0.20	ug/L	5.00	ND	97	75-125			
---------	-----	------	------	------	----	----	--------	--	--	--



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Reported: 08/19/21 22:26

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1H0392 - EPA 7470A

Matrix Spike Dup (B1H0392-MSD1) Source: 1080231-08

Mercury	4.9	0.20	ug/L	5.00	ND	97	75-125	0.3	20	
---------	-----	------	------	------	----	----	--------	-----	----	--

Post Spike (B1H0392-PS1) Source: 1080231-08

Mercury	3.8		ug/L	4.00	ND	95	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--

Batch B1H0482 - EPA 3005A

Blank (B1H0482-BLK1)

Lithium	ND	10	ug/L							
---------	----	----	------	--	--	--	--	--	--	--

LCS (B1H0482-BS1)

Lithium	499	10	ug/L	500		100	80-120			
---------	-----	----	------	-----	--	-----	--------	--	--	--

Matrix Spike (B1H0482-MS1) Source: 1080231-05

Lithium	715	10	ug/L	500	40	135	75-125			S1
---------	-----	----	------	-----	----	-----	--------	--	--	----

Matrix Spike Dup (B1H0482-MSD1) Source: 1080231-05

Lithium	717	10	ug/L	500	40	135	75-125	0.4	20	S1
---------	-----	----	------	-----	----	-----	--------	-----	----	----

Post Spike (B1H0482-PS1) Source: 1080231-05

Lithium	0.703		mg/L	0.500	ND	133	75-125			S1
---------	-------	--	------	-------	----	-----	--------	--	--	----



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Reported: 08/19/21 22:26

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 3005A ICP Digestion				
EPA 3005A	B1H0147	1080231-01	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-02	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-03	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-04	08/04/2021 09:25	CAL
EPA 3005A	B1H0482	1080231-05	08/10/2021 13:03	MTH
EPA 3005A	B1H0147	1080231-06	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-07	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-08	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-09	08/04/2021 09:25	CAL
EPA 3005A	B1H0147	1080231-10	08/04/2021 09:25	CAL
EPA 7470A Mercury Digestion				
EPA 7470A	B1H0392	1080231-08	08/09/2021 09:14	NAR
EPA 7470A	B1H0392	1080231-10	08/09/2021 09:14	NAR



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080231
Reported: 08/19/21 22:26

Data Qualifiers and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not reported
- RPD Relative Percent Difference
- S1 The matrix spike and / or the matrix spike duplicate sample recovery was not within control limits due to matrix interference. The Laboratory Control Sample (LCS) was within control limits.
- S5 The raw sample concentration was greater than four times the spike concentration. The spike recovery was not evaluated against the control limits.



Chain of Custody

1080231

Customer Email/Report Recipient: LCWILLIA@santeecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JMO2.09.681 / 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	B	L	M	H
AF09053	WAP-4	7/19/21	1124	BRT/CNS	1	P	G	GW	2		X	X		
AF09070	WAP-15		1030		1						X	X		
AF09065	WAP-14		1422		1						X	X		
AF09066	WAP-14 DUP		1427		1						X	X		
AF09067	WAP-14A		1346		1							X		
AF09069	WAP-14C		1531		1							X		
AF09068	WAP-14B		1634		1							X		
AF09050	WAP-1	7/20/21	1228	MDS/BRT	1						X	X	X	X
AF09051	WAP-2	7/20/21	1328		1						X			
AF09083	WBW-1	7/20/21	1107		1						X	X	X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sibrown</i>	85594	8/2/21	1530	FedEx			
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
FedEx		8.3.21	0915	<i>[Signature]</i>		8.3.21	0915
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 24.4 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"/> AAM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Party (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"/> Density, Strength <input type="checkbox"/> IFI <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Phosphorus <input type="checkbox"/> Metals in oil (As, Cu, Cr, Ni, Pb, Hg) TX GOREN
--	--	---	---	---	--	---

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 Verification

Client: Santee Cooper Date Received: 08/03/2021 Work Order: 1080231

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____

Tracking Number: _____

Receipt Criteria	Y e s	N o	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN: 97050067	X			<u>Ice</u> Cold Packs Dry Ice None
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.	X			
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.			X	

If in-house preservation used – record Lot #			
HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments: _____

Were non-conformance issues noted at sample receipt? Yes or No
Non-Conformance issue other than noted above: _____



Laboratory Report

Client	Santee Cooper Linda Williams 1 Riverwood Dr. Moncks Corner, SC 29461	Project:	Ground Water
		Work Order:	1080871
		Received:	08/13/2021 09:25

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on August 13, 2021. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Report Approved By:

Lauren Hollister
Project Manager

This report may not be reproduced, except in full, without written permission from Rogers & Callcott, Inc.

PO Box 5655 | Greenville, SC 29606 | 426 Fairforest Way | Greenville, SC 29607 | main 864.232.1556 | fax 864.232.6140

rogersandcallcott.com
an employee-owned company



South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880

Certificate of Analysis

Client
 Santee Cooper
 Linda Williams
 1 Riverwood Dr.
 Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Received: 08/13/2021 09:25

Sample Number	Sample Description	Matrix	Sampled	Type
1080871-01	AF09085 WLF-A1-1	Ground Water	08/05/21 12:46	Grab
1080871-02	AF09056 WAP-7	Ground Water	08/10/21 15:00	Grab
1080871-03	AF09076 WAP-20	Ground Water	08/10/21 15:36	Grab
1080871-04	AF09081 WAP-25	Ground Water	08/10/21 13:32	Grab
1080871-05	AF09082 WAP-26	Ground Water	08/10/21 11:46	Grab
1080871-06	AF09086 WLF-A1-2	Ground Water	08/11/21 13:35	Grab
1080871-07	AF09087 WLF-A1-3	Ground Water	08/11/21 12:05	Grab
1080871-08	AF09088 WLF-A1-4	Ground Water	08/11/21 11:07	Grab
1080871-09	AF09089 WLF-A1-4 DUP	Ground Water	08/11/21 11:12	Grab
1080871-10	AF09052 WAP-3	Ground Water	07/29/21 12:35	Grab
1080871-11	AF09071 WAP-16	Ground Water	07/29/21 15:38	Grab
1080871-12	AF09064 WAP-13	Ground Water	07/29/21 11:29	Grab
1080871-13	AF09062 WAP-12	Ground Water	07/29/21 13:54	Grab
1080871-14	AF09063 WAP-12 DUP	Ground Water	07/29/21 13:59	Grab
1080871-15	AF09080 WAP-24	Ground Water	08/02/21 12:50	Grab
1080871-16	AF09059 WAP-10	Ground Water	08/02/21 11:34	Grab
1080871-17	AF09060 WAP-10 DUP	Ground Water	08/02/21 11:39	Grab
1080871-18	AF09058 WAP-9	Ground Water	08/02/21 13:39	Grab
1080871-19	AF09072 WAP-17	Ground Water	08/02/21 15:12	Grab
1080871-20	AF09073 WAP-17 DUP	Ground Water	08/02/21 15:17	Grab
1080871-21	AF09079 WAP-23	Ground Water	08/03/21 12:36	Grab
1080871-22	AF09077 WAP-21	Ground Water	08/03/21 11:30	Grab
1080871-23	AF09075 WAP-19	Ground Water	08/03/21 16:27	Grab
1080871-24	AF09078 WAP-22	Ground Water	08/04/21 13:31	Grab
1080871-25	AF09091 WLF-A2-6	Ground Water	08/04/21 15:02	Grab
1080871-26	AF09092 WLF-A2-6 DUP	Ground Water	08/04/21 15:07	Grab
1080871-27	AF09074 WAP-18	Ground Water	08/04/21 12:16	Grab



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number	Sample Description	Matrix	Sampled	Type
1080871-28	AF09084 WBW-A1-1	Ground Water	08/05/21 10:30	Grab
1080871-29	AF09090 WLF-A1-5	Ground Water	08/05/21 11:38	Grab



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Data

Sample Number 1080871-01
Sample Description AF09085 WLF-A1-1 collected on 08/05/21 12:46

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 14:50	EPA 7470A		NAR	B1H0833
Boron	1100	20	ug/L	1.00	08/17/21 19:18	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 19:18	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 19:18	EPA 6010D		MLR	B1H0709

Sample Number 1080871-02
Sample Description AF09056 WAP-7 collected on 08/10/21 15:00

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:01	EPA 7470A		NAR	B1H0833
Boron	970	20	ug/L	1.00	08/17/21 18:16	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 18:16	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 18:16	EPA 6010D		MLR	B1H0709

Sample Number 1080871-03
Sample Description AF09076 WAP-20 collected on 08/10/21 15:36

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:18	EPA 7470A		NAR	B1H0833
Boron	1800	20	ug/L	1.00	08/17/21 19:22	EPA 6010D		MLR	B1H0709
Lithium	41	10	ug/L	1.00	08/17/21 19:22	EPA 6010D		MLR	B1H0709
Molybdenum	21	10	ug/L	1.00	08/17/21 19:22	EPA 6010D		MLR	B1H0709

Sample Number 1080871-04
Sample Description AF09081 WAP-25 collected on 08/10/21 13:32

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	08/17/21 19:26	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 19:26	EPA 6010D		MLR	B1H0709



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number 1080871-05
Sample Description AF09082 WAP-26 collected on 08/10/21 11:46

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	08/17/21 19:30	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 19:30	EPA 6010D		MLR	B1H0709

Sample Number 1080871-06
Sample Description AF09086 WLF-A1-2 collected on 08/11/21 13:35

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:21	EPA 7470A		NAR	B1H0833
Boron	87	20	ug/L	1.00	08/17/21 19:53	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 19:53	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 19:53	EPA 6010D		MLR	B1H0709

Sample Number 1080871-07
Sample Description AF09087 WLF-A1-3 collected on 08/11/21 12:05

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:24	EPA 7470A		NAR	B1H0833
Boron	70	20	ug/L	1.00	08/17/21 19:57	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 19:57	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 19:57	EPA 6010D		MLR	B1H0709

Sample Number 1080871-08
Sample Description AF09088 WLF-A1-4 collected on 08/11/21 11:07

Parameter	Result	Reporting Limit	Units	DF	Analized	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:26	EPA 7470A		NAR	B1H0833
Boron	170	20	ug/L	1.00	08/17/21 20:00	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 20:00	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:00	EPA 6010D		MLR	B1H0709



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number 1080871-09
Sample Description AF09089 WLF-A1-4 DUP collected on 08/11/21 11:12

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:29	EPA 7470A		NAR	B1H0833
Boron	180	20	ug/L	1.00	08/17/21 20:04	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 20:04	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:04	EPA 6010D		MLR	B1H0709

Sample Number 1080871-10
Sample Description AF09052 WAP-3 collected on 07/29/21 12:35

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	1700	20	ug/L	1.00	08/17/21 18:36	EPA 6010D		MLR	B1H0709

Sample Number 1080871-11
Sample Description AF09071 WAP-16 collected on 07/29/21 15:38

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	1500	20	ug/L	1.00	08/17/21 20:08	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 20:08	EPA 6010D		MLR	B1H0709

Sample Number 1080871-12
Sample Description AF09064 WAP-13 collected on 07/29/21 11:29

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	4200	20	ug/L	1.00	08/17/21 20:12	EPA 6010D		MLR	B1H0709

Sample Number 1080871-13
Sample Description AF09062 WAP-12 collected on 07/29/21 13:54

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	370	20	ug/L	1.00	08/17/21 20:16	EPA 6010D		MLR	B1H0709



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number 1080871-14
Sample Description AF09063 WAP-12 DUP collected on 07/29/21 13:59

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	390	20	ug/L	1.00	08/17/21 20:20	EPA 6010D		MLR	B1H0709

Sample Number 1080871-15
Sample Description AF09080 WAP-24 collected on 08/02/21 12:50

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	08/17/21 20:43	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:43	EPA 6010D		MLR	B1H0709

Sample Number 1080871-16
Sample Description AF09059 WAP-10 collected on 08/02/21 11:34

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	8800	100	ug/L	5.00	08/17/21 16:56	EPA 6010D		MLR	B1H0709
Lithium	25	10	ug/L	1.00	08/17/21 20:47	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:47	EPA 6010D		MLR	B1H0709

Sample Number 1080871-17
Sample Description AF09060 WAP-10 DUP collected on 08/02/21 11:39

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	8700	100	ug/L	5.00	08/17/21 16:59	EPA 6010D		MLR	B1H0709
Lithium	25	10	ug/L	1.00	08/17/21 20:51	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:51	EPA 6010D		MLR	B1H0709



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number 1080871-18
Sample Description AF09058 WAP-9 collected on 08/02/21 13:39

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	4600	20	ug/L	1.00	08/17/21 20:54	EPA 6010D		MLR	B1H0709
Lithium	57	10	ug/L	1.00	08/17/21 20:54	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:54	EPA 6010D		MLR	B1H0709

Sample Number 1080871-19
Sample Description AF09072 WAP-17 collected on 08/02/21 15:12

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	4100	20	ug/L	1.00	08/17/21 20:58	EPA 6010D		MLR	B1H0709
Lithium	12	10	ug/L	1.00	08/17/21 20:58	EPA 6010D		MLR	B1H0709
Molybdenum	12	10	ug/L	1.00	08/17/21 20:58	EPA 6010D		MLR	B1H0709

Sample Number 1080871-20
Sample Description AF09073 WAP-17 DUP collected on 08/02/21 15:17

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	3900	20	ug/L	1.00	08/17/21 21:02	EPA 6010D		MLR	B1H0709
Lithium	11	10	ug/L	1.00	08/17/21 21:02	EPA 6010D		MLR	B1H0709
Molybdenum	14	10	ug/L	1.00	08/17/21 21:02	EPA 6010D		MLR	B1H0709

Sample Number 1080871-21
Sample Description AF09079 WAP-23 collected on 08/03/21 12:36

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	12	10	ug/L	1.00	08/17/21 21:06	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/17/21 21:06	EPA 6010D		MLR	B1H0734



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number 1080871-22
Sample Description AF09077 WAP-21 collected on 08/03/21 11:30

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	2200	20	ug/L	1.00	08/17/21 21:10	EPA 6010D		MLR	B1H0734
Lithium	ND	10	ug/L	1.00	08/17/21 21:10	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/17/21 21:10	EPA 6010D		MLR	B1H0734

Sample Number 1080871-23
Sample Description AF09075 WAP-19 collected on 08/03/21 16:27

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	4000	20	ug/L	1.00	08/19/21 16:09	EPA 6010D		MLR	B1H0734
Lithium	240	10	ug/L	1.00	08/19/21 16:09	EPA 6010D		MLR	B1H0734
Molybdenum	24	10	ug/L	1.00	08/19/21 16:09	EPA 6010D		MLR	B1H0734

Sample Number 1080871-24
Sample Description AF09078 WAP-22 collected on 08/04/21 13:31

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	67	10	ug/L	1.00	08/17/21 18:55	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/17/21 18:55	EPA 6010D		MLR	B1H0734

Sample Number 1080871-25
Sample Description AF09091 WLF-A2-6 collected on 08/04/21 15:02

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:32	EPA 7470A		NAR	B1H0833
Boron	410	20	ug/L	1.00	08/19/21 15:57	EPA 6010D		MLR	B1H0734
Lithium	41	10	ug/L	1.00	08/19/21 15:57	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/19/21 15:57	EPA 6010D		MLR	B1H0734



Rogers & Callcott

ENVIRONMENTAL

Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Number 1080871-26
Sample Description AF09092 WLF-A2-6 DUP collected on 08/04/21 15:07

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:35	EPA 7470A		NAR	B1H0833
Boron	410	20	ug/L	1.00	08/19/21 16:01	EPA 6010D		MLR	B1H0734
Lithium	39	10	ug/L	1.00	08/19/21 16:01	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/19/21 16:01	EPA 6010D		MLR	B1H0734

Sample Number 1080871-27
Sample Description AF09074 WAP-18 collected on 08/04/21 12:16

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	3500	20	ug/L	1.00	08/19/21 16:13	EPA 6010D		MLR	B1H0734
Lithium	500	10	ug/L	1.00	08/19/21 16:13	EPA 6010D		MLR	B1H0734
Molybdenum	90	10	ug/L	1.00	08/19/21 16:13	EPA 6010D		MLR	B1H0734

Sample Number 1080871-28
Sample Description AF09084 WBW-A1-1 collected on 08/05/21 10:30

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:38	EPA 7470A		NAR	B1H0833
Boron	42	20	ug/L	1.00	08/19/21 16:05	EPA 6010D		MLR	B1H0734
Lithium	ND	10	ug/L	1.00	08/19/21 16:05	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/19/21 16:05	EPA 6010D		MLR	B1H0734

Sample Number 1080871-29
Sample Description AF09090 WLF-A1-5 collected on 08/05/21 11:38

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:41	EPA 7470A		NAR	B1H0833
Boron	2200	20	ug/L	1.00	08/19/21 16:17	EPA 6010D		MLR	B1H0734
Lithium	ND	10	ug/L	1.00	08/19/21 16:17	EPA 6010D		MLR	B1H0734
Molybdenum	ND	10	ug/L	1.00	08/19/21 16:17	EPA 6010D		MLR	B1H0734



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1H0709 - EPA 3005A

Blank (B1H0709-BLK1)

Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							

LCS (B1H0709-BS1)

Boron	490	15	ug/L	500		98	80-120			
Lithium	516	10	ug/L	500		103	80-120			
Molybdenum	470	10	ug/L	500		93	80-120			

Matrix Spike (B1H0709-MS1) Source: 1080871-02

Boron	1400	15	ug/L	500	970	84	75-125			
Lithium	484	10	ug/L	500	ND	97	75-125			
Molybdenum	500	10	ug/L	500	ND	100	75-125			

Matrix Spike (B1H0709-MS2) Source: 1080871-10

Boron	2200	15	ug/L	500	1700	100	75-125			
Lithium	547	10	ug/L	500	11	107	75-125			
Molybdenum	460	10	ug/L	500	ND	92	75-125			

Matrix Spike Dup (B1H0709-MSD1) Source: 1080871-02

Boron	1500	15	ug/L	500	970	102	75-125	6	20	
Lithium	512	10	ug/L	500	ND	102	75-125	6	20	
Molybdenum	460	10	ug/L	500	ND	91	75-125	10	20	

Matrix Spike Dup (B1H0709-MSD2) Source: 1080871-10

Boron	2200	15	ug/L	500	1700	112	75-125	3	20	
Lithium	547	10	ug/L	500	11	107	75-125	0.03	20	
Molybdenum	460	10	ug/L	500	ND	92	75-125	0.003	20	

Post Spike (B1H0709-PS1) Source: 1080871-02

Boron	1.5		mg/L	0.500	ND	99	75-125			
Lithium	0.515		mg/L	0.500	ND	103	75-125			
Molybdenum	0.48		mg/L	0.500	ND	95	75-125			



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1H0709 - EPA 3005A

Post Spike (B1H0709-PS2)

Source: 1080871-10

Boron	2.1		mg/L	0.500	ND	97	75-125			
Lithium	0.552		mg/L	0.500	ND	108	75-125			
Molybdenum	0.47		mg/L	0.500	ND	94	75-125			

Batch B1H0734 - EPA 3005A

Blank (B1H0734-BLK1)

Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							

LCS (B1H0734-BS1)

Boron	510	15	ug/L	500		101	80-120			
Lithium	519	10	ug/L	500		104	80-120			
Molybdenum	490	10	ug/L	500		97	80-120			

Matrix Spike (B1H0734-MS1)

Source: 1080871-24

Boron	4500	15	ug/L	500	4000	94	75-125			
Lithium	615	10	ug/L	500	67	110	75-125			
Molybdenum	460	10	ug/L	500	ND	91	75-125			

Matrix Spike Dup (B1H0734-MSD1)

Source: 1080871-24

Boron	4700	15	ug/L	500	4000	139	75-125	5	20	SS
Lithium	640	10	ug/L	500	67	114	75-125	4	20	
Molybdenum	470	10	ug/L	500	ND	94	75-125	3	20	

Post Spike (B1H0734-PS1)

Source: 1080871-24

Boron	4.6		mg/L	0.500	ND	109	75-125			
Lithium	0.629		mg/L	0.500	ND	112	75-125			
Molybdenum	0.48		mg/L	0.500	ND	96	75-125			

Batch B1H0833 - EPA 7470A

Blank (B1H0833-BLK1)

Mercury	ND	0.20	ug/L							
---------	----	------	------	--	--	--	--	--	--	--



Santee Cooper
1 Riverwood Dr.
Moncks Comer, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Total Metals
Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
-----------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B1H0833 - EPA 7470A

LCS (B1H0833-BS1)

Mercury	5.0	0.20	ug/L	5.00		99	80-120			
---------	-----	------	------	------	--	----	--------	--	--	--

Matrix Spike (B1H0833-MS1) Source: 1080871-01

Mercury	4.2	0.20	ug/L	5.00	ND	83	75-125			
---------	-----	------	------	------	----	----	--------	--	--	--

Matrix Spike (B1H0833-MS2) Source: 1080871-02

Mercury	5.0	0.20	ug/L	5.00	ND	101	75-125			
---------	-----	------	------	------	----	-----	--------	--	--	--

Matrix Spike Dup (B1H0833-MSD1) Source: 1080871-01

Mercury	4.2	0.20	ug/L	5.00	ND	83	75-125	0.2	20	
---------	-----	------	------	------	----	----	--------	-----	----	--

Matrix Spike Dup (B1H0833-MSD2) Source: 1080871-02

Mercury	5.0	0.20	ug/L	5.00	ND	100	75-125	0.9	20	
---------	-----	------	------	------	----	-----	--------	-----	----	--

Post Spike (B1H0833-PS1) Source: 1080871-01

Mercury	3.2		ug/L	4.00	ND	81	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--

Post Spike (B1H0833-PS2) Source: 1080871-02

Mercury	3.8		ug/L	4.00	ND	95	80-120			
---------	-----	--	------	------	----	----	--------	--	--	--



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 3005A ICP Digestion				
EPA 3005A	B1H0709	1080871-01	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-02	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-03	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-04	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-05	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-06	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-07	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-08	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-09	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-10	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-11	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-12	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-13	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-14	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-15	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-16	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-17	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-18	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-19	08/16/2021 11:50	MTH
EPA 3005A	B1H0709	1080871-20	08/16/2021 11:50	MTH
EPA 3005A	B1H0734	1080871-21	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-22	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-23	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-24	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-25	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-26	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-27	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-28	08/17/2021 08:40	MTH
EPA 3005A	B1H0734	1080871-29	08/17/2021 08:40	MTH



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

EPA 7470A Mercury Digestion

EPA 7470A	B1H0833	1080871-01	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-02	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-03	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-06	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-07	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-08	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-09	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-25	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-26	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-28	08/18/2021 11:33	NAR
EPA 7470A	B1H0833	1080871-29	08/18/2021 11:33	NAR



Santee Cooper
1 Riverwood Dr.
Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1080871
Reported: 08/27/21 23:29

Data Qualifiers and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not reported
- RPD Relative Percent Difference
- S5 The raw sample concentration was greater than four times the spike concentration. The spike recovery was not evaluated against the control limits.

Chain of Custody

1080811



Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02-09.G01 / 36500 Rerun request for any flagged QC: (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	B	LI	MO	HF
AF09085	WLF-A1-1 -01	8/5/21	1246	BRT/SWM							X	X	X	X
AF09086	WAP-7 -02	8/10/21	1500	MDS/BSS							X	X	X	X
AF09076	WAP-20 -03		1536								X	X	X	X
AF09081	WAP-25 -04		1332									X	X	
AF09082	WAP-26 -05		1146									X	X	
AF09086	WLF-A1-2 106	8/11/21	1385	MDS/GWS							X	X	X	X
AF09087	WLF-A1-3 -07		1205								X	X	X	X
AF09088	WLF-A1-4 -08		1107								X	X	X	X
AF09089	WLF-A1-4 DUP -09		1112								X	X	X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): <u>22.4</u> Initial: <u>MS</u>
<u>SJBrown</u>	35594	8/12/21	1500	<u>MS</u>				Correct pH: Yes No
<u>FedEx</u>				<u>MS</u>		8/13/21	0925	Preservative Lot#:
								Date/Time/init for preservative:

<input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr	<input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb	<input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI	Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TP04 <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"/> Wellboard <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"/> Pump (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	Cl Units of Calc. Chloride Chlor Arsenic Arsenic Arsenic Arsenic Used Cl Chloride Chloride Chloride Chloride Chloride Chloride
---	--	---	--	--	---	---	--	---

FedEx 8153 6791 5397 MS
 8/13/21

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

1080871
cont



Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JMO2.09.601 / 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	B	J	M	LF
AF09052	WAP-3	10/29/21	1235	MDS/BRT	1	P	G	GW	2		X			
AF09071	WAP-16	11	1538								X	X		
AF09064	WAP-13	12	1129								X			
AF09062	WAP-12	13	1354								X			
AF09063	WAP-12 DUP	14	1359								X			
AF09080	WAP-24	8/2/21	1250	MDS/BRT								X	X	
AF09059	WAP-10	16	1134								X	X	X	
AF09060	WAP-10 DUP	17	1139								X	X	X	
AF09058	WAP-9	18	1339								X	X	X	
AF09072	WAP-17	19	1512								X	X	X	

Relinquished by:	Employee #	Date	Time	Received by:	Employee #	Date	Time
<i>Sibrown</i>	35594	8/12/21	1500	<i>FedEx</i>			
<i>FedEx</i>				<i>[Signature]</i>		8/13/21	0925

Sample Receiving (Internal Use Only)
 TEMP (°C): 22.4 Initial: MA
 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/TP04 <input type="checkbox"/> NH-N <input type="checkbox"/> P <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> NH3 <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 <input type="checkbox"/> Gypsum (all below) <input type="checkbox"/> T AM <input type="checkbox"/> T OC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfates <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"/> Color <input type="checkbox"/> Acid <input type="checkbox"/> Density <input type="checkbox"/> Viscosity <input type="checkbox"/> Water Content <input type="checkbox"/> Sulfur <input type="checkbox"/> Copper
--	--	---	---	---	--	--

8/12/21
3077
2 of 3

Chain of Custody

1080871
cont



Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02.09.081 / 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)	<ul style="list-style-type: none"> Method # Reporting limit Misc. sample info Any other notes 	M	J	Me	Hg
AF09073	WAP-17 DUP -20	8/2/21	MDS BRT	1517	1	P	G	GW	2		X	X	X	
AF09079	WAP-23 -21	8/3/21	1236	BRT CWS								X	X	
AF09077	WAP-21 -22		1130								X	X	X	
AF09075	WAP-19 -23		1627								X	X	X	
AF09078	WAP-22 -24	8/4/21	1331	MDS BRT								X	X	
AF09091	WLF-A2-6 -25		1502								X	X	X	X
AF09092	WLF-A2-6 DUP -26		1507								X	X	X	X
AF09074	WAP-18 -27		1216								X	X	X	
AF09084	WBW-A1-1 -28	8/5/21	1030	BRT BWM							X	X	X	X
AF09090	WLF-A1-5 -29		1138								X	X	X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>SJBrown</i>	35594	8/12/21	1500	<i>FedEx</i>			
<i>FedEx</i>				<i>Michael</i>		8/13/21	0925

Sample Receiving (Internal Use Only)
TEMP (°C): 21.4 Initial: MA
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/TP04 <input type="checkbox"/> NH-N <input type="checkbox"/> P <input type="checkbox"/> C <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"/> AM <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"/> Gross Oil Qual <input type="checkbox"/> Metals <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Oil strength <input type="checkbox"/> Dissolved bases <input type="checkbox"/> Total Oil <input type="checkbox"/> Infrared <input type="checkbox"/> Metals <input type="checkbox"/> A-Gal <input type="checkbox"/> HAP <input type="checkbox"/> ISX <input type="checkbox"/> GOFBR
--	--	--	--	--	--	---

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)

283



Sample Receipt Verification

Client: Santee Cooper Date Received: 08/13/2021 Work Order: 1080871

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____

Tracking Number: _____

Receipt Criteria	Y e s	N o	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN: 97050067	X			Ice Cold Packs Dry Ice <u>None</u>
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.	X			
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.			X	

If in-house preservation used – record Lot #

HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments:

Were non-conformance issues noted at sample receipt? Yes or No

Non-Conformance issue other than noted above:



March 19, 2021

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

Re: ABS Lab Analytical
Work Order: 535320

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 19, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

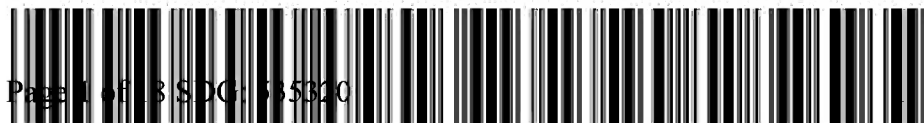
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without 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,

Julie Robinson
Project Manager

Purchase Order: 367074
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: 535320 GEL Work Order: 535320

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by _____

Julie Robinson

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96403
 Sample ID: 535320001
 Matrix: Ground Water
 Collect Date: 16-FEB-21 11:33
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.24	+/-1.16	1.91	3.00	pCi/L			LXB3	03/03/21	0619	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.54	+/-1.21			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.298	+/-0.323	0.523	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.9	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96404
 Sample ID: 535320002
 Matrix: Ground Water
 Collect Date: 16-FEB-21 14:25
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.83	+/-1.32	2.10	3.00	pCi/L			LXB3	03/03/21	0619	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.18	+/-1.37			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.355	+/-0.371	0.604	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96405
 Sample ID: 535320003
 Matrix: Ground Water
 Collect Date: 16-FEB-21 15:30
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.550	+/-0.938	1.64	3.00	pCi/L			LXB3	03/03/21	0619	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.877	+/-1.00			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.327	+/-0.358	0.588	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96379
 Sample ID: 535320004
 Matrix: Ground Water
 Collect Date: 15-FEB-21 13:37
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.34	+/-1.01	1.58	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.76	+/-1.06			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.422	+/-0.332	0.450	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.1	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96380
 Sample ID: 535320005
 Matrix: Ground Water
 Collect Date: 15-FEB-21 14:40
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.43	+/-1.39	1.92	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		8.50	+/-1.77			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		5.07	+/-1.09	0.817	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.9	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96412
 Sample ID: 535320006
 Matrix: Ground Water
 Collect Date: 15-FEB-21 12:21
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.24	+/-0.858	1.30	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.69	+/-0.929			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.453	+/-0.356	0.482	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96388
 Sample ID: 535320007
 Matrix: Ground Water
 Collect Date: 17-FEB-21 13:57
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.96	+/-1.42	2.12	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.83	+/-1.59			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.88	+/-0.701	0.492	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.3	(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: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96389
 Sample ID: 535320008
 Matrix: Ground Water
 Collect Date: 17-FEB-21 14:02
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.53	+/-1.24	1.99	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.16	+/-1.37			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.63	+/-0.584	0.600	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			82.6	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96406
 Sample ID: 535320009
 Matrix: Ground Water
 Collect Date: 17-FEB-21 12:35
 Receive Date: 19-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.48	+/-1.05	1.63	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.13	+/-1.11			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.646	+/-0.377	0.381	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

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

QC Summary

Report Date: March 19, 2021

Page 1 of 2

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

Contact:
Workorder: 535320

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2094595										
QC1204757495	535320004		DUP								
Radium-228	U	1.34	U	0.520	pCi/L	N/A		N/A	LXB3	03/03/21	06:19
	Uncertainty	+/-1.01		+/-0.847							
QC1204757496	LCS										
Radium-228	54.7			61.6	pCi/L		113	(75%-125%)		03/03/21	06:19
	Uncertainty			+/-3.92							
QC1204757494	MB										
Radium-228				1.50	pCi/L					03/03/21	06:19
	Uncertainty			+/-0.829							
Rad Ra-226											
Batch	2094556										
QC1204757382	535320001		DUP								
Radium-226	U	0.298		0.575	pCi/L	63.6		(0% - 100%)	MXH8	03/12/21	09:53
	Uncertainty	+/-0.323		+/-0.378							
QC1204757384	LCS										
Radium-226	27.0			26.8	pCi/L		99.1	(75%-125%)		03/12/21	09:53
	Uncertainty			+/-2.12							
QC1204757381	MB										
Radium-226				0.778	pCi/L					03/12/21	09:52
	Uncertainty			+/-0.479							
QC1204757383	535320001		MS								
Radium-226	27.0 U	0.298		24.9	pCi/L		92.2	(75%-125%)		03/12/21	09:53
	Uncertainty	+/-0.323		+/-2.01							

Notes:

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

The Qualifiers in this report are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 535320

Page 2 of 2

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
H											
J											
J											
K											
L											
M											
M											
N/A											
NI											
ND											
NJ											
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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 #: 535320**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2094595

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
535320001	AE96403
535320002	AE96404
535320003	AE96405
535320004	AE96379
535320005	AE96380
535320006	AE96412
535320007	AE96388
535320008	AE96389
535320009	AE96406
1204757494	Method Blank (MB)
1204757495	535320004(AE96379) Sample Duplicate (DUP)
1204757496	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
1204757494 (MB)	Radium-228	Result: 1.50 pCi/L > MDA: 1.14 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: 2094556

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
535320001	AE96403
535320002	AE96404
535320003	AE96405
535320004	AE96379
535320005	AE96380
535320006	AE96412
535320007	AE96388
535320008	AE96389
535320009	AE96406
1204757381	Method Blank (MB)
1204757382	535320001(AE96403) Sample Duplicate (DUP)
1204757383	535320001(AE96403) Matrix Spike (MS)
1204757384	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
1204757381 (MB)	Radium-226	Result: 0.778 pCi/L > MDA: 0.662 pCi/L <= RDL: 1.00 pCi/L

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

535320



Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02.09.G01 / 36500 Rerun request for any flagged QC: Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC
AE96403	WAP-18	2/16/21	1133	MDE/ DEW	2	P	G	GW	2		X	X	X
AE96404	WAP-19		1425										
AE96405	WAP-20		1530										
AE96379	WAP-1	2/15/21	1337	MDE/ DBN									
AE96380	WAP-2		1440										
AE96412	WBW-1	2/15/21	1221										
AE96388	WAP-10	2/17/21	1357	DEW/ BSB	2								
AE96389	WAP-10 DUP		1402										
AE96406	WAP-21		1235										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35574	2/19/21	0954	<i>GEL</i>	GEL	2/19/21	0954
<i>GEL</i>	666	2/19/21	11:21	<i>GEL</i>	GEL	2/19/21	11:21

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 Trans. Oil Qual. <input type="checkbox"/> % Moisture Color Acidity Dielectric Strength BTU Dissolved Gases Used Oil Flashpoint Metals in oil (As, Cd, Cr, Ni, Pb, Hg) TX GOFER
--	--	---	--	---	--	---

SAMPLE RECEIPT & REVIEW FORM

J.R.

Client: SOOP		SDG/AR/COC/Work Order: 535320	
Received By: Tye		Date Received: 2/19/21	
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier 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?		<input checked="" type="checkbox"/> 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?		<input checked="" type="checkbox"/> 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	No	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: 110°C
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: IR3-19 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, List#:
7 Do any samples require Volatile Analysis?	<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 Fivezer)
			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"/>	ID's and containers 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):			

PM (or PMA) review: Initials **NRC** Date **2/22/21** Page **1** of **1**

List of current GEL Certifications as of 19 March 2021

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	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122020-34
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



March 26, 2021

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

Re: ABS Lab Analytical
Work Order: 536093

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 26, 2021. 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,

Julie Robinson
Project Manager

Purchase Order: 367074
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: 536093 GEL Work Order: 536093

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by _____

Julie Robinson

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96385
 Sample ID: 536093001
 Matrix: Ground Water
 Collect Date: 24-FEB-21 11:02
 Receive Date: 26-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.01	+/-0.828	1.31	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.66	+/-0.938			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.647	+/-0.440	0.621	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.5	(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 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96381
 Sample ID: 536093002
 Matrix: Ground Water
 Collect Date: 24-FEB-21 13:18
 Receive Date: 26-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	-0.123	+/-0.815	1.57	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.47	+/-0.999			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.47	+/-0.578	0.661	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.8	(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 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96387
 Sample ID: 536093003
 Matrix: Ground Water
 Collect Date: 23-FEB-21 12:49
 Receive Date: 26-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.59	+/-1.57	2.45	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.65	+/-1.63			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.07	+/-0.422	0.364	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.8	(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 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96382
 Sample ID: 536093004
 Matrix: Ground Water
 Collect Date: 23-FEB-21 14:28
 Receive Date: 26-FEB-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.524	+/-0.903	1.58	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.97	+/-1.03			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.45	+/-0.495	0.421	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

QC Summary

Report Date: March 26, 2021

Page 1 of 2

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

Contact:
Workorder: 536093

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2097455										
QC1204762520	536093004	DUP									
Radium-228	U	0.524	U	0.739	pCi/L	N/A		N/A	LXB3	03/23/21	06:46
	Uncertainty	+/-0.903		+/-0.982							
QC1204762521	LCS										
Radium-228	54.3			46.4	pCi/L		85.4	(75%-125%)		03/23/21	06:46
	Uncertainty			+/-3.39							
QC1204762519	MB										
Radium-228			U	1.67	pCi/L					03/23/21	06:46
	Uncertainty			+/-1.34							
Rad Ra-226											
Batch	2097342										
QC1204762172	536093001	DUP									
Radium-226		0.647		0.747	pCi/L	14.4		(0% - 100%)	MXH8	03/04/21	09:12
	Uncertainty	+/-0.440		+/-0.426							
QC1204762176	LCS										
Radium-226	27.0			26.3	pCi/L		97.2	(75%-125%)		03/04/21	09:12
	Uncertainty			+/-2.38							
QC1204762171	MB										
Radium-226			U	0.222	pCi/L					03/04/21	09:12
	Uncertainty			+/-0.399							
QC1204762173	536093001	MS									
Radium-226	135	0.647		138	pCi/L		102	(75%-125%)		03/04/21	09:12
	Uncertainty	+/-0.440		+/-10.3							

Notes:

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

The Qualifiers in this report are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 536093

Page 2 of 2

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
H											
J											
J											
K											
L											
M											
M											
N/A											
NI											
ND											
NJ											
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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 #: 536093**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2097455

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
536093001	AE96385
536093002	AE96381
536093003	AE96387
536093004	AE96382
1204762519	Method Blank (MB)
1204762520	536093004(AE96382) Sample Duplicate (DUP)
1204762521	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: 2097342

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
536093001	AE96385
536093002	AE96381
536093003	AE96387
536093004	AE96382
1204762171	Method Blank (MB)
1204762172	536093001(AE96385) Sample Duplicate (DUP)
1204762173	536093001(AE96385) Matrix Spike (MS)
1204762176	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 and matrix spike duplicate, 1204762173 (AE96385MS), aliquots 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.

536093

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 #: 121567 / JM02.09.G01 / 36500 Rerun request for any flagged QC Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC
AE96385	WAP-7	2/24/21	1102	DEW/ ATH	2	P	G	GW	2		X	X	X
AE96381	WAP-3	↓	1318	↓	2	↓	↓	↓	↓		X	X	X
AE96387	WAP-9	2/23/21	1249	DEW/ MDG	2	↓	↓	↓	↓		X	X	X
AE96382	WAP-4	↓	1428	↓	2	↓	↓	↓	↓		X	X	X

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sibrown</i>	35594	2/26/21	0947	<i>GEL</i>	GEL	2/26/21	0947
<i>GEL</i>	GEL	2/26/21	1334	<i>ATH</i>		2/26/21	1334

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 Trans. Oil Qual. % Moisture Color Acidity Dielectric Strength JFI Dissolved Gases Used Oil Flashpoint Metals in oil (As, Cd, Cr, Ni, Pb, Hg) IX GOPER
--	--	---	--	---	--	---

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP		SDG/AR/COC/Work Order: 536093		
Received By: STACY BOONE		Date Received: FEBRUARY 26, 2021		
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?		<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): _____ CPW / 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 (Requirements 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>1°C</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>201-20</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#: _____ 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: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			ID's and tests affected: _____
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and containers affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No container count on COC Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished 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):				

PM (or PMA) review: Initials NRL Date 3/1/21 Page 1 of 1

List of current GEL Certifications as of 26 March 2021

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	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122020-34
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



April 01, 2021

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

Re: ABS Lab Analytical
Work Order: 536991

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 05, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

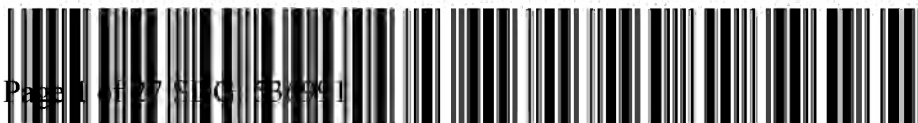
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without 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,

Julie Robinson
Project Manager

Purchase Order: 367074
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: 536991 GEL Work Order: 536991

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by _____

Julie Robinson

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96394
 Sample ID: 536991001
 Matrix: Ground Water
 Collect Date: 25-FEB-21 11:10
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.40	+/-1.44	2.40	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.38	+/-1.47			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.982	+/-0.297	0.247	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			77.2	(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: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96395
 Sample ID: 536991002
 Matrix: Ground Water
 Collect Date: 25-FEB-21 11:15
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.32	+/-1.30	1.98	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.58	+/-1.34			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.25	+/-0.336	0.211	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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	(15%-125%)

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

Column headers are defined as follows:

DF: Dilution Factor	Lc/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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96399
 Sample ID: 536991003
 Matrix: Ground Water
 Collect Date: 25-FEB-21 15:40
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.01	+/-1.14	1.70	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.35	+/-1.24			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.34	+/-0.480	0.330	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96393
 Sample ID: 536991004
 Matrix: Ground Water
 Collect Date: 04-MAR-21 11:55
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.96	+/-0.969	1.35	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.36	+/-1.03			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.40	+/-0.352	0.170	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.3	(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: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96391
 Sample ID: 536991005
 Matrix: Ground Water
 Collect Date: 04-MAR-21 13:09
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.53	+/-1.10	1.74	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.18	+/-1.17			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.65	+/-0.380	0.170	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.8	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96392
 Sample ID: 536991006
 Matrix: Ground Water
 Collect Date: 04-MAR-21 13:14
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.31	+/-1.12	1.34	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		4.72	+/-1.18			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.42	+/-0.355	0.234	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.1	(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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96400
 Sample ID: 536991007
 Matrix: Ground Water
 Collect Date: 04-MAR-21 14:27
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.524	+/-0.852	1.49	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.01	+/-0.937			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.49	+/-0.390	0.197	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96414
 Sample ID: 536991008
 Matrix: Ground Water
 Collect Date: 02-MAR-21 12:53
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.48	+/-1.33	2.18	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.10	+/-1.35			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.624	+/-0.254	0.191	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.2	(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: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96419
 Sample ID: 536991009
 Matrix: Ground Water
 Collect Date: 02-MAR-21 14:01
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.552	+/-1.19	2.08	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.52	+/-1.22			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.970	+/-0.283	0.158	1.00	pCi/L			MXH8	04/01/21	1211	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83.8	(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: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96401
 Sample ID: 536991010
 Matrix: Ground Water
 Collect Date: 02-MAR-21 10:48
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.141	+/-0.941	1.73	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.390	+/-0.955			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.250	+/-0.160	0.174	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.5	(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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96402
 Sample ID: 536991011
 Matrix: Ground Water
 Collect Date: 02-MAR-21 10:53
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.794	+/-0.929	1.56	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.10	+/-0.947			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.308	+/-0.183	0.210	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.5	(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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96413
 Sample ID: 536991012
 Matrix: Ground Water
 Collect Date: 01-MAR-21 10:05
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.271	+/-0.926	1.67	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.24	+/-0.972			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.972	+/-0.297	0.173	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.1	(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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96417
 Sample ID: 536991013
 Matrix: Ground Water
 Collect Date: 01-MAR-21 11:10
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	-0.953	+/-0.818	1.75	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.139	+/-0.830			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.139	+/-0.140	0.220	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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	(15%-125%)

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

Column headers are defined as follows:

DF: Dilution Factor	Lc/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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96418
 Sample ID: 536991014
 Matrix: Ground Water
 Collect Date: 01-MAR-21 11:15
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	+/-1.60	2.65	3.00	pCi/L			LXB3	03/23/21	0802	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.15	+/-1.61			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.518	+/-0.221	0.172	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.3	(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: April 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96416
 Sample ID: 536991015
 Matrix: Ground Water
 Collect Date: 01-MAR-21 12:31
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.271	+/-1.13	2.03	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.965	+/-1.16			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.694	+/-0.264	0.222	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.1	(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 1, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AE96415
 Sample ID: 536991016
 Matrix: Ground Water
 Collect Date: 01-MAR-21 13:48
 Receive Date: 05-MAR-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	+/-0.912	1.40	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		2.23	+/-0.964			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.908	+/-0.311	0.264	1.00	pCi/L			MXH8	04/01/21	0945	2100100	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

QC Summary

Report Date: April 1, 2021

Page 1 of 2

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

Contact:
Workorder: 536991

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2097455										
QC1204762520	536093004	DUP									
Radium-228	U	0.524	U	0.739	pCi/L	N/A		N/A	LXB3	03/23/21	06:46
	Uncertainty	+/-0.903		+/-0.982							
QC1204762521	LCS										
Radium-228	54.3			46.4	pCi/L		85.4	(75%-125%)		03/23/21	06:46
	Uncertainty			+/-3.39							
QC1204762519	MB										
Radium-228			U	1.67	pCi/L					03/23/21	06:46
	Uncertainty			+/-1.34							
Rad Ra-226											
Batch	2100100										
QC1204767958	536991001	DUP									
Radium-226		0.982		1.56	pCi/L	45.6*		(0%-20%)	MXH8	04/01/21	10:33
	Uncertainty	+/-0.297		+/-0.385							
QC1204767960	LCS										
Radium-226	27.0			22.3	pCi/L		82.4	(75%-125%)		04/01/21	10:33
	Uncertainty			+/-1.38							
QC1204767957	MB										
Radium-226			U	0.186	pCi/L					04/01/21	10:33
	Uncertainty			+/-0.227							
QC1204767959	536991001	MS									
Radium-226	27.0	0.982		21.3	pCi/L		75	(75%-125%)		04/01/21	10:33
	Uncertainty	+/-0.297		+/-1.36							

Notes:

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

The Qualifiers in this report are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 536991

Page 2 of 2

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
H											
J											
J											
K											
L											
M											
M											
N/A											
NI											
ND											
NJ											
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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 #: 536991**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2097455

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
536991001	AE96394
536991002	AE96395
536991003	AE96399
536991004	AE96393
536991005	AE96391
536991006	AE96392
536991007	AE96400
536991008	AE96414
536991009	AE96419
536991010	AE96401
536991011	AE96402
536991012	AE96413
536991013	AE96417
536991014	AE96418
536991015	AE96416
536991016	AE96415
1204762519	Method Blank (MB)
1204762520	536093004(AE96382) Sample Duplicate (DUP)
1204762521	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 536991014 (AE96418) was recounted to verify sample results. Recount is reported.

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

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

Analytical Batch: 2100100

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
536991001	AE96394
536991002	AE96395
536991003	AE96399
536991004	AE96393
536991005	AE96391
536991006	AE96392
536991007	AE96400
536991008	AE96414
536991009	AE96419
536991010	AE96401
536991011	AE96402
536991012	AE96413
536991013	AE96417
536991014	AE96418
536991015	AE96416
536991016	AE96415
1204767957	Method Blank (MB)
1204767958	536991001(AE96394) Sample Duplicate (DUP)
1204767959	536991001(AE96394) Matrix Spike (MS)
1204767960	Laboratory Control Sample (LCS)

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

Data Summary:

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

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample

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

Sample	Analyte	Value
1204767958 (AE96394DUP)	Radium-226	RPD 45.6* (0.00%-20.00%) RER 1.82 (0-3)

Technical Information

Recounts

Sample 536991009 (AE96419) was recounted to verify sample results. Recount is reported.

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

530991

Customer Email/Report Recipient: LCWILLIA @santecooper.com Date Results Needed by: Project/Task/Unit #: 121567/JM02.09.G01 / 36500 Rerun request for any flagged QC Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments	RAD 226	RAD 228	TOTAL RAD CALC
AE96394	WAP-14	2/25/21	1110	DEW/ MDS	2	P	G	GW	2	• Method # • Reporting limit • Misc. sample info • Any other notes	X	X	X
AE96395	WAP-14 DUP		1115										
AE96399	WAP-15		1540										
AE96393	WAP-13	3/4/21	1155	DEW/ ML									
AE96391	WAP-12		1309										
AE96392	WAP-12 DUP		1314										
AE96400	WAP-16		1427										
AE96414	WLF-A1-1	3/2/21	1253	DEW/ TG/DJ									
AE96419	WLF-A1-5		1401										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>S. Brown</i>	35594	3/5/21	0959	<i>[Signature]</i>	GEL	3/5/21	0959
<i>[Signature]</i>	GEL	3-5-21	1345	<i>H. [Signature]</i>	GEL	3-5-21	1345

Sample Receiving (Internal Use Only)
TEMP (°C): 20 Initial: MS
Correct pH: Yes No
Preservative Lot#:
Date/Time/Init for preservative:

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

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)



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: LCWILLIA @santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02.09.G01 / 36500 Rerun request for any flagged QC Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228	TOTAL RAD CALC.
AE96402	WAP-17 DUP	↓	1053	↓	↓	↓	↓	↓	↓		↓	↓	↓
AE96413	WW-A1-1	3/3/21	1006	DEW ML									
AE96417	WLF-A1-4	↓	1110	↓	↓	↓	↓	↓	↓		↓	↓	↓
AE96418	WLF-A1-4 DUP	↓	1115	↓	↓	↓	↓	↓	↓		↓	↓	↓
AE96416	WLF-A1-3	↓	1231	↓	↓	↓	↓	↓	↓		↓	↓	↓
AE96415	WLF-A1-2	↓	1348	↓	↓	↓	↓	↓	↓		↓	↓	↓

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>M. Brown</i>	35594	3/5/21	0959	<i>DEW</i>	GEL	3/5/21	0959
<i>DEW</i>	666	3-5-21	1345	<i>M. Brown</i>	GEL	3-5-21	1345

Sample Receiving (Internal Use Only)
TEMP (°C): 20 Initial: MS
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 Trans. Oil Qual. <input type="checkbox"/> % Moisture Color Acidity Dynamic Strength IFI Dissolved Gases Used Oil Flashpoint Metals in oil (As, Cd, Cr, Ni, Pb, Hg) TX GOFIR
--	--	---	--	---	--	--

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=HNO3 2=H2SO4 3=HCl 4=HCl 5=Na2S2O3 6=Other (Specify)



SAMPLE RECEIPT & REVIEW FORM

Client: 608 SDG/AR/COC/Work Order: 530991

Received By: MLS Date Received: 3-5-21

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?
B) Did the client designate the samples are to be received as radioactive?
C) Did the RSO classify the samples as radioactive?
D) Did the client designate samples are hazardous?
E) Did the RSO identify possible hazards?

Table with columns: Sample Receipt Criteria, Yes, NA, No, Comments/Qualifiers (Required for Non-Conforming Items). Rows 1-13 detailing shipping and handling criteria.

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials [Signature] Date 3/8/21 Page 1 of 1

List of current GEL Certifications as of 01 April 2021

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	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122020-34
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



August 26, 2021

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

Re: ABS Lab Analytical
Work Order: 551182

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on July 30, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

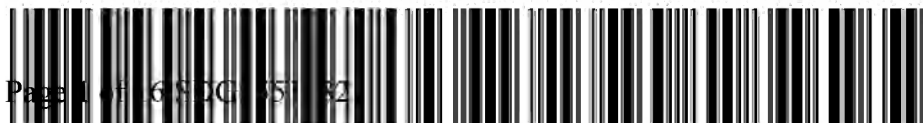
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without 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,

Julie Robinson
Project Manager

Purchase Order: 367074
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: 551182 GEL Work Order: 551182

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by _____

Julie Robinson

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: August 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AF09053
 Sample ID: 551182001
 Matrix: Ground Water
 Collect Date: 19-JUL-21 11:24
 Receive Date: 30-JUL-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	-/-0.843	1.84	3.00	pCi/L			JXC9	08/17/21	0929	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.40	+/-0.962			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.40	-/-0.463	0.290	1.00	pCi/L			LXPI	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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	(15%-125%)

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor	Lc/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: August 26, 2021

Company :	Santee Cooper		
Address :	P.O. Box 2946101		
	OCO3		
	Moncks Corner, South Carolina 29461		
Contact:	Ms. Jeanette Gilmetti		
Project:	ABS Lab Analytical		
Client Sample ID:	AF09070	Project:	SOOP00119
Sample ID:	551182002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	19-JUL-21 10:30		
Receive Date:	30-JUL-21		
Collector:	Client		

Parameter	Qualifier	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	-0.396	-/-0.781	1.60	3.00	pCi/L			JXC9	08/17/21	0930	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.983	+/-0.867			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.983	-/-0.378	0.351	1.00	pCi/L			LXPI	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			82.8	(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: August 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AF09065
 Sample ID: 551182003
 Matrix: Ground Water
 Collect Date: 19-JUL-21 14:22
 Receive Date: 30-JUL-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.453	-/-0.984	1.74	3.00	pCi/L			JXC9	08/17/21	0930	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.67	+/-1.08			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.21	-/-0.439	0.415	1.00	pCi/L			LXPI	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer		GFPC, Ra228, Liquid "As Received"			81.1	(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: August 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AF09066
 Sample ID: 551182004
 Matrix: Ground Water
 Collect Date: 19-JUL-21 14:27
 Receive Date: 30-JUL-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	2.67	+/-1.80	2.77	3.00	pCi/L			JXC9	08/17/21	0930	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.81	+/-1.85			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.15	-/-0.418	0.373	1.00	pCi/L			LXPI	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer		GFPC, Ra228, Liquid "As Received"			44.8	(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: August 26, 2021

Company :	Santee Cooper		
Address :	P.O. Box 2946101		
	OCO3		
	Moncks Corner, South Carolina 29461		
Contact:	Ms. Jeanette Gilmetti		
Project:	ABS Lab Analytical		
Client Sample ID:	AF09050	Project:	SOOP00119
Sample ID:	551182005	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	20-JUL-21 12:28		
Receive Date:	30-JUL-21		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.96	+/-1.44	1.96	3.00	pCi/L			JXC9	08/17/21	0930	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		5.01	+/-1.51			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.05	-/-0.475	0.559	1.00	pCi/L			LXP1	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer		GFPC, Ra228, Liquid "As Received"			85.5	(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: August 26, 2021

Company :	Santee Cooper		
Address :	P.O. Box 2946101		
	OCO3		
	Moncks Corner, South Carolina 29461		
Contact:	Ms. Jeanette Gilmetti		
Project:	ABS Lab Analytical		
Client Sample ID:	AF09051	Project:	SOOP00119
Sample ID:	551182006	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	20-JUL-21 13:28		
Receive Date:	30-JUL-21		
Collector:	Client		

Parameter	Qualifier	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	-/-0.988	1.18	3.00	pCi/L			JXC9	08/17/21	0930	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		7.52	+/-1.28			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		4.72	-/-0.810	0.505	1.00	pCi/L			LXPI	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.5	(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: August 26, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AF09083
 Sample ID: 551182007
 Matrix: Ground Water
 Collect Date: 20-JUL-21 11:07
 Receive Date: 30-JUL-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	0.0240	+/-1.24	2.26	3.00	pCi/L			JXC9	08/17/21	0929	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.626	+/-1.29			pCi/L		1	AEA	08/24/21	1422	2157718	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.602	-/-0.361	0.463	1.00	pCi/L			LXPI	08/22/21	0714	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer		GFPC, Ra228, Liquid "As Received"			83.9	(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: August 26, 2021

Page 1 of 2

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

Contact:
Workorder: 551182

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2157720										
QC1204877893	551609004	DUP									
Radium-228	U	1.13	U	0.433	pCi/L	N/A		N/A	JXC9	08/17/21	09:29
	Uncertainty	+/-1.19		+/-0.901							
QC1204877894	LCS										
Radium-228	51.5			45.9	pCi/L		89.2	(75%-125%)		08/17/21	11:13
	Uncertainty			+/-3.67							
QC1204877892	MB										
Radium-228			U	-0.0456	pCi/L					08/17/21	09:28
	Uncertainty			+/-0.829							
Rad Ra-226											
Batch	2157760										
QC1204878006	551182006	DUP									
Radium-226		4.72		5.09	pCi/L	7.59		(0%-20%)	LXP1	08/22/21	07:49
	Uncertainty	+/-0.810		+/-0.873							
QC1204878008	LCS										
Radium-226	27.0			24.8	pCi/L		91.9	(75%-125%)		08/22/21	07:49
	Uncertainty			+/-2.01							
QC1204878005	MB										
Radium-226			U	0.126	pCi/L					08/22/21	07:49
	Uncertainty			+/-0.195							
QC1204878007	551182006	MS									
Radium-226	135	4.72		130	pCi/L		92.8	(75%-125%)		08/22/21	07:49
	Uncertainty	+/-0.810		+/-9.30							

Notes:

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

The Qualifiers in this report are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 551182

Page 2 of 2

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
H											
J											
J											
K											
L											
M											
M											
N/A											
NI											
ND											
NJ											
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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 #: 551182**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2157720

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
551182001	AF09053
551182002	AF09070
551182003	AF09065
551182004	AF09066
551182005	AF09050
551182006	AF09051
551182007	AF09083
1204877892	Method Blank (MB)
1204877893	551609004(AF09052) Sample Duplicate (DUP)
1204877894	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 1204877894 (LCS) was recounted due to low recovery. 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: 2157760

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
551182001	AF09053
551182002	AF09070
551182003	AF09065
551182004	AF09066

551182005	AF09050
551182006	AF09051
551182007	AF09083
1204878005	Method Blank (MB)
1204878006	551182006(AF09051) Sample Duplicate (DUP)
1204878007	551182006(AF09051) Matrix Spike (MS)
1204878008	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, 1204878007 (AF09051MS), 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

551182



Customer Email/Report Recipient: LCWILLIA@santecooper.com Date Results Needed by: Project/Task/Unit #: 121567 / JM02.09.091 / 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	RAD 228	TOTAL RAD CALC
AF09053	WAP-4	7/19/21	1124	BRT/ CNS	2	P	G	GW	2		X	X	X
AF09070	WAP-15	7/19/21	1030										
AF09065	WAP-14		1422										
AF09066	WAP-14 DUP		1427										
AF09050	WAP-1	7/20/21	1228	MDS/ BRT									
AF09051	WAP-2		1328										
AF09083	WBW-1		1107										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
<i>Sjbrown</i>	35574	7/30/21	1230	<i>[Signature]</i>	GEL	7/30/21	1230
<i>[Signature]</i>	666	7/30/21	1327	<i>[Signature]</i>	GEL	7/30/21	1327

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 <input type="checkbox"/> Gypsum/all below <input type="checkbox"/> AM <input type="checkbox"/> DO <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfates <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. Measure Vol Wash Distillate Residue Dissolved Gases Used Oil Flashpoint Moisture (As, Cd, Cr, Hg, Pb) PAH TSS COPPER
--	--	---	---	---	--	--

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>DS 9/30/21</u> <u>BELT SDOOP</u>		SDG/AR/COC/Work Order: <u>551182</u>			
Received By: <u>DS</u>		Date Received: <u>7-30-2021</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> 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?		Yes	No		
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	No		
COC notation or radioactive stickers on containers equal client designation.					
C) Did the RSO classify the samples as radioactive?		Yes	No		
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	No		
COC notation or hazard labels on containers equal client designation.					
E) Did the RSO identify possible hazards?		Yes	No		
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: <u>22°C</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>125-21</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 NRG Date 8/2/21 Page 1 of 1

List of current GEL Certifications as of 26 August 2021

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	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-35
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



August 30, 2021

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

Re: ABS Lab Analytical
Work Order: 551609

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 03, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

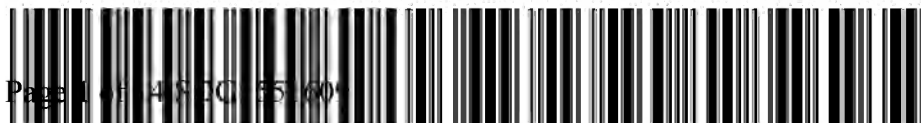
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without 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,

Julie Robinson
Project Manager

Purchase Order: 367074
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: 551609 GEL Work Order: 551609

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by _____

Julie Robinson

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: August 30, 2021

Company :	Santee Cooper		
Address :	P.O. Box 2946101		
	OCO3		
	Moncks Corner, South Carolina 29461		
Contact:	Ms. Jeanette Gilmetti		
Project:	ABS Lab Analytical		
Client Sample ID:	AF09064	Project:	SOOP00119
Sample ID:	551609001	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	29-JUL-21 11:29		
Receive Date:	03-AUG-21		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.68	+/-1.50	2.32	3.00	pCi/L			JXC9	08/17/21	0929	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.83	+/-1.56			pCi/L		1	AEA	08/25/21	0423	2161475	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.16	-/-0.420	0.286	1.00	pCi/L			LXPI	08/22/21	0715	2157760	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: August 30, 2021

Company :	Santee Cooper		
Address :	P.O. Box 2946101		
	OCO3		
	Moncks Corner, South Carolina 29461		
Contact:	Ms. Jeanette Gilmetti		
Project:	ABS Lab Analytical		
Client Sample ID:	AF09062	Project:	SOOP00119
Sample ID:	551609002	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	29-JUL-21 13:54		
Receive Date:	03-AUG-21		
Collector:	Client		

Parameter	Qualifier	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	0.261	-/-0.943	1.71	3.00	pCi/L			JXC9	08/17/21	0929	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		0.840	+/-1.02			pCi/L		1	AEA	08/25/21	0423	2161475	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.579	-/-0.379	0.518	1.00	pCi/L			LXPI	08/22/21	0749	2157760	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: August 30, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AF09063
 Sample ID: 551609003
 Matrix: Ground Water
 Collect Date: 29-JUL-21 13:59
 Receive Date: 03-AUG-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.28	+/-1.41	1.96	3.00	pCi/L			JXC9	08/17/21	1113	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.50	+/-1.44			pCi/L		1	AEA	08/25/21	0423	2161475	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.216	-/-0.282	0.483	1.00	pCi/L			LXPI	08/22/21	0749	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.1	(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: August 30, 2021

Company :	Santee Cooper		
Address :	P.O. Box 2946101		
	OCO3		
	Moncks Corner, South Carolina 29461		
Contact:	Ms. Jeanette Gilmetti		
Project:	ABS Lab Analytical		
Client Sample ID:	AF09052	Project:	SOOP00119
Sample ID:	551609004	Client ID:	SOOP001
Matrix:	Ground Water		
Collect Date:	29-JUL-21 12:35		
Receive Date:	03-AUG-21		
Collector:	Client		

Parameter	Qualifier	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	+/-1.19	1.97	3.00	pCi/L			JXC9	08/17/21	0929	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.21	+/-1.30			pCi/L		1	AEA	08/25/21	0423	2161475	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.08	-/-0.533	0.321	1.00	pCi/L			LXPI	08/22/21	0749	2157760	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
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: August 30, 2021

Company : Santee Cooper
 Address : P.O. Box 2946101
 OCO3
 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical
 Client Sample ID: AF09071
 Sample ID: 551609005
 Matrix: Ground Water
 Collect Date: 29-JUL-21 15:38
 Receive Date: 03-AUG-21
 Collector: Client

Project: SOOP00119
 Client ID: SOOP001

Parameter	Qualifier	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	1.78	+/-1.18	1.85	3.00	pCi/L			JXC9	08/17/21	0929	2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		3.31	+/-1.28			pCi/L		1	AEA	08/25/21	0423	2161475	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.52	-/-0.497	0.497	1.00	pCi/L			LXPI	08/22/21	0749	2157760	3

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.3	(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: August 30, 2021

Page 1 of 2

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

Contact:
Workorder: 551609

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2157720										
QC1204877893	551609004	DUP									
Radium-228	U	1.13	U	0.433	pCi/L	N/A		N/A	JXC9	08/17/21	09:29
	Uncertainty	+/-1.19		+/-0.901							
QC1204877894	LCS										
Radium-228	51.5			45.9	pCi/L		89.2	(75%-125%)		08/17/21	11:13
	Uncertainty			+/-3.67							
QC1204877892	MB										
Radium-228			U	-0.0456	pCi/L					08/17/21	09:28
	Uncertainty			+/-0.829							
Rad Ra-226											
Batch	2157760										
QC1204878006	551182006	DUP									
Radium-226		4.72		5.09	pCi/L	7.59		(0%-20%)	LXP1	08/22/21	07:49
	Uncertainty	+/-0.810		+/-0.873							
QC1204878008	LCS										
Radium-226	27.0			24.8	pCi/L		91.9	(75%-125%)		08/22/21	07:49
	Uncertainty			+/-2.01							
QC1204878005	MB										
Radium-226			U	0.126	pCi/L					08/22/21	07:49
	Uncertainty			+/-0.195							
QC1204878007	551182006	MS									
Radium-226	135	4.72		130	pCi/L		92.8	(75%-125%)		08/22/21	07:49
	Uncertainty	+/-0.810		+/-9.30							

Notes:

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

The Qualifiers in this report are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 551609

Page 2 of 2

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
H											
J											
J											
K											
L											
M											
M											
N/A											
NI											
ND											
NJ											
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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 #: 551609**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2157720

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
551609001	AF09064
551609002	AF09062
551609003	AF09063
551609004	AF09052
551609005	AF09071
1204877892	Method Blank (MB)
1204877893	551609004(AF09052) Sample Duplicate (DUP)
1204877894	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 1204877894 (LCS) was recounted due to low recovery. The recount is reported. Sample 551609003 (AF09063) was recounted due to results more negative than the three sigma TPU. The second count is reported.

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

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

Analytical Batch: 2157760

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
551609001	AF09064
551609002	AF09062
551609003	AF09063
551609004	AF09052
551609005	AF09071

1204878005	Method Blank (MB)
1204878006	551182006(AF09051) Sample Duplicate (DUP)
1204878007	551182006(AF09051) Matrix Spike (MS)
1204878008	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, 1204878007 (AF09051MS), 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.

SAMPLE RECEIPT & REVIEW FORM

Client: <u>SOOP</u>	SDG/AR/COC/Work Order: <u>551609</u>	<u>SR</u>
Received By: <u>TYE</u>	Date Received: <u>8/3/21</u>	
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services <u>Courier</u> 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): <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 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 <u>None</u> 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"/>		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"/>		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):

List of current GEL Certifications as of 30 August 2021

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	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-35
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Field Data Sheets

(Note: the color coding is to assist field personnel in determining when the well has stabilized enough to begin sample collection.)

**Winyah Generating Station
3 and 4 Slurry Pond Background Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 1	29.44	4.16	4- 24	2/15/2021	1337	25.18

Drawdown: 4.19 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1306	14.57	4.12	310	88	8.1	3.14
1311	14.35	4.15	271	86	6.5	1.04
1316	14.3	4.15	258	86	0.9	0.85
1321	14.36	4.16	247	86	0	0.74
1326	14.39	4.17	240	85	0	0.7
1331	14.22	4.2	231	85	0	0.67
1334	14.16	4.2	228	85	0	0.67
1337	14.13	4.2	227	85	0	0.65

Comments/Conditions:

Samples were collected by Trey West and Melanie Goings

**Winyah Generating Station
3 and 4 Slurry Pond Background Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 1	29.44	6.14	4- 24	7/20/2021	1228	25.18

Drawdown: 6.15 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1154	27.12	4.24	166	89	1.2	2.63
1159	27.59	4.19	159	97	6.3	1.17
1204	27.7	4.18	158	94	3.9	1.71
1209	27.63	4.19	153	93	2.6	1.9
1214	27.78	4.21	144	92	2.3	1.64
1219	27.94	4.24	136	91	5.2	0.63
1222	28.18	4.22	139	90	1.7	0.49
1225	28	4.23	136	89	1	0.47
1228	28.33	4.24	133	88	0.9	0.44

Comments/Conditions:

Samples were collected by Ben Taylor and Melanie Goings

Winyah Generating Station
3 and 4 Slurry Pond Background Groundwater Monitoring Wells

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WBW - 1	31.97	3.32	7- 17	2/15/2021	1221	19.77

Drawdown: 3.55 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1120	17.95	4.37	212	32	24.4	1.46
1125	17.41	4.27	229	27	0	1.04
1130	16.92	4.24	234	27	1.3	0.9
1135	16.47	4.21	235	27	0	0.79
1140	16.08	4.21	239	27	0	0.86
1145	15.79	4.21	250	27	0	0.85
1148	15.64	4.2	260	27	0	0.83
1151	15.5	4.19	268	27	0	0.82
1154	15.35	4.2	277	27	0	0.81
1157	15.23	4.2	285	27	0	0.79
1200	15.13	4.19	294	28	0	0.78
1203	15.03	4.19	303	28	0	0.73
1206	14.94	4.2	310	28	0	0.75
1209	14.84	4.2	317	28	0	0.76
1212	14.74	4.19	324	28	0	0.73
1215	14.64	4.2	329	28	0	0.72
1218	14.54	4.2	333	28	0	0.73
1221	14.41	4.2	339	28	0	0.72

Comments/Conditions:

Samples were collected by Trey West and Melanie Goings

**Winyah Generating Station
3 and 4 Slurry Pond CCR Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 4	20.34	5.9	4- 24	2/23/2021	1428	26.9

Drawdown: 6.74 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1345	18.61	7.26	-3	306	206	2.2
1350	19	7.29	-18	296	76	0.79
1355	18.97	7.28	-21	295	64.3	0.69
1400	19.09	7.26	-22	295	40.3	0.64
1405	19.37	7.24	-23	295	27.1	0.53
1410	19.4	7.22	-25	295	20.2	0.52
1413	19.49	7.21	-26	296	17.4	0.46
1416	19.6	7.19	-28	297	15.3	0.45
1419	19.68	7.17	-31	297	13.7	0.43
1422	19.72	7.15	-32	298	12.1	0.42
1425	19.78	7.14	-35	298	12	0.42
1428	19.76	7.12	-38	298	11.3	0.4

Comments/Conditions: Well posts need to be painted yellow

Samples were collected by Trey West and Melanie Goings

**Winyah Generating Station
3 and 4 Slurry Pond CCR Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 14	14.69	3.8	9.5- 19.5	2/25/2021	1110	22.52

Drawdown: 4.11 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1036	19.69	7	-125	2840	0	3.8
1041	20	7.06	-238	2930	6.1	1.36
1046	20.27	7.08	-263	2930	0.4	1.16
1051	20.66	7.09	-290	2970	0	1.98
1056	21.12	7.11	-311	3190	0	5.27
1101	21.68	7.13	-321	3390	0	8.61
1104	22.1	7.14	-328	3460	0	9.59
1107	22.35	7.15	-333	3530	0	10.02
1110	22.67	7.16	-336	3590	0	10.19

Comments/Conditions:
Duplicate taken at 1115

Samples were collected by Trey West and Melanie Goings

**Winyah Generating Station
3 and 4 Slurry Pond CMA/NE Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 14A	13.95	2.04	12'-22'	2/25/2021	1448	25.4

Drawdown: 2.36 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1417	24.49	7.24	-326	3950	83.4	9.11
1422	24	7.01	-361	4280	35.5	10.34
1427	23.82	6.99	-364	4300	32.7	10.19
1432	23.58	6.99	-365	4320	29.4	9.97
1437	23.6	6.99	-366	4350	33.8	9.86
1442	23.72	6.98	-368	4400	43.6	9.92
1445	23.9	6.98	-371	4410	46.1	9.88
1448	23.96	6.98	-372	4410	48.5	9.77

Comments/Conditions:

Samples were collected by Trey West and Melanie Goings

**Winyah Generating Station
3 and 4 Slurry Pond CMA/NE Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 14B	9.23	4.48	3'-13'	2/25/2021	1356	16.29

Drawdown: 5.08 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1301	28.34	6.75	-86	3040	74.3	0.77
1306	27.16	6.78	-106	3210	46.9	0.54
1311	26.73	6.76	-114	3220	23.2	0.51
1316	26.37	6.73	-151	3250	12.9	0.55
1321	25.94	6.72	-206	3290	7.2	1.04
1326	25.83	6.72	-262	3340	2.1	3.38
1329	26.14	6.69	-301	3380	0	5.11
1332	26.32	6.67	-306	3440	0	6.2
1335	26.3	6.65	-312	3450	0	6.91
1338	26.43	6.62	-323	3460	0	7.51
1341	26.17	6.62	-335	3480	0	7.75
1344	26.39	6.62	-338	3480	0	7.79
1347	26.65	6.63	-346	3480	0	7.64
1350	26.62	6.63	-352	3520	0	7.59
1353	26.65	6.63	-358	3540	0	7.42
1356	26.4	6.63	-358	3570	0	7.7

Comments/Conditions:

Samples were collected by Trey West and Melanie Goings

**Winyah Generating Station
3 and 4 Slurry Pond CMA/NE Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 14B	9.23	5.44	3'-13'	7/19/2021	1634	16.2

Drawdown: 6.63 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1557	25.02	6.67	-127	3190	0	2.86
1602	23.49	6.74	-184	3400	7.1	0.54
1607	23.46	6.72	-226	3460	3.6	0.92
1612	22.81	6.69	-257	3520	2.8	1.57
1617	22.6	6.54	-301	3570	9.2	1.92
1622	22.54	6.53	-344	3630	44.8	2.23
1625	22.26	6.53	-355	3620	28.4	2.42
1628	22.22	6.54	-370	3650	18.9	2.5
1631	22.11	6.55	-378	3680	9.9	2.56
1634	22.05	6.57	-380	3710	3.8	2.59

Comments/Conditions:

Samples were collected by Ben Taylor and Connor Smalling

**Winyah Generating Station
3 and 4 Slurry Pond CMA/NE Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
WAP - 14C	13.88	10.33	9.5'-19.5'	7/19/2021	1539	23.07

Drawdown: 10.61 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1510	25.73	7.17	-160	1130	20.5	1.1
1515	26.68	7.15	-158	1090	11	0.7
1520	25.69	7.15	-159	1100	3.1	0.61
1525	24.49	7.13	-157	1100	1.8	0.6
1530	24.39	7.07	-149	1110	0.5	0.58
1533	24.21	7.01	-142	1110	0	0.57
1536	24.09	6.97	-137	1120	0	0.56
1539	24.03	6.92	-132	1120	0	0.54

Comments/Conditions:

Samples were collected by Ben Taylor and Connor Smalling

