2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT SLURRY POND 3 & 4 WINYAH GENERATING STATION

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1. Annual Groundwater Monitoring Report Summary

The South Carolina Public Service Authority (Santee Cooper) has prepared this 2024 Annual Groundwater Monitoring Corrective Action Report for Slurry Pond 3 & 4 at the Winyah Generating Station (WGS). This 2024 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, 2024), the WGS 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 initial statistical analysis to determine if statistically significant levels (SSLs) of one or more Appendix IV constituents were 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 2024. Therefore, at the end of the current annual reporting period (December 31, 2024), Slurry Pond 3 & 4 remains in the assessment monitoring program.

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

2. 40 CFR § 257.90 Applicability

2.1 40 CFR § 257.90(a) and (c)

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

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

The Slurry Pond 3 & 4 at WGS is an existing CCR surface impoundment which is no longer receiving CCR or non-CCR waste streams and is undergoing closure by removal. As such, it is 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 2024 for WGS Slurry Pond 3 & 4 as required by the subject regulations. Groundwater sampling and analysis was conducted per the requirements of § 257.93, and the status of the groundwater monitoring program, set forth in § 257.95, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

Earlier, statistically significant increases (SSIs) of Appendix III constituents were identified downgradient of Slurry Pond 3 & 4, and the notification was provided on January 15, 2018. As a result, an assessment monitoring program was initiated as required by § 257.94(e)(2). The notification was placed in the facility's operating record as required by § 257.106(h)(4). As required by § 257.93(h)(2), a 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 (ASD) was also initiated at that time. Haley & Aldrich, Inc. documented in the ASD that naturally occurring conditions exist within the uppermost shallow alluvial aquifer which are 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.

For the assessment monitoring events in 2024, SSLs of Appendix IV constituents above GWPS were not identified in groundwater downgradient of this unit consistent with prior sampling results. Therefore, this CCR unit will remain in assessment monitoring in 2024.

2.2.2 Key Actions Completed

The following key actions were completed in 2024:

- Prepared 2023 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-March 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.
- 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).
- WAP-29 was added to the compliance groundwater monitoring network for the first sampling event of 2024.
- Replaced WAP-15 on February 15, 2024, due to irreparable damage to the original well.
- Continued with improved potentiometric surface characterization of the uppermost aquifer given changing site conditions by completing sitewide synoptic water level measurements on an approximately quarterly basis to further evaluate temporal changes.
  Continued evaluation of turbidity, oxidation-reduction potential, and well screen submersion trends sitewide in wells and to identify wells to be redeveloped by a certified well driller to remove buildup of sediment fines and suspected biofouling on the well screens. A submersible camera was also used where applicable to investigate wells with unsubmerged screens prior to redevelopment. Plans to conduct redevelopment will be finalized in 2025 and reported in the 2025 Annual Report.

2.2.3 Problems Encountered

As a result of nearby construction, WAP-15 was accidentally run over and damaged beyond repair. The damage was discovered during the collection of synoptic water levels prior to the February 2024 sampling event.

2.2.4 Actions to Resolve Problems

WAP-15 was quickly replaced on February 15, 2024, in the same location. After the well was developed, WAP-15 was sampled on March 5, 2024, as part of the first sampling event of 2024.

2.2.5 Project Key Activities for Upcoming Year

Key activities to be completed in 2025 include the following:

- Prepare the 2024 annual report; place it in the record as required by § 257.105(h)(1); notify the state [§ 257.106(d)]; and post to the facility's publicly available CCR website [§ 257.107(d)].
- Conduct semi-annual groundwater monitoring consistent with § 257.95.
- Complete semi-annual statistical analysis of assessment monitoring analytical data to determine if SSLs of the detected Appendix IV constituents are present above GWPS.
- Continue monitoring the results of WAP-15 to ensure that it was an effective replacement well.
- Continue improving the potentiometric surface characterization of the uppermost aquifer given changing site conditions by expanding the number of locations for collecting surface water elevations from unlined ponds.

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;

A replacement well for WAP-15 was installed on February 15, 2024.

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 investigation was initiated per §257.95(g)(3) on May 15, 2019. However, prior to completing the assessment of corrective measures 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 2024 data, no new SSLs were identified (Appendix A). Therefore, at the end of the current annual reporting period (December 31, 2024), Slurry Pond 3 & 4 will remain in assessment monitoring in 2025.

2.3.5 40 CFR § 257.90(e)(5)

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

This Annual Report documents activities conducted to comply with Sections § 257.90 through § 257.95 of the CCR Rule. There are no applicable requirements from Sections § 257.96 through § 257.98.

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

TABLES

Table 1 - Summary of Analytical Results
Winyah Generating Station Slurry Pond 3 & 4 Assessment Monitoring 2024

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	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226	Radium 228	Radium 226/228 Combined Calculation	Selenium	Thallium	Depth to Groundwater	Groundwater Elevation	pH	Specific Conductivity	Temperature	Oxidation Reduction Potential	Turbidity	Dissolved Oxygen
				Unit	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	SU	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	pCi/L	pCi/L	pCi/L		ug/L	Feet	Feet	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 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 6020B	EPA 300.0	EPA 6020B	EPA 6010D	EPA 7470	EPA6010D	EPA 903.1 Mod	EPA 904.0	EPA 903.1 Mod	EPA 6020B	EPA 6020B						SM2580		
				GWPS/ US EPA MCL/RSL	—	—	—	4.00	—	—	—	25.0	10.0	2000	4.00	5.00	100	6.00	4.00	15.0	40.0	2.00	100	—	—	6.00	50.0	2.00	—	—	—	—	—	—	—	—
Site Background Wells																																			
WAP-1	Background	2/5/24	AF90595		37.1	8.8	11.6	<0.10	30.2	80.00	4.41	<5.0	5.6	81.0	<0.5	<0.5	<5.0	0.84	<0.10	<1.0	<5.0	<0.2	<5.0	2.03	0.185	2.215	<10.0	<1.0	4.86	24.58	4.41	139	16.98	68.0	0.100	1.06
WAP-1	Background	7/1/24	AG03721		30.4	7.5	9.26	<0.10	30.8	70.00	4.42	<5.0	9.6	68.1	<0.5	<0.5	<5.0	0.75	<0.10	<1.0	<5.0	<0.2	<5.0	2.13	2.16	4.29	<10.0	<1.0	5.71	23.73	4.42	120	24.57	26.0	0	1.01
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
WBW-1	Background	2/6/24	AF90634		185	2.2	4.50	<0.10	10.9	75.00	4.54	<5.0	<5.0	22.3	<0.5	<0.5	<5.0	0.88	<0.10	<1.0	9.9	<0.2	<5.0	0.0320	2.16	2.192	<10.0	<1.0	7.16	24.82	4.54	56.0	16.40	158	7.20	3.58
WBW-1	Background	7/1/24	AG03766		13.2	1.8	4.92	<0.10	7.22	<25	4.04	<5.0	<5.0	12.9	<0.5	<0.5	<5.0	0.54	<0.10	<1.0	<5.0	<0.2	<5.0	0.102	2.41	2.512	<10.0	<1.0	7.27	24.70	4.04	47.0	24.17	258	1.40	4.10
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
Slurry Pond 3 and 4 Wells																																			
WAP-4	Assessment	2/6/24	AF90599		25.1	53.8	7.81	<0.10	7.06	266.2	7.42	<5.0	<5.0	32.3	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	<5.0	<0.2	<5.0	0.470	0.0789	0.5489	<10.0	<1.0	7.54	12.80	7.42	367	18.22	-135	5.90	0.890
WAP-4	Assessment	7/10/24	AG03728		141	49.0	8.03	<0.10	17.0	212.5	6.43	5.3	<5.0	33.5	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	6.25	<0.2	<5.0	0.676	1.89	2.565	<10.0	<1.0	7.55	12.79	6.43	330	22.19	26.0	7.40	1.38
WAP-4	**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
WAP-14	Assessment	2/19/24	AF90611		8430	1190	1470	0.91	867	5075	7.46	<5.0	42.9	48.1	<0.5	<0.5	<5.0	<0.5	0.91	<1.0	<5.0	<0.2	<5.0	0.552	1.85	2.402	<10.0	<1.0	4.20	10.49	7.46	6440	16.81	-360	1.00	0.840
WAP-14	Duplicate	2/19/24	AF90612		8200	1190	1480	0.95	873	4970	***	6.4	41.6	47.1	<0.5	<0.5	<5.0	<0.5	0.95	<1.0	<5.0	<0.2	<5.0	1.04	1.26	2.3	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-14	Assessment	7/17/24	AG03741		8660	1210	1390	1.02	921	5352	7.34	5.1	16.6	49.4	<0.5	<0.5	<5.0	<0.5	1.02	<1.0	5.63	<0.2	<5.0	1.22	2.25	3.47	<10.0	<1.0	6.20	8.49	7.34	6480	24.68	-409	0	0.780
WAP-14	Duplicate	7/17/24	AG03742		9160	1250	1430	1.03	938	5390	***	5.2	18.8	49.6	<0.5	<0.5	<5.0	<0.5	1.03	<1.0	<5.0	<0.2	<5.0	1.28	2.56	3.84	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-14	**total samples**				4	4	4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2
WAP-14A	CMA/NE	2/15/24	AF90613		5790	780	1060	0.10	699	3324	7.18	<5.0	6.5	81.5	<0.5	<0.5	<5.0	<0.5	0.10	<1.0	51.4	<0.2	<5.0	1.02	-0.280	1.02	<10.0	<1.0	2.52	11.43	7.18	4640	19.15	-370	0	0.700
WAP-14A	CMA/NE	7/17/24	AG03743		5790	839	992	0.12	679	4020	6.92	<5.0	6.1	88.5	<0.5	<0.5	<5.0	<0.5	0.12	<1.0	50.6	<0.2	<5.0	1.26	0.928	2.188	<10.0	<1.0	5.01	8.94	6.92	4640	24.47	-384	0	0.740
WAP-14A	**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
WAP-14B	CMA/NE	2/20/24	AF90614		6410	672	870	<0.10	665	3128	6.89	<5.0	<5.0	146	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	19.0	<0.2	<5.0	6.88	-2.70	6.88	<10.0	<1.0	4.72	4.51	6.89	3750	17.91	-396	0	0.690
WAP-14B	CMA/NE	7/17/24	AG03744		6390	691	773	<0.1	658	3236	6.59	6.6	<5.0	172	<0.5	<0.5	<5.0	<0.5	<0.1	<1.0	18.7	<0.2	<5.0	1.33	1.38	2.71	<10.0	<1.0	5.86	3.34	6.59	3730	22.63	-347	4.80	0.820
WAP-14B	**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
WAP-14C	CMA/NE	2/20/24	AF90615		453	147	269	0.18	109	851.2	6.49	<5.0	<5.0	87.4	<0.5	<0.5	<5.0	3.2	0.18	<1.0	21.3	<0.2	<5.0	1.91	-1.32	1.91	<10.0	<1.0	6.86	5.09	6.49	1290	16.29	-43.0	0	0.830
WAP-14C	CMA/NE	7/17/24	AG03745		78.3	192	278	0.11	129	1106	7.05	<5.0	<5.0	89.1	<0.5	<0.5	<5.0	<0.5	0.11	<1.0	15.8	<0.2	<5.0	2.00	0.264	2.264	<10.0	<1.0	10.59	2.89	7.05	1500	24.74	-184	5.20	0.800
WAP-14C	**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
WAP-15	Assessment	3/5/24	AF93805		4440	522	915	0.17	470	2529	6.65	<5.0	<5.0	223	<0.5	<0.5	<5.0	<0.5	0.17	<1.0	48.3	<0.2	<5.0	1.57	3.49	5.06	<10.0	<1.0	6.85	13.56	6.65	3370	20.31	-50.0	0	1.04
WAP-15	Duplicate	3/5/24	AF93806		4480	524	909	0.17	458	2551	***	<5.0	<5.0	230	<0.5	<0.5	<5.0	<0.5	0.17	<1.0	49.5	<0.2	<5.0	1.79	0.983	2.773	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-15	Assessment	7/17/24	AG03746		4510	814	864	0.50	627	3234	6.53	5.4	<5.0	243	<0.5	<0.5	<5.0	<0.5	0.50	<1.0	76.8	<0.2	<5.0	1.47	1.80	3.27	<10.0	<1.0	8.76	11.65	6.53	3920	23.29	-128	0	0.790
WAP-15	**total samples**				3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	3	3	2	2	2	2	2	2	2	2
WAP-16	Assessment	2/20/24	AF90617		1890	202	216	0.21	274	1160	6.80	<5.0	<5.0	79.6	<0.5	<0.5	<5.0	<0.5	0.21	<1.0	7.12	<0.2	<5.0	3.90	-1.48	3.90	<10.0	<1.0	9.34	15.74	6.80	1790	18.12	-64.0	0	0.920
WAP-16	Assessment	7/15/24	AG03747		1760	215	236	<0.10	289	1192	6.77	<5.0	<5.0	83.3	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	5.75	<0.2	<5.0	1.59	1.82	3.21	<10.0	<1.0	11.27	13.81	6.77	1840	25.08	-101	0	0.830
WAP-16	**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
WAP-29	Assessment	2/15/24	AF90633		6940	397	657	<0.10	447	2244	6.11	<5.0	<5.0	26.9	<0.5	<0.5	<5.0	3.9	<0.10	<1.0	<5.0	<0.2	<5.0	0.472	0.882	1.354	<10.0	<1.0	5.90	6.44	6.11	2800	19.38	-43.0	0	1.69
WAP-29	Assessment	7/17/24	AG03764		9250	605	942	<0.1	588	3348	5.94	<5.0	<5.0	47.4	<0.5	<0.5	<5.0	5.4	<0.1	<1.0	<5.0	<0.2	<5.0	0.962	1.90	2.862	<10.0	<1.0	7.94	4.40	5.94	4130	24.80	-100	0	0.780
WAP-29	**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

Notes:

1. All groundwater samples collected from the monitoring wells were analyzed by South Carolina Certified laboratories: Santee Cooper Analytical Services (Certification # 08552), GEL Laboratories, LLC (Certification # 10120), Eurofins (Certification # 98001), Davis & Brown (Certification # 21117), Shealy Environmental Services, Inc (Certification # 32010), Test America Laboratories Inc. Savannah (Certification # 98001), Rogers & Callcot, Inc (Certification # 23105001), and Pace Analytical Services LLC (Certification #99030).
2. All Background, Corrective Measures Assessment (CMA) / Nature & Extent (NE), & Assessment Monitoring compliance wells have been sampled to meet § 257.94 and § 257.95.
3. Due to challenges with laboratory delays, all groundwater samples were not analyzed by a single laboratory. This accounts for the majority of the reporting limit variability. Matrix interference also contributed to variable RLs.
4. Depth to groundwater is measured below the toc of the casing (btoc) to the water surface. Elevation is shown relative to mean sea level (msl).
5. *** means not collected. Mainly pertinant for duplicate samples.

Table 2
Cross Generating Station
2024 Synoptic Water Levels for Groundwater Monitoring Wells

		1st Event - 1/3/2024		2nd Event - 4/9/2024		3rd Event - 6/3/2024		4th Event - 11/6/2024	
Well Name	Top of Casing Elevation (ft msl)	Depth to Groundwater (ft btoc)	GW Elevation (ft msl)	Depth to Groundwater (ft btoc)	GW Elevation (ft msl)	Depth to Groundwater (ft btoc)	GW Elevation (ft msl)	Depth to Groundwater (ft btoc)	GW Elevation (ft msl)
PM-1	83.24	7.75	75.49	8.14	83.24	8.50	74.74	9.13	74.11
CBW-1	85.80	8.50	77.30	9.12	85.80	10.41	75.39	11.47	74.33
CAP-1	82.70	8.50	74.20	6.61	82.70	7.66	75.04	8.40	74.30
CAP-2	89.70	15.10	74.60	15.91	89.70	16.98	72.72	17.69	72.01
CAP-3	91.49	14.70	76.79	15.47	91.49	16.54	74.95	17.34	74.15
CAP-4	91.77	15.05	76.72	15.77	91.77	16.97	74.80	17.81	73.96
CAP-5	91.78	14.60	77.18	15.26	91.78	17.66	74.12	18.67	73.11
CAP-6	91.82	14.65	77.17	15.89	91.82	18.05	73.77	18.94	72.88
CAP-7	91.64	14.75	76.89	15.19	91.64	17.57	74.07	18.52	73.12
CAP-8	91.61	15.95	75.66	16.67	91.61	18.30	73.31	18.98	72.63
CAP-9	91.59	14.35	77.24	14.62	91.59	17.82	73.77	18.73	72.86
CAP-10	95.68	20.25	75.43	21.12	95.68	22.40	73.28	13.11	82.57
CAP-11	95.55	19.20	76.35	18.72	95.55	20.71	74.84	21.31	74.24
CAP-12	98.33	22.25	76.08	23.72	98.33	24.13	74.20	24.73	73.60
CAP-13	80.77	4.35	76.42	4.83	80.77	7.65	73.12	8.76	72.01
CAP-14	80.77	4.15	76.62	4.78	80.77	7.77	73.00	8.93	71.84
CCMLF-1	80.86	3.45	77.41	4.00	80.86	7.11	73.75	7.95	72.91
CCMLF-1D	80.65	3.20	77.45	3.74	80.65	6.89	73.76	7.74	72.91
CCMLF-2	84.08	6.75	77.33	7.43	84.08	11.53	72.55	12.74	71.34
POZ-3	82.61	4.30	78.31	4.98	82.61	7.80	74.81	8.98	73.63
POZ-4	82.73	3.95	78.78	5.07	82.73	8.34	74.39	9.35	73.38
POZ-5D	82.49	4.15	78.34	5.21	82.49	8.56	73.93	9.57	72.92
POZ-6	83.84	5.80	78.04	6.44	83.84	9.86	73.98	10.93	72.91
POZ-7	82.02	3.95	78.07	4.77	82.02	7.44	74.58	8.29	73.73
POZ-8	83.13	4.80	78.33	5.84	83.13	9.12	74.01	10.15	72.98
CLF1B-1	83.76	6.00	77.76	6.66	83.76	8.70	75.06	9.68	74.08
CLF1B-2	82.04	4.35	77.69	5.05	82.04	7.18	74.86	8.19	73.85
CLF1B-3	82.75	3.95	78.80	5.82	82.75	8.18	74.57	9.18	73.57
CLF1B-4	82.74	3.85	78.89	5.80	82.74	8.55	74.19	9.59	73.15
CLF1B-5	81.09	3.40	77.69	4.23	81.09	7.32	73.77	8.31	72.78
CLF1B-5D	80.93	3.85	77.08	4.55	80.93	7.72	73.21	8.82	72.11
CCMAP-1	80.21	4.50	75.71	5.10	80.21	7.61	72.60	8.45	71.76
CCMAP-2	81.24	6.50	74.74	7.14	81.24	8.02	73.22	8.55	72.69
CCMAP-3	81.91	6.15	75.76	6.92	81.91	8.58	73.33	8.95	72.96
CCMAP-4	81.83	4.45	77.38	5.19	81.83	7.64	74.19	8.60	73.23
CCMAP-5	83.71	6.15	77.56	6.93	83.71	9.33	74.38	10.29	73.42
CCMAP-6	84.41	7.90	76.51	8.45	84.41	11.61	72.80	12.57	71.84
CCMAP-7	81.57	7.05	74.52	7.59	81.57	8.21	73.36	8.93	72.64
CCMAP-8	82.89	6.40	76.49	6.99	82.89	9.80	73.09	10.72	72.17
CCMAP-9	82.51	6.00	76.51	6.62	82.51	9.75	72.76	10.80	71.71
CCMAP-10	81.80	5.55	76.25	6.08	81.80	9.10	72.70	10.01	71.79
CCMAP-11	80.29	4.00	76.29	5.01	80.29	8.11	72.18	9.10	71.19
CCMAP-12	80.58	4.75	75.83	5.71	80.58	7.42	73.16	8.00	72.58
CCMAP-13	80.11	4.55	75.56	5.36	80.11	6.93	73.18	7.60	72.51
CCMAP-14	78.64	4.40	74.24	4.71	78.64	5.43	73.21	6.04	72.60
CGYP-1	91.89	15.95	75.94	19.69	91.89	17.56	74.33	17.98	73.91
CGYP-2	84.88	8.50	76.38	13.20	84.88	10.56	74.32	11.01	73.87
CGYP-3	83.95	6.95	77.00	9.41	83.95	9.37	74.58	9.84	74.11
CGYP-4	83.49	6.65	76.84	8.27	83.49	8.20	75.29	8.60	74.89
CGYP-5	84.12	7.90	76.22	9.09	84.12	8.14	75.98	8.35	75.77
CGYP-6	83.93	7.15	76.08	-	-	9.46	74.47	9.91	74.02
CGYP-7	85.37	9.20	76.17	13.10	85.37	10.97	74.40	11.42	73.95
CGSPZ-1	83.31	7.45	75.86	8.64	83.31	8.61	74.70	9.22	74.09
CGSPZ-2	82.56	6.70	75.86	9.38	82.56	8.29	74.27	8.55	74.01
CGSPZ-3	82.85	4.75	78.10	6.19	82.85	9.91	72.94	10.51	72.34
CGSPZ-4	81.28	3.80	77.48	4.82	81.28	7.68	73.60	8.73	72.55
CGSPZ-5	80.56	2.75	77.81	5.39	80.56	8.27	72.29	9.62	70.94
CCMGP-1	84.30	8.15	76.15	13.43	84.30	10.07	74.23	10.53	73.77
CCMGP-2	96.73	20.05	76.68	24.20	96.73	22.54	74.19	22.97	73.76
CCMGP-3	84.44	8.45	75.99	12.38	84.44	10.54	73.90	10.97	73.47
CCMGP-4	84.82	8.50	76.32	12.78	84.82	10.31	74.51	10.79	74.03
CCMGP-5	79.91	4.70	75.21	6.06	79.91	6.56	73.35	7.08	72.83
CGS-PSE-1	-	-	75.07	-	75.27	-	74.97	-	74.80
CGS-PSE-2	-	-	81.99	-	80.27	-	79.30	-	76.85
CGS-PSE-3	-	-	79.52	-	76.88	-	76.49	-	76.52
CGS-PSE-4	-	-	76.37	-	75.64	-	74.88	-	75.43
CGS-PSE-5	-	-	78.50	-	77.28	-	76.57	-	76.49
CGS-PSE-6	-	-	74.71	-	74.58	-	74.46	-	74.21
CGS-PSE-7	-	-	83.35	-	85.75	-	85.30	-	86.29
CGYPSW-1-WSE	-	-	75.13	-	75.16	-	74.88	-	74.93
CGYPSW-2-WSE	-	-	75.15	-	75.18	-	75.02	-	75.01
CGYPSW-3-WSE	-	-	75.49	-	75.37	-	75.45	-	75.26
CGYPSW-4-WSE	-	-	75.83	-	75.69	-	75.76	-	75.75
CGYPSW-6-WSE	-	-	75.12	-	75.17	-	74.85	-	74.70
CGYPSW-7-WSE	-	-	75.15	-	75.20	-	74.83	-	74.76
CGYPSW-8-WSE	-	-	75.14	-	75.23	-	74.86	-	74.79
GMPSW-WET-1SWE	-	-	75.98	-	75.81	-	74.35	-	74.24
GMPSW-WET-2SWE	-	-	75.55	-	75.34	-	74.49	-	74.50
GMPSW-CPD-1SWE	-	-	78.47	-	77.62	-	77.38	-	77.74
STAFF GAUGE	-	-	76.80	-	76.45	-	-	-	-
STAFF GAUGE	-	-	76.63	-	76.48	-	-	-	-

Notes:

1. Additional groundwater monitoring wells used for development of potentiometric maps. These wells monitor groundwater constituent concentrations under the SCDES NPDES Permit #SC0037401 and are not used for CCR constituent concentrations.

2. Depth to Groundwater is measured below the top of casing (btoc) to the water surface. The Top of Casing Elevation and GW Elevation are shown relative to the mean sea level (msl).

3. Pond surface elevations (PSE) and staff gauge elevations were collected to aid in the potentiometric surface interpretation elevation.

FIGURES

LEGEND

- BACKGROUND WELL
- SLURRY POND 3&4 NATURE EXTENT WELL
- SLURRY POND 3&4 MONITORING WELL
- CCR UNIT BOUNDARY
- PROPERTY BOUNDARY
- POND WATER SURFACE ELEVATION MEASUREMENT LOCATION

NOTES

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

N

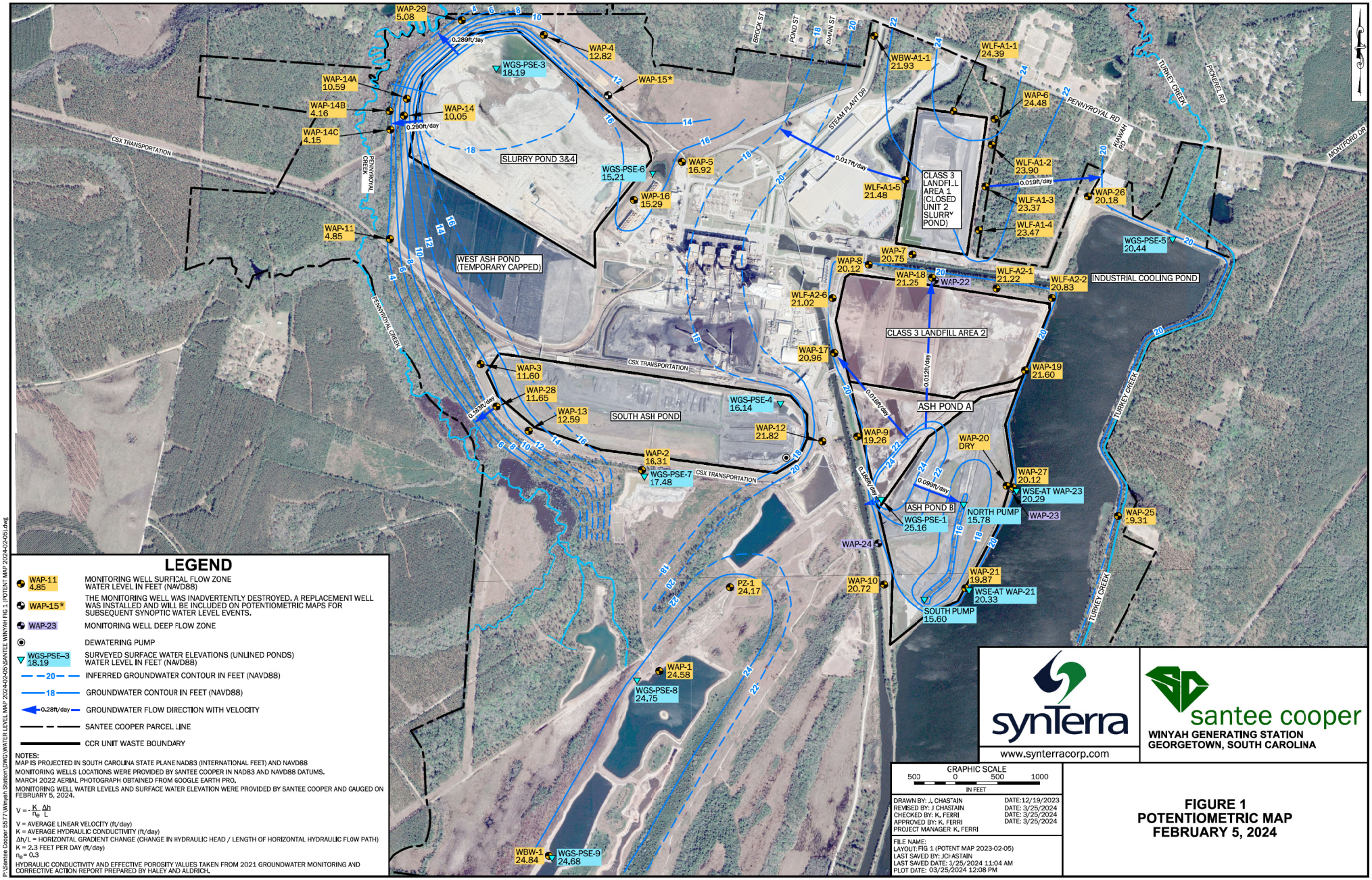
0 1,000 2,000
SCALE IN FEET

SANTEE COOPER
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

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

JANUARY 2024

FIGURE 1



LEGEND

WAP-11 4.85	MONITORING WELL SURFICAL FLOW ZONE WATER LEVEL IN FEET (NAVD88)
WAP-15*	THE MONITORING WELL WAS INADVERTENTLY DESTROYED. A REPLACEMENT WELL WAS INSTALLED AND WILL BE INCLUDED ON POTENTIOMETRIC MAPS FOR SUBSEQUENT SYNOPTIC WATER LEVEL EVENTS.
WAP-23	MONITORING WELL DEEP FLOW ZONE
	DEWATERING PUMP
WGS-PSE–3 18.19	SURVEYED SURFACE WATER ELEVATIONS (UNLINED PONDS) WATER LEVEL IN FEET (NAVD88)
20	INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
18	GROUNDWATER CONTOUR IN FEET (NAVD88)
0.28ft/day	GROUNDWATER FLOW DIRECTION WITH VELOCITY
	SANTEE COOPER PARCEL LINE
	CCR UNIT WASTE BOUNDARY

NOTES:
MAP IS PROJECTED IN SOUTH CAROLINA STATE PLANE NAD83 (INTERNATIONAL FEET) AND NAVD88
MONITORING WELLS LOCATIONS WERE PROVIDED BY SANTEE COOPER IN NAD83 AND NAVD88 DATUMS.
MARCH 2022 AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
MONITORING WELL WATER LEVELS AND SURFACE WATER ELEVATION WERE PROVIDED BY SANTEE COOPER AND GAUGED ON FEBRUARY 5, 2024.

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

V = AVERAGE LINEAR VELOCITY (ft/day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
$\Delta h/L$ = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 2.3 FEET PER DAY (ft/day)
n_e = 0.3
HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

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santee cooper
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

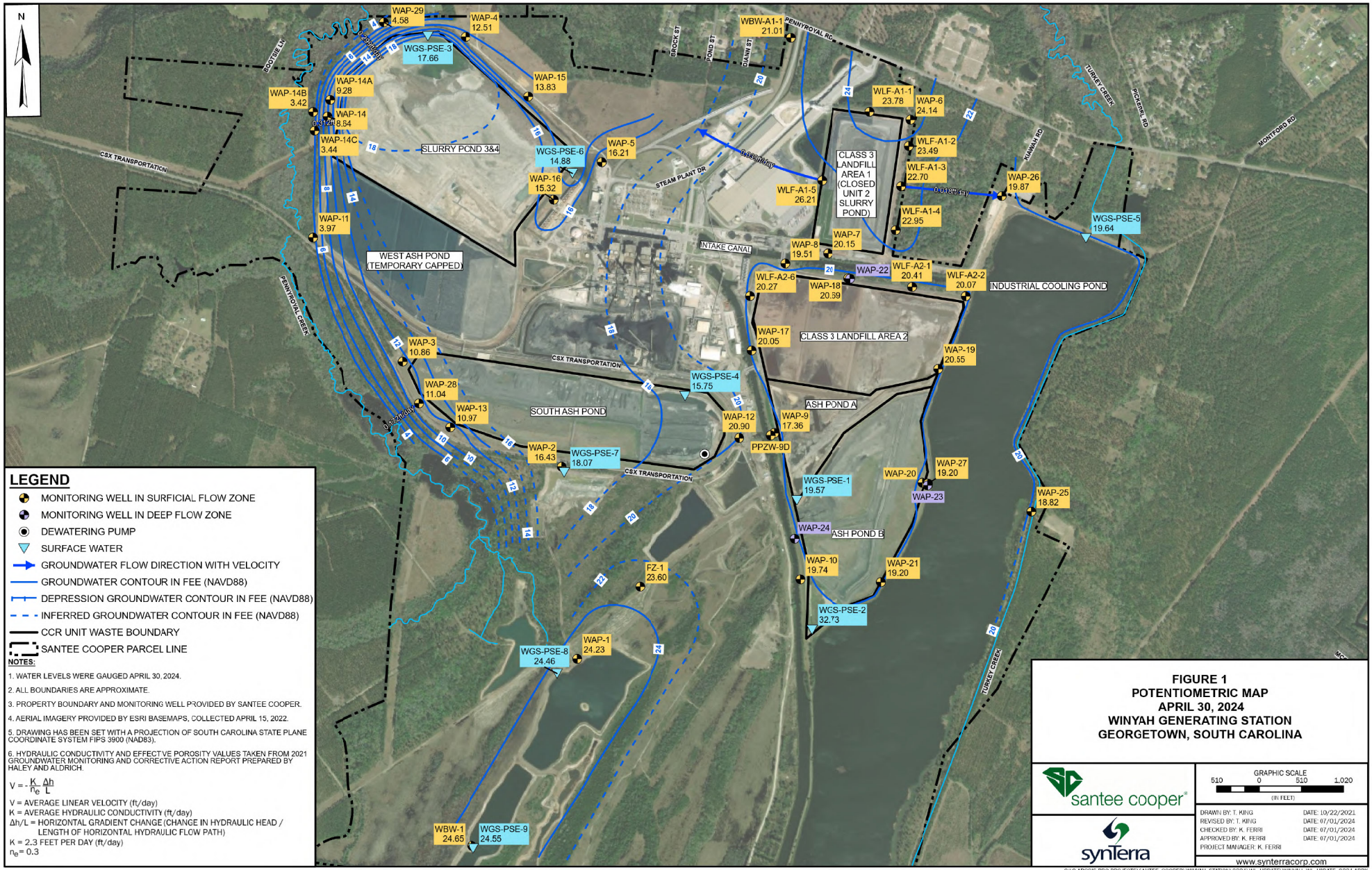
GRAPHIC SCALE
500 0 500 1000
IN FEET

DRAWN BY: J. CHASTAIN	DATE:12/19/2023
REVISED BY: J CHASTAIN	DATE: 3/25/2024
CHECKED BY: K. FERRI	DATE: 3/25/2024
APPROVED BY: K. FERRI	DATE: 3/25/2024
PROJECT MANAGER K. FERRI	

FILE NAME:
LAYOUT: FIG 1 (POTENT MAP 2023-02-05)
LAST SAVED BY: JCHASTAIN
LAST SAVED DATE: 3/25/2024 11:04 AM
PLOT DATE: 03/25/2024 12:08 PM

FIGURE 1
POTENTIOMETRIC MAP
FEBRUARY 5, 2024

P:\Santee Cooper 5577\Winyah Station\DWG\WATER LEVEL MAP 2024-02-05\SANTEE WINYAH FIG 1 (POTENT MAP 2024-02-05).dwg



LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- DEWATERING PUMP
- SURFACE WATER
- GROUNDWATER FLOW DIRECTION WITH VELOCITY
- GROUNDWATER CONTOUR IN FEE (NAVD88)
- DEPRESSION GROUNDWATER CONTOUR IN FEE (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEE (NAVD88)
- CCR UNIT WASTE BOUNDARY
- SANTEE COOPER PARCEL LINE

NOTES:

1. WATER LEVELS WERE GAUGED APRIL 30, 2024.
2. ALL BOUNDARIES ARE APPROXIMATE.
3. PROPERTY BOUNDARY AND MONITORING WELL PROVIDED BY SANTEE COOPER.
4. AERIAL IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED APRIL 15, 2022.
5. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83).
6. HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

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

V = AVERAGE LINEAR VELOCITY (ft/day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
$\Delta h/L$ = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 2.3 FEET PER DAY (ft/day)
n_e = 0.3

FIGURE 1
POTENTIOMETRIC MAP
APRIL 30, 2024
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

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synTerra

GRAPHIC SCALE
510 0 510 1,020
(IN FEET)

DRAWN BY: T. KING	DATE: 10/22/2021
REVISED BY: T. KING	DATE: 07/01/2024
CHECKED BY: K. FERRI	DATE: 07/01/2024
APPROVED BY: K. FERRI	DATE: 07/01/2024
PROJECT MANAGER: K. FERRI	

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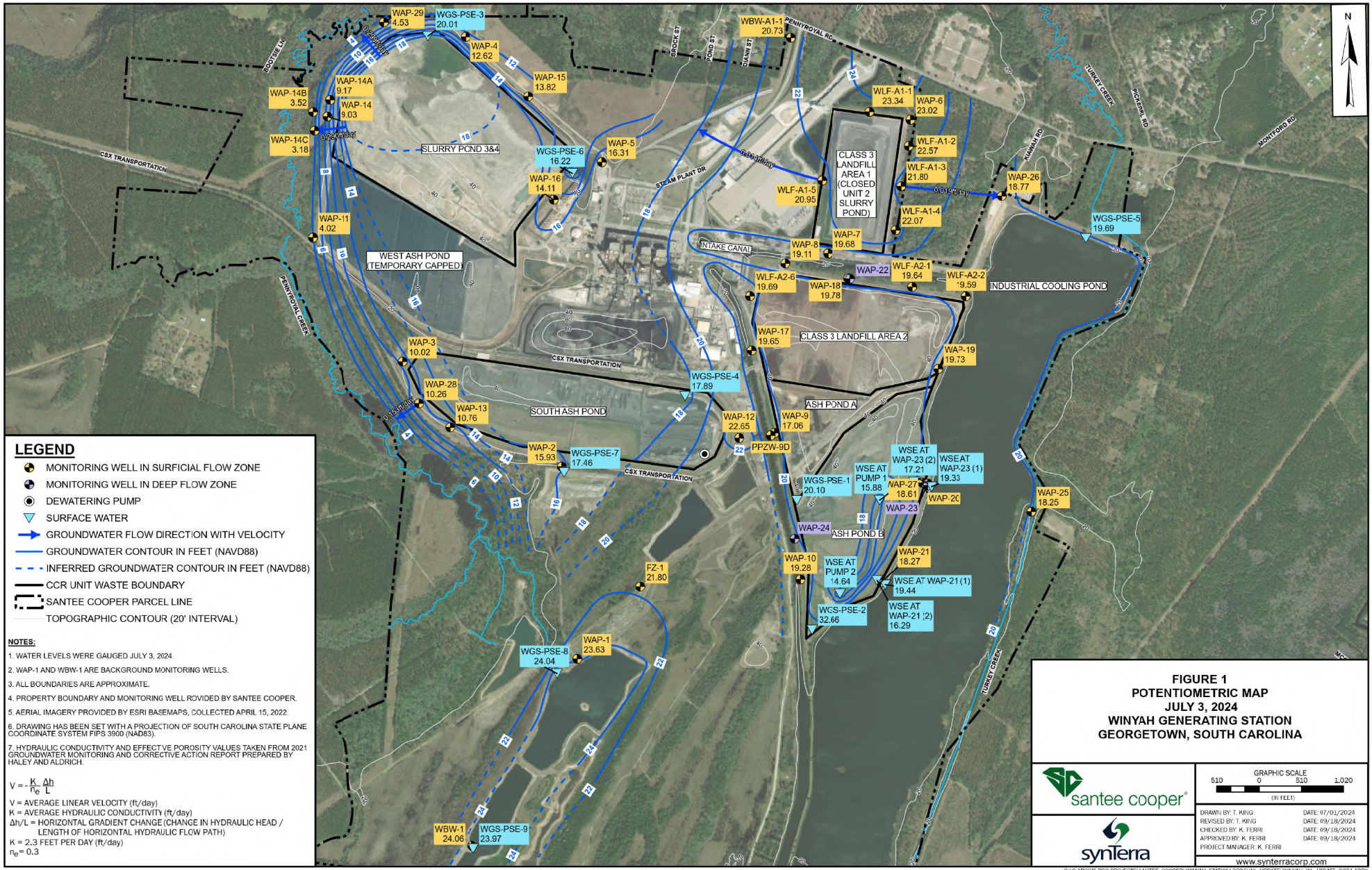
G:\0 ARCGIS PRO PROJECTS\SANTEE_COOPER\WINYAH_STATION\2024\WL_UPDATE\WINYAH_WL_UPDATE_2024.APRX



LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- DEWATERING PUMP
- SURFACE WATER
- GROUNDWATER FLOW DIRECTION WITH VELOCITY
- GROUNDWATER CONTOUR IN FEET (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- CCR UNIT WASTE BOUNDARY
- SANTEE COOPER PARCEL LINE
- TOPOGRAPHIC CONTOUR (20' INTERVAL)

NOTES:

1. WATER LEVELS WERE GAUGED JULY 3, 2024.
2. WAP-1 AND WBW-1 ARE BACKGROUND MONITORING WELLS.
3. ALL BOUNDARIES ARE APPROXIMATE.
4. PROPERTY BOUNDARY AND MONITORING WELL ROVIDED BY SANTEE COOPER.
5. AERIAL IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED APRIL 15, 2022.
6. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83).
7. HYDRAULIC CONDUCTIVITY AND EFFECTVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

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

V = AVERAGE LINEAR VELOCITY (ft/day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
Δh/L = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 2.3 FEET PER DAY (ft/day)
n_e = 0.3

FIGURE 1
POTENTIOMETRIC MAP
JULY 3, 2024
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

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synTerra

GRAPHIC SCALE
510 0 510 1,020
(IN FEET)

DRAWN BY: T. KING	DATE: 07/01/2024
REVISED BY: T. KING	DATE: 09/18/2024
CHECKED BY: K. FERRI	DATE: 09/18/2024
APPROVED BY: K. FERRI	DATE: 09/18/2024
PROJECT MANAGER: K. FERRI	

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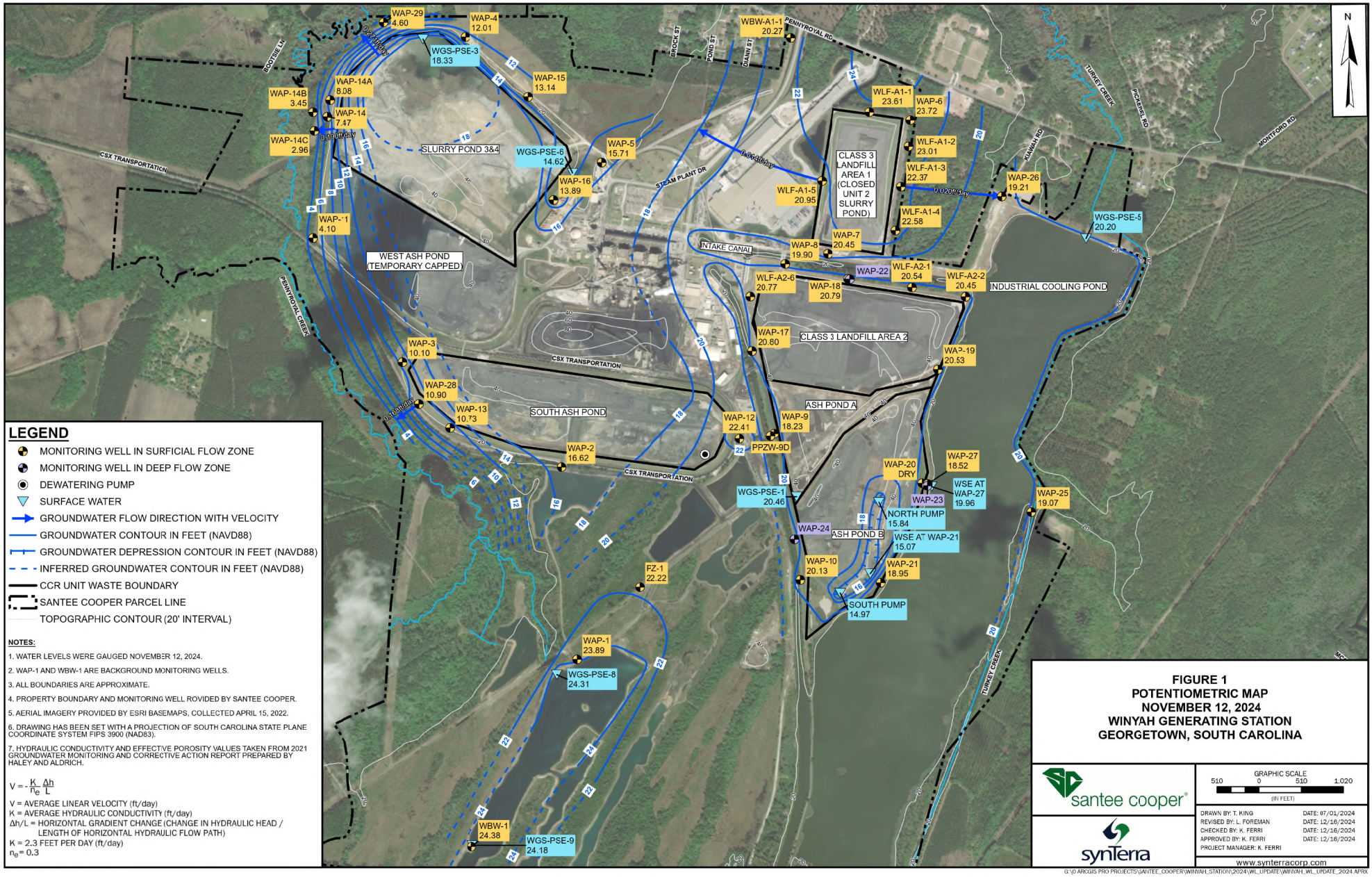
G:\0 ARCGIS PRO PROJECTS\SANTEE_COOPER\WINYAH_STATION\2024\WL_UPDATE\WINYAH_WL_UPDATE_2024.APRX



LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- DEWATERING PUMP
- SURFACE WATER
- GROUNDWATER FLOW DIRECTION WITH VELOCITY
- GROUNDWATER CONTOUR IN FEET (NAVD88)
- GROUNDWATER DEPRESSION CONTOUR IN FEET (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- CCR UNIT WASTE BOUNDARY
- SANTEE COOPER PARCEL LINE
- TOPOGRAPHIC CONTOUR (20' INTERVAL)

NOTES:

1. WATER LEVELS WERE GAUGED NOVEMBER 12, 2024.
2. WAP-1 AND WBW-1 ARE BACKGROUND MONITORING WELLS.
3. ALL BOUNDARIES ARE APPROXIMATE.
4. PROPERTY BOUNDARY AND MONITORING WELL ROVIDED BY SANTEE COOPER.
5. AERIAL IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED APRIL 15, 2022.
6. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83).
7. HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

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

V = AVERAGE LINEAR VELOCITY (ft/day)
K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
Δh/L = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
K = 2.3 FEET PER DAY (ft/day)
n_e = 0.3

FIGURE 1
POTENTIOMETRIC MAP
NOVEMBER 12, 2024
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

santee cooper®

synterra

GRAPHIC SCALE
510 0 510 1,020
(IN FEET)

DRAWN BY: T. KING	DATE: 07/01/2024
REVISED BY: L. FOREMAN	DATE: 12/16/2024
CHECKED BY: K. FERRI	DATE: 12/16/2024
APPROVED BY: K. FERRI	DATE: 12/16/2024
PROJECT MANAGER: K. FERRI	

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G:\O ARCGIS PRO PROJECTS\SANTEE_COOPER\WINYAH_STATION\2024\WL_UPDATE\WINYAH_WL_UPDATE_2024.APRX

Appendix A – Statistical Analysis

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

TECHNICAL MEMORANDUM

July 15, 2024
File No. 132892-100-009-02

SUBJECT: Statistical Evaluation of the February and March 2024 Semiannual Groundwater Assessment Monitoring Data, 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 from the February and March 2024 semiannual assessment monitoring event for Winyah Generating Station (WGS) Slurry Pond 3 & 4. Data for this groundwater sampling event were validated on April 16 and April 24, 2024 by Santee Cooper.

BACKGROUND

The WGS Slurry Pond 3 & 4 ceased receipt of all coal combustion residual (CCR) and non-CCR wastewater inflows prior to April 11, 2021. Closure by excavation and removal of CCR is currently underway.

Statistically significant levels (SSLs) of arsenic and lithium above Groundwater Protection Standards (GWPS) were identified in previous assessment monitoring events. Subsequently, an alternative source demonstration (ASD) was completed on September 12, 2019, which concluded that a source other than the WGS Slurry Pond 3 & 4 was contributing to the SSLs for arsenic and lithium. Accordingly, the unit has remained in assessment monitoring.

Recent analytical testing results were evaluated to determine if SSLs exist above GWPS of Appendix IV groundwater monitoring constituents. Using interwell and intrawell evaluations, data from the semiannual groundwater sampling event for the downgradient monitoring wells were compared to the GWPS established from background well data.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the CCR Unit (§257.93(f) (1-4)) represents a SSL of Appendix IV parameters above the GWPS. The selected statistical method used for these evaluations is the tolerance limit (TL). This statistical method was certified by Haley & Aldrich, Inc. on October 12, 2017.

A combination of interwell and intrawell evaluations were used for the statistical analysis. Interwell evaluations were performed for Appendix IV constituents detected downgradient of Slurry Pond 3 & 4 and compared to the most recent values from downgradient compliance wells against a background dataset. The GWPS for each of the Appendix IV constituents has been set equal to the highest value of

the maximum contaminant level, regional screening level (RSL), or site background concentration. The intrawell evaluation for arsenic and lithium compares the most recent values from each compliance well against a background dataset composed of its own historical data. Data from the most recent groundwater sampling event from each compliance well were compared to the corresponding GWPS to determine if a SSL existed. The results of the statistical analysis are presented in Table I.

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

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

After testing for outliers, the UTLs were calculated from the background dataset to evaluate whether removal of data was necessary based on sampling or measurement discrepancies. Both visual and statistical outlier tests for the background data were performed.[1] A visual inspection of the data was performed using distribution plots for the downgradient sample data. Based on our review, no sample data were identified as outliers that warranted removal from the dataset.

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

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

[1] Visual and statistical outlier tests for background data were performed using Chemstat 6.3.0.0 and U.S. Environmental Protection Agency's ProUCL 5.1 software.

TREND ANALYSIS

Mann-Kendall trend analyses were performed on datasets of sufficient sample size. Results of the trend analysis are included on Table 1. In summary, analyzed trends for the compliance wells are identified as stable or decreasing. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSL. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

The sample concentrations from the downgradient wells for each of the detected Appendix IV constituents from the February and March 2024 semiannual assessment monitoring event were compared to their respective GWPS (Table 1). A sample concentration greater than the GWPS is considered to represent a SSL. Interwell comparisons were used for most constituents in downgradient wells. An intrawell comparison was used for arsenic and lithium as supported by the successful 2019 Alternate Source Demonstration (ASD). SSLs were not identified for the February and March 2024 monitoring event.

Arsenic, barium, fluoride, lithium, and radium were detected; however, they fell below their respective SSLs. Short-term increases in the concentrations of Appendix IV constituents are not unexpected during dewatering and excavation closure activities. Concentrations are expected to decrease once the closure is complete and groundwater equilibrium is restored. The expected date for completing CCR removal for Slurry Pond 3 & 4 is 2025. Groundwater trends will continue to be monitored during future sampling events.

Enclosures:

Table 1 – WGS Slurry Pond 3 & 4 February and March 2024 Semiannual Assessment Monitoring Data

TABLE

TABLE 1

WGS SLURRY POND 3&4

FEBRUARY AND MARCH 2024 SEMIANNUAL ASSESSMENT MONITORING AREA

																								Intra-well Analysis		Inter-well Analysis		
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well	February and March 2024 Concentration	Detect?	95 LCL	Upper Tolerance Limit	Exceedance above Background at Individual Well (SSI)	Upper Prediction Limits	Exceedance above Background at Individual Well	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above GWPS (SSL)	SSL
CCR Appendix-IV: Antimony, Total (mg/L)																													
WBW-1	0/19	100%	0.005-0.025	0.00605	0.005	0.007		0.00002105	0.004588	0.7581	0.006	mg/L	N	0	1	NA	NA	NA	Non-parametric				0.025				0.025		
WAP-1	0/19	100%	0.002-0.025	0.00589	0.005	0.007		0.00002188	0.004677	0.7935	0.006	mg/L	N	0	1	NA	NA	NA											
WAP-4	0/18	100%	0.002-0.025	0.00578	0.005	0.008		0.00002395	0.004894	0.847	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N				N	No
WAP-14	1/18	94%	0.002-0.025	0.00578	0.005	0.008	0.002	0.00002395	0.004894	0.847	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N				N	No
WAP-15R	0/17	100%	0.002-0.025	0.01082	0.01	0.016		0.0000479	0.009788	1.694	0.006	mg/L	N	0	2	NA	NA	NA		0.005	N			N				N	No
WAP-16	0/18	100%	0.002-0.025	0.00578	0.005	0.008		0.00002395	0.004894	0.847	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N				N	No
CCR Appendix-IV: Arsenic, Total (mg/L)																													
WBW-1	0/21	100%	0.003-0.005	0.00443	0.005	0.005		8.571E-07	0.0009258	0.2091	0.01	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.009						
WAP-1	5/23	78%	0.003-0.005	0.00524	0.005	0.00819	0.0085	0.00000159	0.001261	0.2405	0.01	mg/L	N	0	0	Yes	No	NA							0.005	N	0.010	N	No
WAP-4	1/24	96%	0.003-0.005	0.00439	0.005	0.005	0.00044	0.00000139	0.001179	0.2683	0.01	mg/L	N	0	0	Yes	No	NA		0.005	N			N	0.008	N	0.010	N	No
WAP-14	20/22	9%	0.003-0.005	0.0206	0.01705	0.04679	0.3475	0.0001493	0.01222	0.5934	0.01	mg/L	Y	19	0	No	No	Stable		0.043	Y			Y	0.048	N	0.048	N	No
WAP-15R	8/21	62%	0.003-0.005	0.00999	0.01	0.01239	0.0084	0.00000317	0.002518	0.5046	0.01	mg/L	N	0	0	Yes	No	Decrease		0.005	N			N	0.008	N	0.010	N	No
WAP-16	1/22	95%	0.003-0.005	0.00426	0.005	0.005	0.00063	1.472E-06	0.001213	0.2851	0.01	mg/L	N	0	0	Yes	No	NA		0.005	N			N	0.005	N	0.010	N	No
CCR Appendix-IV: Barium, Total (mg/L)																													
WBW-1	21/21	0%	-	0.0185	0.015	0.044	0.0534	0.000137	0.01171	0.6344	2	mg/L	N	0	0	Yes	No	Stable	Non-parametric				0.094				2.000		
WAP-1	23/23	0%	-	0.0411	0.0434	0.081	0.094	0.000744	0.02728	0.6632	2	mg/L	N	0	0	No	No	Increase											
WAP-4	24/24	0%	-	0.045	0.0433	0.0615	0.0818	0.000109	0.01044	0.2322	2	mg/L	N	0	0	Yes	No	Decrease		0.032	Y			N				N	No
WAP-14	22/22	0%	-	0.0562	0.05085	0.07945	0.093	0.0001363	0.01167	0.2075	2	mg/L	N	0	0	Yes	No	Decrease		0.048	Y			N				N	No
WAP-15R	21/21	0%	-	0.459	0.465	0.6694	0.636	0.015486	0.17598	0.7462	2	mg/L	N	0	0	No	No	Stable		0.223	Y			Y				N	No
WAP-16	22/22	0%	-	0.111	0.0945	0.1797	0.18	0.001326	0.03641	0.3275	2	mg/L	N	0	0	No	No	Decrease		0.080	Y			N				N	No
CCR Appendix-IV: Beryllium, Total (mg/L)																													
WBW-1	0/19	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA	NA				0.0005				0.004		
WAP-1	0/19	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/18	100%	0.0005-0.001	0.000528	0.0005	0.000575		1.389E-08	0.0001179	0.2233	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-14	0/18	100%	0.0005-0.001	0.000528	0.0005	0.000575		1.389E-08	0.0001179	0.2233	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-15R	5/17	71%	0.0005-0.0005	0.001356	0.001	0.00544	0.00351	1.4484E-06	0.001702	2.036	0.004	mg/L	N	0	0	Yes	No	NA		0.0005	N			N				N	No
WAP-16	0/18	100%	0.0005-0.001	0.000528	0.0005	0.000575		1.389E-08	0.0001179	0.2233	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
CCR Appendix-IV: Cadmium, Total (mg/L)																													
WBW-1	0/20	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.0005				0.005		
WAP-1	0/22	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/23	100%	0.0005-0.002	0.000587	0.0005	0.00095		1.057E-07	0.0003252	0.554	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-14	0/18	100%	0.0005-0.001	0.000528	0.0005	0.000575		1.389E-08	0.0001179	0.2233	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-15R	0/17	100%	0.0005-0.001	0.001029	0.001	0.00115		2.778E-08	0.0002358	0.4466	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-16	0/18	100%	0.0005-0.001	0.000528	0.0005	0.000575		1.389E-08	0.0001179	0.2233	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
CCR Appendix-IV: Chromium, Total (mg/L)																													
WBW-1	1/20	95%	0.005-0.005	0.005	0.005	0.005	0.005	0	0	0	0.1	mg/L	N	0	0	No	No	NA	Non-parametric				0.0050				0.100		
WAP-1	0/22	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA											
WAP-4	2/23	91%	0.005-0.01	0.00527	0.005	0.0095	0.01	2.853E-06	0.001689	0.3205	0.1	mg/L	N	0	0	Yes	No	NA		0.005	N			N				N	No
WAP-14	1/20	95%	0.005-0.005	0.0049	0.005	0.005	0.0031	1.805E-07	0.0004249	0.08662	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N				N	No
WAP-15R	1/19	95%	0.005-0.005	0.00982	0.01	0.01	0.0015	1.225E-06	0.0015652	0.3244	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N				N	No
WAP-16	1/20	95%	0.005-0.005	0.00484	0.005	0.005	0.0019	4.805E-07	0.0006932	0.1431	0.1	mg/L	N	0	0	No	No	NA		0.005	N			N				N	No
CCR Appendix-IV: Cobalt, Total (mg/L)																													
WBW-1	6/21	71%	0.0005-0.0005	0.00123	0.0005	0.00315	0.00838	3.237E-06	0.001799	1.468	0.006	mg/L	Y	1	0	No	No	NA	Non-parametric				0.0084				0.008		
WAP-1	8/21	62%	0.0005-0.0005	0.000716	0.0005	0.0015	0.0016	1.442E-07	0.0003797	0.53	0.006	mg/L	N	0	0	No	No	Increase											
WAP-4	1/21	95%	0.0005-0.0005	0.000507	0.0005	0.0005	0.00064	9.333E-10	0.00003055	0.0603	0.006	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
WAP-14	2/21	90%	0.0005-0.0005	0.00053	0.0005	0.0007	0.00093	1.03E-08	0.0001015	0.1915	0.006	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
WAP-15R	7/21	67%	0.0005-0.01	0.00208	0.001	0.01301	0.0066	1.2278E-05	0.004956	3.234	0.006	mg/L	Y	2	2	Yes	No	Stable		0.0005	N			N				N	No
WAP-16	4/21	81%	0.0005-0.0005	0.000489	0.0005	0.00051	0.00056	4.869E-09	0.00006978	0.1427	0.006	mg/L	N	0	0	Yes	No	NA		0.0005	N			N				N	No
CCR Appendix-IV: Fluoride (mg/L)																													
WBW-1	1/22	95%	0.1-0.1	0.1	0.1	0.1	0.1	1.322E-18	1.15E-09	1.15E-08	4	mg/L	N	0	0	No	No	NA	Non-parametric				0.140				4.00		
WAP-1	2/22	91%	0.1-0.1	0.103	0.1	0.1285	0.14	0.0001084	0.01041	0.1009	4	mg/L	N	0	0	No	No	NA											
WAP-4	11/23	52%	0.1-0.1	0.104	0.1	0.129	0.13	0.0003404	0.01845	0.1781	4	mg/L	N	0	0	Yes	No	Stable		0.10	N			N				N	No
WAP-14	21/23	9%	0.1-0.1	0.539	0.54	0.907	1	0.06676	0.2584	0.4793	4	mg/L	N	0	0	No	No	Stable		0.91	Y			Y				N	No
WAP-15R	18/22	18%	0.1-0.1	0.332	0.32	0.552	0.46	0.006872	0.11724	0.7228	4	mg/L	N	0	0	No	No	Decrease		0.17	Y			Y				N	No
WAP-16	18/22	18%	0.1-0.1	0.159	0.155	0.24	0.25	0.002222	0.04714	0.2971	4	mg/L	N	0	0	No	No	Stable		0.21	Y			Y				N	No
CCR Appendix-IV: Lead, Total (mg/L)																													
WBW-1	0/20	100%	0.001-0.01	0.00227	0.001	0.01		7.407E-06	0.002722	1.196	0.015	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.0100				0.015		
WAP-1	4/22	82%	0.001-0.01	0.00197	0.001	0.004457	0.00456	4.041E-06	0.00201	1.02	0.015	mg/L	N	0	0	Yes	No	NA											
WAP-4	1/23	96%	0.001-0.0025	0.00146	0.001	0.0025	0.0031	5.352E-07	0.0007316	0.5008	0.015	mg/L	N	0	0	No	No	NA		0.001	N			N				N	No
WAP-14	1/21	95%	0.001-0.01	0.0018	0.001	0.0025	0.00039	4.002E-06	0.002	1.109	0.015	mg/L	N	0	0	Yes	No	NA		0.001	N			N				N	No
WAP-15R	0/20	100%	0.001-0.01	0.00288	0.002	0.005		7.866E-06	0.003966	2.164	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N				N	No
WAP-16	1/21	95%	0.001-0.01	0.00184	0.001	0.0025	0.0012	3.919E-06	0.00198	1.074	0.015	mg/L	N	0	0	Yes	No	NA		0.001	N			N				N	No
CCR Appendix-IV: Lithium, Total (mg/L)																													
WBW-1	1/21	95%	0.005-0.01	0.00928	0.01	0.01	0.0099	3.208E-06	0.001791	0.193	0.04	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.012						
WAP-1	1/21	95%	0.005-0.01	0.00912	0.01	0.01	0.0116	4.322E-06	0.002079	0.2279	0.04	mg/L	N	0	0	Yes	No	NA											
WAP-4	13/22	41%	0.005-0.01	0.012	0.01	0.01649	0.031	0.00002601	0.0051	0.4261	0.04	mg/L	N	0	0	Yes	No	Decrease		0.005	N			N	0.031	N	0.040	N	No
WAP-14	4/22	82%	0.005-0.05	0.0273	0.01	0.1013	0.27	0.003405	0.05835	2.134	0.04	mg/L	Y	2	1	Yes	No	NA		0.005	N			N	0.270	N	0.270	N	No
WAP-15R	18/21	14%	0.01-0.01	0.0908	0.0788	0.12482	0.2683	0.0036	0.08486	1.9826	0.04	mg/L	Y	22	0	Yes	No	Stable		0.048	Y			Y	0.220	N	0.220	N	No
WAP-16	3/22	86%	0.005-0.25	0.0204	0.01	0.01	0.00916	0.002516	0.05016	2.513	0.04	mg/L	N	0	1	NA	NA	NA		0.007	Y			N	0.250	N	0.250	N	No

CCR Appendix-IV: Mercury, Total (mg/L)																													
WBW-1	1/19	95%	0.0002-0.0002	0.0002	0.0002	0.0002	0.0002	0	0	0	0.002	mg/L	N	0	0	No	No	NA	Non-parametric				0.0002				0.0020		
WAP-1	0/19	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/18	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
WAP-14	0/18	100%	0.0002-0.001	0.000244	0.0002	0.00032		3.556E-08	0.0001886	3.7714	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
WAP-15R	0/17	100%	0.0002-0.0002	0.0004	0.0004	0.0004		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
WAP-16	0/18	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
CCR Appendix-IV: Molybdenum, Total (mg/L)																													
WBW-1	0/21	100%	0.005-0.05	0.0112	0.01	0.01		0.00008226	0.00907	0.8105	0.1	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.050				0.10		
WAP-1	0/21	100%	0.005-0.01	0.00905	0.01	0.01		4.048E-06	0.002012	0.2224	0.1	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/18	100%	0.005-0.04	0.0106	0.01	0.0145		0.0000585	0.007648	0.7246	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N				N	No
WAP-14	0/18	100%	0.005-0.4	0.0308	0.01	0.0685		0.008492	0.09215	2.989	0.1	mg/L	N	0	1	NA	NA	NA		0.005	N			N				N	No
WAP-15R	0/18	100%	0.005-0.4	0.0383	0.02	0.17		0.016078	0.17932	5.632	0.1	mg/L	N	0	2	NA	NA	NA		0.005	N			N				N	No
WAP-16	0/18	100%	0.005-0.2	0.0197	0.01	0.0385		0.002028	0.04503	2.283	0.1	mg/L	N	0	1	NA	NA	NA		0.005	N			N				N	No
CCR Appendix-IV: Radium-226 & 228 (pCi/L)																													
WBW-1	14/21	33%	0-4	2.98	4	4.33	4.39	2.247	1.499	0.503	5	pCi/L	N	0	0	No	No	Stable	Non-parametric				5.97				6.0		
WAP-1	16/21	24%	4-4	3.29	4	5.74	5.97	2.521	1.588	0.482	5	pCi/L	Y	4	0	No	No	Decrease											
WAP-4	19/22	14%	4-4	3.25	3.285	5.973	7.15	3.399	1.844	0.5673	5	pCi/L	Y	4	0	No	No	Decrease		0.549	Y			N				N	No
WAP-14	20/22	9%	4-4	3.57	3.185	5.879	7.4	2.607	1.615	0.4529	5	pCi/L	Y	4	0	No	No	Decrease		2.402	Y			N				N	No
WAP-15R	21/21	0%	-	9.53	9.43	13.294	11.98	4.832	3.108	0.691	5	pCi/L	Y	16	0	No	No	Stable		5.060	Y			N				N	No
WAP-16	21/22	5%	4-4	4.15	4.025	6.904	8.4	3.247	1.802	0.4342	5	pCi/L	Y	7	0	No	No	Decrease		3.9	Y			N				N	No
CCR Aspendix-IV: Selenium, Total (mg/L)																													
WBW-1	0/20	100%	0.0025-0.02	0.0114	0.01	0.02		0.00002334	0.004831	0.4247	0.05	mg/L	N	0	0	NA	NA	NA	NA				0.020				0.050		
WAP-1	0/22	100%	0.0025-0.02	0.0108	0.01	0.02		0.00001749	0.004182	0.3874	0.05	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/23	100%	0.0025-0.02	0.0103	0.01	0.02		0.00001949	0.004415	0.4275	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N				N	No
WAP-14	1/18	94%	0.0025-0.02	0.0111	0.01	0.02	0.0021	0.00003072	0.005543	0.4999	0.05	mg/L	N	0	0	No	No	NA		0.010	N			N				N	No
WAP-15R	1/17	94%	0.0025-0.02	0.0211	0.02	0.04	0.00095	0.00006402	0.011316	1.0264	0.05	mg/L	N	0	0	No	No	NA		0.010	N			N				N	No
WAP-16	0/18	100%	0.0025-0.02	0.0112	0.01	0.02		0.00002812	0.005303	0.4714	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N				N	No
CCR Appendix-IV: Thallium, Total (mg/L)																													
WBW-1	0/19	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.001				0.002		
WAP-1	0/19	100%	0.0001-0.001	0.000953	0.001	0.001		4.263E-08	0.0002065	0.2167	0.002	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N				N	No
WAP-14	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N				N	No
WAP-15R	0/17	100%	0.001-0.001	0.002	0.002	0.002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N				N	No
WAP-16	0/18	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N				N	No

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TECHNICAL MEMORANDUM

December 9, 2024
File No. 132892-102

SUBJECT: Statistical Evaluation of the July 2024 Semiannual Groundwater Assessment Monitoring Data, 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 from the July 2024 semiannual assessment monitoring event for Winyah Generating Station (WGS) Slurry Pond 3 & 4. Data for this groundwater sampling event were validated on October 9, 2024 by Santee Cooper.

BACKGROUND

The WGS Slurry Pond 3 & 4 ceased receipt of coal combustion residual (CCR) and non-CCR wastewater inflows prior to April 11, 2021. Closure by excavation and removal of CCR is currently underway.

Statistically significant levels (SSLs) of arsenic and lithium above Groundwater Protection Standards (GWPS) were identified in previous assessment monitoring events. Subsequently, an alternative source demonstration (ASD) was completed on September 12, 2019, which concluded that a source other than the WGS Slurry Pond 3 & 4 was contributing to the SSLs for arsenic and lithium. Accordingly, the unit has remained in assessment monitoring.

Recent analytical testing results were evaluated to determine if SSLs exist above GWPS of Appendix IV groundwater monitoring constituents. Using interwell and intrawell evaluations, data from the semiannual groundwater sampling event for the downgradient monitoring wells were compared to the GWPS established from background well data.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the CCR Unit (§257.93(f) (1-4)) represents a SSL of Appendix IV parameters above the GWPS. The selected statistical method used for these evaluations is the tolerance limit (TL). This statistical method was certified by Haley & Aldrich, Inc. on October 12, 2017.

A combination of interwell and intrawell evaluations were used for the statistical analysis. Interwell evaluations were performed for Appendix IV constituents detected downgradient of Slurry Pond 3 & 4 and compared to the most recent values from downgradient compliance wells against a background dataset. The GWPS for each of the Appendix IV constituents has been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or site background concentration. The

intrawell evaluation for arsenic and lithium compares the most recent values from each compliance well against a background dataset composed of its own historical data. Data from the most recent groundwater sampling event from each compliance well were compared to the corresponding GWPS to determine if a SSL existed. The results of the statistical analysis are presented in Table 1.

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

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

After testing for outliers, the UTLs were calculated from the background dataset to evaluate whether removal of data was necessary based on sampling or measurement discrepancies. Both visual and statistical outlier tests for the background data were performed.[1] A visual inspection of the data was performed using distribution plots for the downgradient sample data. Based on our review, no sample data were identified as outliers that warranted removal from the dataset.

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

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

[1] Visual and statistical outlier tests for background data were performed using Chemstat 6.3.0.0 and U.S. Environmental Protection Agency's ProUCL 5.1 software.

TREND ANALYSIS

Mann-Kendall trend analyses were performed on datasets of sufficient sample size. Results of the trend analysis are included on Table 1. In summary, analyzed trends for the compliance wells are identified as stable or decreasing. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSL. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

The sample concentrations from the downgradient wells for each of the detected Appendix IV constituents from the July 2024 semiannual assessment monitoring event were compared to their respective GWPS (Table 1). A sample concentration greater than the GWPS is considered to represent a SSL. Interwell comparisons were used for most constituents in downgradient wells. An intrawell comparison was used for arsenic and lithium as supported by the successful 2019 Alternate Source Demonstration (ASD). SSLs were not identified for the July 2024 monitoring event.

Antimony, arsenic, barium, fluoride, lithium, and radium were detected; however, they fell below their respective SSLs. Short-term increases in the concentrations of Appendix IV constituents are not unexpected during dewatering and excavation closure activities. Concentrations are expected to decrease once the closure is complete and groundwater equilibrium is restored. The expected date for completing CCR removal for Slurry Pond 3 & 4 is 2025. Groundwater trends will continue to be monitored during future sampling events.

Enclosures:

Table 1 – WGS Slurry Pond 3 & 4 July 2024 Semiannual Assessment Monitoring Data

TABLE

TABLE 1
WGS SLURRY POND 3&4
JULY 2024 SEMIANNUAL ASSESSMENT MONITORING DATA

																									Intra-well Analysis		Inter-well Analysis		
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution Well	July 2024 Concentration	Detect?	95 LCL	Upper Tolerance Limit	Exceedance above Background at Individual Well (SSI)	Upper Prediction Limits	Exceedance above Background at Individual Well	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above GWPS (SSL)	SSL
CCR Appendix-IV: Antimony, Total (mg/L)																													
WBW-1	0/20	100%	0.005-0.025	0.006	0.005	0.006		0.00002	0.004472	0.7454	0.006	mg/L	N	0	1	NA	NA	NA	NA				0.025						
WAP-1	0/20	100%	0.002-0.025	0.00585	0.005	0.006		0.00002077	0.004557	0.779	0.006	mg/L	N	0	1	NA	NA	NA									0.025		
WAP-4	1/19	95%	0.002-0.025	0.00575	0.005	0.00727	0.0053	0.00002263	0.004757	0.8269	0.006	mg/L	N	0	1	Yes	No	NA		0.0005	Y			N				N	No
WAP-14	2/19	89%	0.002-0.025	0.00574	0.005	0.00709	0.0051	0.00002264	0.004758	0.8287	0.006	mg/L	N	0	1	Yes	No	NA		0.0005	Y			N				N	No
WAP-15R	0/1	100%	0.005-0.005	0.0108	0.01	0.01472	0.0054	0.00004524	0.009514	1.6522	0.006	mg/L	N	0	2	NA	NA	NA		0.0005	Y			N				N	No
WAP-16	0/19	100%	0.002-0.025	0.00574	0.005	0.007		0.00002265	0.004759	0.8296	0.006	mg/L	N	0	1	NA	NA	NA		0.0005	N			N				N	No
CCR Appendix-IV: Arsenic, Total (mg/L)																													
WBW-1	0/22	100%	0.003-0.005	0.00445	0.005	0.005		8.312E-07	0.0009117	0.2047	0.01	mg/L	N	0	0	NA	NA	NA											
WAP-1	6/24	75%	0.003-0.005	0.00542	0.005	0.00847	0.0096	0.000002312	0.00152	0.2803	0.01	mg/L	N	0	0	Yes	No	NA	Non-parametric				0.010						
WAP-4	1/25	96%	0.003-0.005	0.00442	0.005	0.005	0.00044	0.000001346	0.00116	0.2627	0.01	mg/L	N	0	0	Yes	No	NA		0.0005	N			N	0.005	N	0.010	N	No
WAP-14	21/23	9%	0.003-0.005	0.0204	0.017	0.04659	0.0475	0.0001432	0.01197	0.5861	0.01	mg/L	Y	20	0	No	No	Stable		0.0017	Y			Y	0.048	N	0.048	N	No
WAP-15R	0/1	100%	0.005-0.005	0.00999	0.01	0.01238	0.0084	0.000003026	0.00246	0.4928	0.01	mg/L	N	0	0	Yes	No	Decrease		0.0005	N			N	0.008	N	0.010	N	No
WAP-16	1/23	96%	0.003-0.005	0.00429	0.005	0.005	0.00063	0.000001429	0.001196	0.2788	0.01	mg/L	N	0	0	Yes	No	NA		0.0005	N			N	0.005	N	0.010		
CCR Appendix-IV: Barium, Total (mg/L)																													
WBW-1	22/22	0%	-	0.0182	0.015	0.04338	0.0534	0.0001319	0.01149	0.6311	2	mg/L	N	0	0	Yes	No	Stable											
WAP-1	24/24	0%	-	0.0423	0.04355	0.081	0.094	0.000742	0.02724	0.6447	2	mg/L	N	0	0	No	No	Increase	Non-parametric				0.094				2.000		
WAP-4	25/25	0%	-	0.0445	0.043	0.061	0.0818	0.0001098	0.01048	0.2353	2	mg/L	N	0	0	Yes	No	Decrease		0.0034	Y			N				N	No
WAP-14	23/23	0%	-	0.0559	0.0507	0.0789	0.093	0.0001321	0.01149	0.2054	2	mg/L	N	0	0	Yes	No	Decrease		0.0049	Y			N				N	No
WAP-15R	22/22	0%	-	0.46	0.468	0.669	0.636	0.014786	0.17196	0.7282	2	mg/L	N	0	0	No	No	Stable		0.0243	Y			Y				N	No
WAP-16	23/23	0%	-	0.11	0.0945	0.1795	0.18	0.0013	0.03605	0.3278	2	mg/L	N	0	0	No	No	Decrease		0.0083	Y			N				N	No
CCR Appendix-IV: Beryllium, Total (mg/L)																													
WBW-1	0/20	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA											
WAP-1	0/20	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA	NA				0.0005				0.004		
WAP-4	0/19	100%	0.0005-0.001	0.000526	0.0005	0.00055		1.316E-08	0.0001147	0.2179	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-14	0/19	100%	0.0005-0.001	0.000526	0.0005	0.00055		1.316E-08	0.0001147	0.2179	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-15R	5/18	72%	0.0005-0.0005	0.001336	0.001	0.005346	0.00351	1.3798E-06	0.0016612	2.03	0.004	mg/L	N	0	0	Yes	No	NA		0.0005	N			N				N	No
WAP-16	0/19	100%	0.0005-0.001	0.000526	0.0005	0.00055		1.316E-08	0.0001147	0.2179	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
CCR Appendix-IV: Cadmium, Total (mg/L)																													
WBW-1	0/21	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA											
WAP-1	0/23	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.0005				0.005		
WAP-4	0/24	100%	0.0005-0.002	0.000583	0.0005	0.000925		1.014E-07	0.0003185	0.546	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-14	0/19	100%	0.0005-0.001	0.000526	0.0005	0.00055		1.316E-08	0.0001147	0.2179	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-15R	0/18	100%	0.0005-0.001	0.001028	0.001	0.0011		2.632E-08	0.0002294	0.4358	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
WAP-16	0/19	100%	0.0005-0.001	0.000526	0.0005	0.00055		1.316E-08	0.0001147	0.2179	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N				N	No
CCR Appendix-IV: Chromium, Total (mg/L)																													
WBW-1	1/21	95%	0.005-0.005	0.005	0.005	0.005	0.005	0	0	0	0.1	mg/L	N	0	0	No	No	NA											
WAP-1	0/23	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.0050				0.100		
WAP-4	2/24	92%	0.005-0.01	0.00526	0.005	0.00925	0.01	0.000002732	0.001653	0.3143	0.1	mg/L	N	0	0	Yes	No	NA		0.0005	N			N				N	No
WAP-14	1/21	95%	0.005-0.005	0.00491	0.005	0.005	0.0031	1.719E-07	0.0004146	0.08445	0.1	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
WAP-15R	1/20	95%	0.005-0.005	0.00982	0.01	0.01	0.0015	1.1666E-06	0.0015276	0.316	0.1	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
WAP-16	1/21	95%	0.005-0.005	0.00485	0.005	0.005	0.0019	4.576E-07	0.0006765	0.1394	0.1	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
CCR Appendix-IV: Cobalt, Total (mg/L)																													
WBW-1	7/22	68%	0.0005-0.0005	0.00119	0.0005	0.003108	0.00838	0.000003105	0.001762	1.476	0.006	mg/L	Y	1	0	Yes	No	NA											
WAP-1	9/22	59%	0.0005-0.0005	0.000718	0.0005	0.001495	0.0016	1.373E-07	0.0003706	0.5162	0.006	mg/L	N	0	0	No	No	Increase	Non-parametric				0.0084				0.008		
WAP-4	1/22	95%	0.0005-0.0005	0.000506	0.0005	0.0005	0.00064	8.909E-10	0.00002985	0.05895	0.006	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
WAP-14	2/22	91%	0.0005-0.0005	0.000529	0.0005	0.00069	0.00093	9.85E-09	0.00009925	0.1877	0.006	mg/L	N	0	0	No	No	NA		0.0005	N			N				N	No
WAP-15R	7/22	68%	0.0005-0.01	0.00203	0.001	0.01282	0.0066	0.000011814	0.00486	3.268	0.006	mg/L	Y	2	2	Yes	No	Stable		0.0005	N			N				N	No
WAP-16	4/22	82%	0.0005-0.0005	0.00049	0.0005	0.00051	0.00056	4.643E-09	0.00006814	0.1392	0.006	mg/L	N	0	0	Yes	No	NA		0.0005	N			N				N	No
CCR Appendix-IV: Fluoride (mg/L)																													
WBW-1	1/23	96%	0.1-0.1	0.1	0.1	0.1	0.1	0	0	0	4	mg/L	N	0	0	No	No	NA											
WAP-1	2/23	91%	0.1-0.1	0.103	0.1	0.127	0.14	0.000104	0.0102	0.09895	4	mg/L	N	0	0	No	No	NA	Non-parametric				0.140				4.00		
WAP-4	11/24	54%	0.1-0.1	0.103	0.1	0.1285	0.13	0.0003262	0.01806	0.1746	4	mg/L	N	0	0	Yes	No	Stable		0.0100	N			N				N	No
WAP-14	22/24	8%	0.1-0.1	0.559	0.565	0.9865	1.02	0.07349	0.2711	0.4848	4	mg/L	N	0	0	No	No	Stable		0.1020	Y			Y				N	No
WAP-15R	19/23	17%	0.1-0.1	0.347	0.32	0.577	0.67	0.016084	0.17936	1.0176	4	mg/L	N	0	0	Yes	No	Decrease		0.0500	Y			Y				N	No
WAP-16	18/23	22%	0.1-0.1	0.156	0.15	0.24	0.25	0.00227	0.04765	0.3053	4	mg/L	N	0	0	No	No	Stable		0.0100	N			N				N	No
CCR Appendix-IV: Lead, Total (mg/L)																													
WBW-1	0/21	100%	0.001-0.01	0.00221	0.001	0.01		0.000007114	0.002667	1.205	0.015	mg/L	N	0	0	NA	NA	NA											
WAP-1	4/23	83%	0.001-0.01	0.00193	0.001	0.004354	0.00456	0.000003899	0.001974	1.024	0.015	mg/L	N	0	0	Yes	No	NA	Non-parametric				0.0100				0.015		
WAP-4	1/24	96%	0.001-0.0025	0.00144	0.001	0.0025	0.0031	5.208E-07	0.0007217	0.5006	0.015	mg/L	N	0	0	No	No	NA		0.0010	N			N				N	No
WAP-14	1/22	95%	0.001-0.01	0.00177	0.001	0.0025	0.00039	0.000003841	0.00196	1.109	0.015	mg/L	N	0	0	Yes	No	NA		0.0010	N			N				N	No
WAP-15R	0/21	100%	0.001-0.01	0.00283	0.002	0.005		0.000007556	0.003888	2.166	0.015	mg/L	N	0	0	NA	NA	NA		0.0010	N			N				N	No
WAP-16	1/22	95%	0.001-0.01	0.0018	0.001	0.0025	0.0012	0.000003764	0.00194	1.075	0.015	mg/L	N	0	0	Yes	No	NA		0.0010	N			N				N	No

TABLE 1
WGS SLURRY POND 3&4
JULY 2024 SEMIANNUAL ASSESSMENT MONITORING DATA

CCR Appendix-IV: Lithium, Total (mg/L)																													
WBW-1	1/22	95%	0.005-0.01	0.00909	0.01	0.01	0.0099	0.000003888	0.001972	0.217	0.04	mg/L	N	0	0	No	No	NA	Non-parametric				0.012						
WAP-1	1/22	95%	0.005-0.01	0.00894	0.01	0.01	0.0116	0.000004889	0.002211	0.2474	0.04	mg/L	N	0	0	Yes	No	NA											
WAP-4	14/23	39%	0.005-0.01	0.0117	0.01	0.01648	0.031	0.00002625	0.005124	0.4371	0.04	mg/L	N	0	0	Yes	No	Decrease		0006	Y			N	0.031	N	0.040	N	No
WAP-14	5/23	78%	0.005-0.05	0.0264	0.01	0.0986	0.27	0.00327	0.05719	2.167	0.04	mg/L	Y	2	1	Yes	No	NA		0006	Y			N	0.270	N	0.270	N	No
WAP-15R	19/22	14%	0.01-0.01	0.0924	0.0836	0.15082	0.2683	0.003538	0.08412	1.8996	0.04	mg/L	Y	24	0	Yes	No	Stable		0077	Y			Y	0.220	N	0.220	N	No
WAP-16	4/23	83%	0.005-0.25	0.0198	0.01	0.01	0.00916	0.002415	0.04914	2.537	0.04	mg/L	N	0	1	NA	NA	NA		0006	Y			N	0.250	N	0.250	N	No
CCR Appendix-IV: Mercury, Total (mg/L)																													
WBW-1	1/20	95%	0.0002-0.0002	0.0002	0.0002	0.0002	0.0002	0	0	0	0.002	mg/L	N	0	0	No	No	NA	Non-parametric				0.0002				0.0020		
WAP-1	0/20	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/19	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
WAP-14	0/19	100%	0.0002-0.001	0.000242	0.0002	0.00028		3.368E-08	0.0001835	0.7581	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
WAP-15R	0/18	100%	0.0002-0.0002	0.0004	0.0004	0.0004		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
WAP-16	0/19	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N				N	No
CCR Appendix-IV: Molybdenum, Total (mg/L)																													
WBW-1	0/22	100%	0.005-0.05	0.0109	0.01	0.01		0.00008009	0.008949	0.8203	0.1	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.050				0.10		
WAP-1	0/22	100%	0.005-0.01	0.00886	0.01	0.01		0.0000046	0.002145	0.242	0.1	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/19	100%	0.005-0.04	0.0103	0.01	0.013		0.00005687	0.007541	0.7348	0.1	mg/L	N	0	0	NA	NA	NA		0005	N			N				N	No
WAP-14	0/19	100%	0.005-0.4	0.0295	0.01	0.049		0.008055	0.08975	3.045	0.1	mg/L	N	0	1	NA	NA	NA		0005	N			N				N	No
WAP-15R	0/19	100%	0.005-0.4	0.0368	0.02	0.135		0.015304	0.17496	5.736	0.1	mg/L	N	0	2	NA	NA	NA		0005	N			N				N	No
WAP-16	0/19	100%	0.005-0.2	0.0189	0.01	0.029		0.001927	0.04389	2.317	0.1	mg/L	N	0	1	NA	NA	NA		0005	N			N				N	No
CCR Appendix-IV: Radium-226 & 228 (pCi/L)																													
WBW-1	15/22	32%	0-4	2.96	4	4.33	4.39	2.15	1.466	0.4955	5	pCi/L	N	0	0	No	No	Stable	Non-parametric				5.97				6.0		
WAP-1	17/22	23%	4-4	3.34	4	5.705	5.97	2.446	1.564	0.4683	5	pCi/L	Y	4	0	No	No	Decrease											
WAP-4	20/23	13%	4-4	3.22	2.57	5.956	7.15	3.264	1.807	0.5612	5	pCi/L	Y	4	0	No	No	Decrease		2565	Y			N				N	No
WAP-14	21/23	9%	4-4	3.56	3.22	5.878	7.4	2.489	1.578	0.443	5	pCi/L	Y	4	0	No	No	Decrease		3470	Y			N				N	No
WAP-15R	22/22	0%	-	9.48	9.38	13.286	11.98	4.744	3.08	0.6928	5	pCi/L	Y	16	0	No	No	Stable		3270	Y			N				N	No
WAP-16	22/23	4%	4-4	4.11	4	6.868	8.4	3.138	1.771	0.4311	5	pCi/L	Y	7	0	No	No	Decrease		3210	Y			N				N	No
CCR Appendix-IV: Selenium, Total (mg/L)																													
WBW-1	0/21	100%	0.0025-0.02	0.0113	0.01	0.02		0.00002226	0.004718	0.4172	0.05	mg/L	N	0	0	NA	NA	NA	NA				0.020				0.050		
WAP-1	0/23	100%	0.0025-0.02	0.0108	0.01	0.02		0.00001672	0.00409	0.38	0.05	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/24	100%	0.0025-0.02	0.0103	0.01	0.02		0.00001865	0.004318	0.4187	0.05	mg/L	N	0	0	NA	NA	NA		0010	N			N				N	No
WAP-14	1/19	95%	0.0025-0.02	0.011	0.01	0.02	0.0021	0.00002908	0.005393	0.4888	0.05	mg/L	N	0	0	No	No	NA		0010	N			N				N	No
WAP-15R	1/18	94%	0.0025-0.02	0.021	0.02	0.04	0.00095	0.00006058	0.011008	1.0034	0.05	mg/L	N	0	0	No	No	NA		0010	N			N				N	No
WAP-16	0/19	100%	0.0025-0.02	0.0112	0.01	0.02		0.00002664	0.005162	0.4615	0.05	mg/L	N	0	0	NA	NA	NA		0010	N			N				N	No
CCR Appendix-IV: Thallium, Total (mg/L)																													
WBW-1	0/20	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA				0.001				0.002		
WAP-1	0/20	100%	0.001-0.001	0.000955	0.001	0.001		4.05E-08	0.0002012	0.2107	0.002	mg/L	N	0	0	NA	NA	NA											
WAP-4	0/19	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0001	N			N				N	No
WAP-14	0/19	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0001	N			N				N	No
WAP-15R	0/18	100%	0.001-0.001	0.002	0.002	0.002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0001	N			N				N	No
WAP-16	0/19	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0001	N			N				N	No

Appendix B:

Certificates of Analysis, External Lab Reports, & Field Parameters

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90595 **Location:** GW Well WAP-1 **Date:** 02/05/2024 **Sample Collector:** WJK/BB

Loc. Code WAP-1 **Time:** 14:35

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	1.2	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Arsenic	5.6	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Barium	81.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Calcium	8.8	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Cobalt	0.84	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Iron	2460	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Magnesium	0.93	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Boron	37.1	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/20/2024	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/14/2024	KCWELLS	EPA 300.0
Chloride	11.6	mg/L	02/14/2024	KCWELLS	EPA 300.0
Sulfate	30.2	mg/L	02/14/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	80.00	mg/L	02/09/2024	KCWELLS	SM 2540C
Radium 226	2.03	pCi/L	03/05/2024	GEL	EPA 903.1 Mod
Radium 228	0.185	pCi/L	02/23/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.215	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	4.41	SU	02/05/2024	WJK/BB	
Copper	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Nickel	<0.5	ug/L	02/13/2024	SKJACOBS	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: Validation date: 4/15/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90599 **Location:** GW Well WAP-4 **Date:** 02/06/2024 **Sample Collector:** WJK/BB

Loc. Code WAP-4 **Time:** 12:45

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	<0.1	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Barium	32.3	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Calcium	53.8	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Copper	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Iron	1050	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Magnesium	3.7	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Total Dissolved Solids	266.2	mg/L	02/09/2024	KCWELLS	SM 2540C
Chloride	7.81	mg/L	02/22/2024	KCWELLS	EPA 300.0
Sulfate	7.06	mg/L	02/22/2024	KCWELLS	EPA 300.0
pH	7.42	SU	02/06/2024	WJK/BB	

Independent Laboratory Results: "GEL" - GEL Laboratories LLC - Lab ID # 10120; "Eurofins" - Eurofins. - Lab ID# 98001; "Pace"-Pace Analytical Laboratory- Lab ID# 99030

Qualifiers: **U**-Value below RL; **H**-Holding Time Exceeded; **J**-Value is Estimated; **M**-Matrix Interference

Analysis Validated: _____ Validation Date: 3/8/24

Linda Williams - Manager, Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90611 **Location:** GW Well WAP-14 **Date:** 02/19/2024 **Sample Collector:** WJK/BM

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

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	42.9	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Barium	48.1	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Calcium	1190	mg/L	03/06/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Boron	8430	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Fluoride	0.91	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	1470	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	867	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	5075	mg/L	02/28/2024	TDHARRIS	SM 2540C
Radium 226	0.552	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	1.85	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.402	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	7.46	SU	02/19/2024	WJK/BM	

Comments:

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

Analysis Validated: _____ Validation date: 4/15/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90612 **Location:** GW Well WAP-14 **Date:** 02/19/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-14 DUP **Time:** 14:20

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	41.6	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Barium	47.1	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Calcium	1190	mg/L	03/06/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Antimony	6.4	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Boron	8200	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Fluoride	0.95	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	1480	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	873	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	4970	mg/L	02/28/2024	SJLEVY	SM 2540C
Radium 226	1.04	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	1.26	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.3	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod

Comments:

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

Analysis Validated: Validation date: 4/15/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90613 **Location:** GW Well WAP-14A **Date:** 02/15/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-14A **Time:** 13:31

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	6.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	81.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Boron	5790	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Calcium	780	mg/L	02/29/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Lithium	51.4	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/26/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Lead	<1.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Radium 226	1.02	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-0.280	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.02	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	1060	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	699	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	3324	mg/L	02/23/2024	KCWELLS	SM 2540C
pH	7.18	SU	02/15/2024	WJK/BM	

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 Final Validation Date: 4/15/24

Linda Williams - Supervisor Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90614 **Location:** GW Well WAP-14B **Date:** 02/20/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-14B **Time:** 13:07

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Barium	146	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Boron	6410	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Calcium	672	mg/L	03/12/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Lithium	19.0	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Lead	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Radium 226	6.88	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-2.70	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	6.88	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	870	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	665	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	3128	mg/L	02/28/2024	SJLEVY	SM 2540C
pH	6.89	SU	02/20/2024	WJK/BM	

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 Final Validation Date: 4/15/24

Linda Williams - Supervisor Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90615 **Location:** GW Well WAP-14C **Date:** 02/20/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-14C **Time:** 11:13

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Barium	87.4	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Boron	453	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Calcium	147	mg/L	03/12/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Cobalt	3.2	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Lithium	21.3	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Lead	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Radium 226	1.91	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-1.32	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.91	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	0.18	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	269	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	109	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	851.2	mg/L	02/28/2024	SJLEVY	SM 2540C
pH	6.49	SU	02/20/2024	WJK/BM	

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 Final Validation Date: 4/15/24

Linda Williams - Supervisor Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF93805 **Location:** GW Well WAP-15 **Date:** 03/05/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-15 **Time:** 12:50

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Barium	223	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Calcium	522	mg/L	03/13/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Boron	4440	ug/L	03/12/2024	SKJACOBS	EPA 6010D
Lithium	48.3	ug/L	03/12/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	03/12/2024	EUROFINS SAV	EPA 7470
Fluoride	0.17	mg/L	03/07/2024	LCWILLIAMS	EPA 300.0
Chloride	915	mg/L	03/07/2024	LCWILLIA	EPA 300.0
Sulfate	470	mg/L	03/07/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	2529	mg/L	03/13/2024	KCWELLS	SM 2540C
Radium 226	1.57	pCi/L	04/02/2024	GEL	EPA 903.1 Mod
Radium 228	3.49	pCi/L	03/28/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	5.06	pCi/L	04/16/2024	SJLEVY	EPA 903.1 Mod
pH	6.65	SU	03/05/2024	WJK/BM	

Comments:

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

Analysis Validated: Validation date: 4/15/24

Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF93806 **Location:** GW Well WAP-15 **Date:** 03/05/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-15 DUP **Time:** 12:55

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Barium	230	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Calcium	524	mg/L	03/13/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Boron	4480	ug/L	03/12/2024	SKJACOBS	EPA 6010D
Lithium	49.5	ug/L	03/12/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	03/12/2024	EUROFINS SAV	EPA 7470
Fluoride	0.17	mg/L	03/07/2024	LCWILLIAMS	EPA 300.0
Chloride	909	mg/L	03/07/2024	LCWILLIA	EPA 300.0
Sulfate	458	mg/L	03/07/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	2551	mg/L	03/13/2024	KCWELLS	SM 2540C
Radium 226	1.79	pCi/L	04/02/2024	GEL	EPA 903.1 Mod
Radium 228	0.983	pCi/L	03/28/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.773	pCi/L	04/16/2024	SJLEVY	EPA 903.1 Mod

Comments:

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

Analysis Validated: _____ Validation date: 4/15/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90617 **Location:** GW Well WAP-16 **Date:** 02/20/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-16 **Time:** 09:51

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Barium	79.6	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Calcium	202	mg/L	03/12/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/12/2024	SKJACOBS	EPA 6020B
Boron	1890	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Lithium	7.12	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/27/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Fluoride	0.21	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	216	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	274	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	1160	mg/L	02/23/2024	KCWELLS	SM 2540C
Radium 226	3.90	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-1.48	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.90	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.80	SU	02/20/2024	WJK/BM	

Comments:

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

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 4/15/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90633 **Location:** GW Well WAP-29 **Date:** 02/15/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-29 **Time:** 14:12

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	26.9	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Calcium	397	mg/L	02/29/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Cobalt	3.9	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Boron	6940	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/26/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	657	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	447	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	2244	mg/L	02/28/2024	SJLEVY	SM 2540C
Radium 226	0.472	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	0.882	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.354	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.11	SU	02/15/2024	WJK/BM	

Comments:

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

Analysis Validated: Validation date: 4/15/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03721 **Location:** GW Well WAP-1 **Date:** 07/01/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-1 **Time:** 10:53

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	9.6	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Barium	68.1	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/22/2024	SKJACOBS	EPA 6020B
Calcium	7.5	mg/L	07/19/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Cobalt	0.75	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Boron	30.4	ug/L	07/19/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/19/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/19/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/19/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	07/08/2024	KCWELLS	EPA 300.0
Chloride	9.26	mg/L	07/08/2024	KCWELLS	EPA 300.0
Sulfate	30.8	mg/L	07/08/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	70.00	mg/L	07/03/2024	KRMATHER	SM 2540C
Radium 226	2.13	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	2.16	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.29	pCi/L	08/14/2024	SJLEVY	EPA 903.1 Mod
pH	4.42	SU	07/01/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03766 **Location:** GW Well WBW-1 **Date:** 07/01/2024 **Sample Collector:** ZM/BM

Loc. Code WBW-1 **Time:** 09:54

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Barium	12.9	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Calcium	1.8	mg/L	07/23/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Cobalt	0.54	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Boron	13.2	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/22/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	07/12/2024	KCWELLS	EPA 300.0
Chloride	4.92	mg/L	07/12/2024	KCWELLS	EPA 300.0
Sulfate	7.22	mg/L	07/12/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	<25	mg/L	07/03/2024	KRMATHER	SM 2540C
Radium 226	0.102	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	2.41	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.512	pCi/L	08/14/2024	SJLEVY	EPA 903.1 Mod
pH	4.04	SU	07/01/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03728 **Location:** GW Well WAP-4 **Date:** 07/10/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-4 **Time:** 09:13

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Barium	33.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Calcium	49.0	mg/L	07/23/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Antimony	5.3	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Boron	141	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Lithium	6.25	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/20/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Chloride	8.03	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Sulfate	17.0	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	212.5	mg/L	07/17/2024	KRMATHER	SM 2540C
Radium 226	0.675	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	1.89	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.565	pCi/L	08/14/2024	SJLEVY	EPA 903.1 Mod
pH	6.43	SU	07/10/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03741 **Location:** GW Well WAP-14 **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-14 **Time:** 10:52

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	16.6	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	49.4	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	1210	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	5.1	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	8660	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	5.63	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	1.02	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	1390	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	921	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	5352	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	1.22	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	2.25	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.47	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	7.34	SU	07/17/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 10/1/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03742 **Location:** GW Well WAP-14 **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-14 DUP **Time:** 10:57

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	18.8	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	49.6	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	1250	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	5.2	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	9160	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	1.03	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	1430	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	938	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	5390	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	1.28	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	2.56	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.84	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03743 **Location:** GW Well WAP-14A **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-14A **Time:** 13:03

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	6.1	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	88.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	839	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	5790	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	50.6	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/08/2024	EUROFINS SAV	EPA 7470
Fluoride	0.12	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	992	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	679	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	4020	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	1.26	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	0.928	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.188	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.92	SU	07/17/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03744 **Location:** GW Well WAP-14B **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-14B **Time:** 10:03

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	172	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	691	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	6.6	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	6390	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	18.7	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	07/20/2024	GEL	EPA 300.0
Chloride	773	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	658	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	3236	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	1.33	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	1.38	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.71	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.59	SU	07/17/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03745 **Location:** GW Well WAP-14C **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-14C **Time:** 12:12

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	89.1	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	192	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	78.3	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	15.8	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	0.11	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	278	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	129	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	1106	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	2.00	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	0.264	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.264	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	7.05	SU	07/17/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03746 **Location:** GW Well WAP-15 **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-15 **Time:** 14:38

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	243	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	614	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	5.4	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	4510	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	76.8	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	0.50	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	864	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	527	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	3234	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	1.47	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	1.80	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.27	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.53	SU	07/17/2024	ZM/BM	

Comments:

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

Analysis Validated: Linda Williams - Manager Analytical Services Validation date: 9/30/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03747 **Location:** GW Well WAP-16 **Date:** 07/15/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-16 **Time:** 14:54

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Barium	83.3	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Calcium	215	mg/L	07/24/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Boron	1760	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Lithium	5.75	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/22/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Chloride	236	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Sulfate	289	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	1192	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	1.59	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	1.62	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.21	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.77	SU	07/15/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03764 **Location:** GW Well WAP-29 **Date:** 07/17/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-29 **Time:** 13:53

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Barium	47.4	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	605	mg/L	07/30/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Cobalt	5.4	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Boron	9250	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	07/20/2024	GEL	EPA 300.0
Chloride	942	mg/L	07/21/2024	GEL	EPA 300.0
Sulfate	588	mg/L	07/21/2024	GEL	EPA 300.0
Total Dissolved Solids	3348	mg/L	07/25/2024	KRMATHER	SM 2540C
Radium 226	0.962	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	1.90	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.862	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	5.94	SU	07/17/2024	ZM/BM	

Comments:

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

Analysis Validated: Validation date: 9/30/24

Linda Williams - Manager Analytical Services

Authorized Signature Only- Not Valid Unless Signed

GEL Laboratories LLC
a member of The GEL Group INC

2040 Savage Road | Charleston, SC 29407
843.556.8171
gel.com

March 06, 2024

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

Re: ABS Lab Analytical
Work Order: 654972

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 09, 2024. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,

Jordan Melton

Jordan Melton for
Julie Robinson
Project Manager

Purchase Order: 125915/JM02.08.G01.3/36500
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: 654972 GEL Work Order: 654972

The Qualifiers in this report are defined as follows:

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

** Analyte is a Tracer compound

** Analyte is a surrogate compound

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

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

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

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

Reviewed by Jordan Melton

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90605	Project:	SOOP00119
Sample ID:	654972001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-FEB-24 10:07		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	0.936	+/-0.907	1.49	3.00	pCi/L			JE1	02/23/24	1110	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.11	+/-0.917	0.840	1.00	pCi/L			LXP1	03/05/24	0913	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.7	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90606	Project:	SOOP00119
Sample ID:	654972002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-FEB-24 10:12		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	0.147	+/-0.989	1.81	3.00	pCi/L			JE1	02/23/24	1110	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.69	+/-0.674	0.577	1.00	pCi/L			LXP1	03/05/24	0913	2571356	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	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
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90604	Project:	SOOP00119
Sample ID:	654972003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	07-FEB-24 11:12		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.17	+/-0.887	1.13	3.00	pCi/L			JE1	02/23/24	1110	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.13	+/-0.867	0.754	1.00	pCi/L			LXP1	03/05/24	0913	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.8	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90596	Project:	SOOP00119
Sample ID:	654972004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-FEB-24 10:25		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.51	+/-0.814	1.16	3.00	pCi/L			JE1	02/23/24	1110	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		4.23	+/-1.22	0.752	1.00	pCi/L			LXP1	03/05/24	0913	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.2	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90597	Project:	SOOP00119
Sample ID:	654972005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-FEB-24 11:19		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.16	+/-1.37	2.00	3.00	pCi/L			JE1	02/23/24	1111	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		4.72	+/-1.18	0.676	1.00	pCi/L			LXP1	03/05/24	0948	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.6	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90599	Project:	SOOP00119
Sample ID:	654972006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-FEB-24 12:45		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	0.0789	+/-1.34	2.47	3.00	pCi/L			JE1	02/23/24	1225	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.470	+/-0.485	0.761	1.00	pCi/L			LXP1	03/05/24	0948	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.6	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90602	Project:	SOOP00119
Sample ID:	654972007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-FEB-24 09:24		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-0.0579	+/-0.881	1.66	3.00	pCi/L			JE1	02/23/24	1111	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.30	+/-0.721	0.811	1.00	pCi/L			LXP1	03/05/24	0948	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.1	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID: AF90634
Sample ID: 654972008
Matrix: GW
Collect Date: 06-FEB-24 14:12
Receive Date: 09-FEB-24
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		2.16	+/-0.884	1.10	3.00	pCi/L			JE1	02/23/24	1111	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.0320	+/-0.140	0.374	1.00	pCi/L			LXP1	03/05/24	0948	2571356	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	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
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: March 6, 2024

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

Client Sample ID:	AF90595	Project:	SOOP00119
Sample ID:	654972009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	05-FEB-24 14:35		
Receive Date:	09-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	0.185	+/-0.587	1.09	3.00	pCi/L			JE1	02/23/24	1111	2568526	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.03	+/-0.764	0.653	1.00	pCi/L			LXP1	03/05/24	0948	2571356	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.3	(15%-125%)

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

Column headers are defined as follows:

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

QC Summary

Report Date: March 6, 2024

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

Contact: **Ms. Jeanette Gilmetti**

Workorder: **654972**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2568526										
QC1205650263 654136001 DUP										
Radium-228	U	0.712		1.52	pCi/L	72.3		(0% - 100%)	JE1	02/23/24 11:11
	Uncertainty	+/-1.28		+/-0.944						
QC1205650264 LCS										
Radium-228	72.0			71.4	pCi/L		99.2	(75%-125%)		02/23/24 11:11
	Uncertainty			+/-3.83						
QC1205650262 MB										
Radium-228			U	0.536	pCi/L					02/23/24 11:11
	Uncertainty			+/-0.599						
Rad Ra-226										
Batch 2571356										
QC1205655691 654972001 DUP										
Radium-226		2.11		1.74	pCi/L	19.2		(0% - 100%)	LXP1	03/05/24 10:05
	Uncertainty	+/-0.917		+/-0.865						
QC1205655693 LCS										
Radium-226	26.4			31.4	pCi/L		119	(75%-125%)		03/05/24 10:05
	Uncertainty			+/-3.08						
QC1205655690 MB										
Radium-226			U	0.318	pCi/L					03/05/24 10:05
	Uncertainty			+/-0.318						
QC1205655692 654972001 MS										
Radium-226	137	2.11		130	pCi/L		93.5	(75%-125%)		03/05/24 10:05
	Uncertainty	+/-0.917		+/-13.6						

Notes:

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

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **654972**

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

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

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

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

Radiochemistry
Technical Case Narrative
Santee Cooper
SDG #: 654972

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2568526

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

GEL Sample ID#	Client Sample Identification
654972001	AF90605
654972002	AF90606
654972003	AF90604
654972004	AF90596
654972005	AF90597
654972006	AF90599
654972007	AF90602
654972008	AF90634
654972009	AF90595
1205650262	Method Blank (MB)
1205650263	654136001(AF87814) Sample Duplicate (DUP)
1205650264	Laboratory Control Sample (LCS)

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

Data Summary:

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

Preparation Information

Homogenous Matrix
Sample 654972003 (AF90604) was non-homogenous matrix. yellow liquid 654972003 (AF90604).

Technical Information

Recounts
Sample 654972006 (AF90599) was recounted due to a suspected false positive. 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: 2571356

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

GEL Sample ID#	Client Sample Identification
654972001	AF90605
654972002	AF90606
654972003	AF90604
654972004	AF90596
654972005	AF90597
654972006	AF90599
654972007	AF90602
654972008	AF90634
654972009	AF90595
1205655690	Method Blank (MB)
1205655691	654972001(AF90605) Sample Duplicate (DUP)
1205655692	654972001(AF90605) Matrix Spike (MS)
1205655693	Laboratory Control Sample (LCS)

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

Data Summary:

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

Preparation Information

Aliquot Reduced
1205655691 (AF90605DUP), 1205655692 (AF90605MS) and 654972001 (AF90605) Aliquots were reduced due to limited sample volume.

Certification Statement

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

654972

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 3 / 8 / 24 Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

Chain of Custody

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

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.08.G01.3 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228		
AF90665	WAP-10	2/7/24	1007	WJK BM	2	P	G	GW	2		1	1		
06	WAP-10 DUP	"	1012	"	"	"	"	"	"		"	"		
04	WAP-9	"	1112	"	"	"	"	"	"		"	"		
AF90596	WAP-2	2/6/24	1025	WJK BB	"	"	"	"	"		"	"		
97	WAP-2R	"	1119	"	"	"	"	"	"		"	"		
99	WAP-4	"	1245	"	"	"	"	"	"		"	"		
AF90602	WAP-7	"	0924	"	"	"	"	"	"		"	"		
34	WBW-1	"	1412	"	"	"	"	"	"		"	"		
AF90595	WAP-1	2/5/24	1435	WJK BB	1	1	1	1	1		1	1		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Sherry	35594	2/9/24	0950		GEL	2/9/24	0950
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	2-9-24	1550		GEL	2/9/24	1550
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

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

☐ METALS (all)

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

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

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

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

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

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

NPDES
☐ Oil & Grease
☐ As
☐ TSS

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

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

JR

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 654972
Received By: CLM	Date Received: 2/9/24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other Cooler 1 - 19° (RCHEM) Cooler 3 - 4° Cooler 2 - 3° Cooler 4 - 0°

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

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: (Wet Ice) Ice Packs Dry ice (None) Other: *all temperatures are recorded in Celsius TEMP: See above with coolers
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR8-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	✓			If Yes, are Encores or Soil Kits present for solids? Yes___ No ✓ NA___ (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No ✓ NA___ (If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA ✓ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?			✓	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe) Times are different on sample ID's: AF91624-629
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?			✓	
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

and also on sample ID: AF91632 compared to the COC.
* 654978 + 654976

PM (or PMA) review: Initials MEA Date 2/12/24 Page 1 of 1

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 06 March 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Pucrto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

GEL Laboratories LLC
a member of The GEL Group INC

2040 Savage Road | Charleston, SC 29407
843.556.8171
gel.com

March 19, 2024

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

Re: ABS Lab Analytical
Work Order: 656481

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 23, 2024. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. The client labels were swapped on the containers. The client was notified and confirmed that the GEL labels were correct*656481011(AF90628), 656481012(AF90629)*.

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

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,

Jordan Melton

Jordan Melton for
Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures

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

Certificate of Analysis Report
for

SOOP001 Santee Cooper

Client SDG: 656481 GEL Work Order: 656481

The Qualifiers in this report are defined as follows:

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

** Analyte is a Tracer compound

** Analyte is a surrogate compound

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

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

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

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

Reviewed by Jordan Melton

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

Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90610	Project:	SOOP00119
Sample ID:	656481001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	21-FEB-24 10:15		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Notes:

Column headers are defined as follows:

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

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

QC Summary

Report Date: March 19, 2024

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

Contact: **Ms. Jeanette Gilmetti**

Workorder: **656481**

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

Notes:

The Qualifiers in this report are defined as follows:

U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
J	Value is estimated
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
J	See case narrative for an explanation

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

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

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

Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90610	Project:	SOOP00119
Sample ID:	656481001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	21-FEB-24 10:15		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.17	+/-1.36	2.10	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.987	+/-0.402	0.302	1.00	pCi/L			MJ2	03/17/24	0838	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			85.6	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90631	Project:	SOOP00119
Sample ID:	656481002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	21-FEB-24 11:03		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		2.04	+/-1.11	1.64	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.88	+/-0.768	0.647	1.00	pCi/L			MJ2	03/17/24	0838	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.2	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90615	Project:	SOOP00119
Sample ID:	656481003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-FEB-24 11:13		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	+/-0.870	1.89	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.91	+/-0.631	0.560	1.00	pCi/L			MJ2	03/17/24	0838	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.1	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90614	Project:	SOOP00119
Sample ID:	656481004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-FEB-24 13:07		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-2.70	+/-0.807	2.12	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		6.88	+/-1.16	0.596	1.00	pCi/L			MJ2	03/17/24	0838	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			77.6	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90617	Project:	SOOP00119
Sample ID:	656481005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-FEB-24 09:51		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	+/-0.873	2.00	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		3.90	+/-0.882	0.387	1.00	pCi/L			MJ2	03/17/24	0838	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			77.3	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90632	Project:	SOOP00119
Sample ID:	656481006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	20-FEB-24 14:21		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-3.62	+/-0.859	2.26	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.697	+/-0.497	0.717	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.2	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90611	Project:	SOOP00119
Sample ID:	656481007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-FEB-24 14:15		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.85	+/-1.06	1.54	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.552	+/-0.322	0.325	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			72.5	(15%-125%)

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

Column headers are defined as follows:

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

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

Client Sample ID:	AF90612	Project:	SOOP00119
Sample ID:	656481008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-FEB-24 14:20		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	1.26	+/-0.899	1.38	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.04	+/-0.525	0.612	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			77.5	(15%-125%)

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

Column headers are defined as follows:

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

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Report Date: March 19, 2024

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

Client Sample ID:	AF90625	Project:	SOOP00119
Sample ID:	656481009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-FEB-24 10:38		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.53	+/-0.843	1.16	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.74	+/-0.545	0.325	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.2	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90613	Project:	SOOP00119
Sample ID:	656481010	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-FEB-24 13:31		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-0.280	+/-0.836	1.66	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.02	+/-0.414	0.311	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.5	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90628	Project:	SOOP00119
Sample ID:	656481011	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-FEB-24 09:44		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-5.48	+/-0.846	2.60	3.00	pCi/L			JE1	03/13/24	1045	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.853	+/-0.429	0.500	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			77.3	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90629	Project:	SOOP00119
Sample ID:	656481012	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-FEB-24 09:49		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	0.0686	+/-0.839	1.57	3.00	pCi/L			JE1	03/13/24	1046	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.741	+/-0.503	0.711	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			83	(15%-125%)

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

Column headers are defined as follows:

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

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Report Date: March 19, 2024

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

Client Sample ID:	AF90627	Project:	SOOP00119
Sample ID:	656481013	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-FEB-24 11:05		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	-0.281	+/-0.669	1.40	3.00	pCi/L			JE1	03/13/24	1046	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.72	+/-0.651	0.712	1.00	pCi/L			MJ2	03/17/24	0910	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			76.8	(15%-125%)

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

Column headers are defined as follows:

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

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Report Date: March 19, 2024

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

Client Sample ID:	AF90626	Project:	SOOP00119
Sample ID:	656481014	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	19-FEB-24 12:49		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-0.867	+/-0.665	1.56	3.00	pCi/L			JE1	03/13/24	1046	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.563	+/-0.362	0.392	1.00	pCi/L			MJ2	03/17/24	0943	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.8	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90630	Project:	SOOP00119
Sample ID:	656481015	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-FEB-24 11:25		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	-2.47	+/-0.972	2.22	3.00	pCi/L			JE1	03/13/24	1046	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.74	+/-0.638	0.703	1.00	pCi/L			MJ2	03/17/24	0943	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.4	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90623	Project:	SOOP00119
Sample ID:	656481016	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-FEB-24 12:20		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.67	+/-0.985	1.46	3.00	pCi/L			JE1	03/13/24	1046	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.581	+/-0.355	0.371	1.00	pCi/L			MJ2	03/17/24	0943	2574135	2

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.5	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 19, 2024

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

Client Sample ID:	AF90633	Project:	SOOP00119
Sample ID:	656481017	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	15-FEB-24 14:12		
Receive Date:	23-FEB-24		
Collector:	Client		

Parameter	Qualifier	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	0.882	+/-0.750	1.19	3.00	pCi/L			JE1	03/13/24	1046	2575958	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.472	+/-0.308	0.377	1.00	pCi/L			MJ2	03/17/24	0943	2574135	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 904.0/SW846 9320 Modified	
2	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
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

QC Summary

Report Date: March 19, 2024

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

Contact: **Ms. Jeanette Gilmetti**

Workorder: **656481**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2575958										
QC1205664335 656481001 DUP										
Radium-228		2.17	U	1.13	pCi/L	62.7		(0% - 100%)	JE1	03/13/24 10:46
	Uncertainty	+/-1.36		+/-0.775						
QC1205664336 LCS										
Radium-228	73.4			59.4	pCi/L		80.9	(75%-125%)		03/13/24 10:46
	Uncertainty			+/-3.74						
QC1205664334 MB										
Radium-228			U	0.782	pCi/L					03/13/24 10:46
	Uncertainty			+/-0.753						
Rad Ra-226										
Batch 2574135										
QC1205661277 656481001 DUP										
Radium-226		0.987		1.33	pCi/L	29.9		(0% - 100%)	MJ2	03/17/24 09:43
	Uncertainty	+/-0.402		+/-0.520						
QC1205661279 LCS										
Radium-226	26.9			20.9	pCi/L		77.5	(75%-125%)		03/17/24 09:43
	Uncertainty			+/-1.99						
QC1205661276 MB										
Radium-226			U	0.000	pCi/L					03/17/24 09:43
	Uncertainty			+/-0.264						
QC1205661278 656481001 MS										
Radium-226	131	0.987		104	pCi/L		78.8	(75%-125%)		03/17/24 09:43
	Uncertainty	+/-0.402		+/-9.80						

Notes:

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

The Qualifiers in this report are defined as follows:

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

QC Summary

Workorder: **656481**

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

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

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

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

Radiochemistry

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2575958

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

GEL Sample ID#	Client Sample Identification
656481001	AF90610
656481002	AF90631
656481003	AF90615
656481004	AF90614
656481005	AF90617
656481006	AF90632
656481007	AF90611
656481008	AF90612
656481009	AF90625
656481010	AF90613
656481011	AF90628
656481012	AF90629
656481013	AF90627
656481014	AF90626
656481015	AF90630
656481016	AF90623
656481017	AF90633
1205664334	Method Blank (MB)
1205664335	656481001(AF90610) Sample Duplicate (DUP)
1205664336	Laboratory Control Sample (LCS)

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

Data Summary:

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

Preparation Information

Homogenous Matrix
Samples 1205664335 (AF90610DUP), 656481001 (AF90610) and 656481004 (AF90614) were non-homogenous matrix. slightly yellow 1205664335 (AF90610DUP), 656481001 (AF90610) and 656481004 (AF90614).

Technical Information

Negative > 3 sigma TPU
Sample results were more negative than the three sigma TPU. The background control charts were examined and the

detectors were determined to be fully functional.

Sample	Analyte	Value
656481004 (AF90614)	Radium-228	Negative Result > 3 sigma value
656481005 (AF90617)	Radium-228	Negative Result > 3 sigma value
656481006 (AF90632)	Radium-228	Negative Result > 3 sigma value
656481011 (AF90628)	Radium-228	Negative Result > 3 sigma value
656481015 (AF90630)	Radium-228	Negative Result > 3 sigma value

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2574135

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

GEL Sample ID#	Client Sample Identification
656481001	AF90610
656481002	AF90631
656481003	AF90615
656481004	AF90614
656481005	AF90617
656481006	AF90632
656481007	AF90611
656481008	AF90612
656481009	AF90625
656481010	AF90613
656481011	AF90628
656481012	AF90629
656481013	AF90627
656481014	AF90626
656481015	AF90630
656481016	AF90623
656481017	AF90633
1205661276	Method Blank (MB)
1205661277	656481001(AF90610) Sample Duplicate (DUP)
1205661278	656481001(AF90610) Matrix Spike (MS)
1205661279	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, 1205661278 (AF90610MS), 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.

656481

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 3 / 25 / 24 Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

Chain of Custody

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

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226	RAD 228		
AF90610	WAP-13	2/21/24	1015	WJK BM	2	P	G	GW	2		X	X		
31	WAP-28	"	1103	"	"	"	"	"	"		"	"		
AF90615	WAP-14C	2/20/24	1113	"	"	"	"	"	"		"	"		
14	WAP-14B	"	1307	"	"	"	"	"	"		"	"		
AF90617	WAP-16	"	0951	"	"	"	"	"	"		"	"		
32	WAP-28R	"	1421	"	"	"	"	"	"		"	"		
11	WAP-14	2/19/24	1415	"	"	"	"	"	"		"	"		
12	WAP-14 DUP	"	1420	"	"	"	"	"	"		"	"		
25	WAP-23	2/15/24	1038	"	"	"	"	"	"		"	"		
13	WAP-14A	"	1331	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	2/23/24	0931		GEL	2/23/24	0931
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	GEL	2/23/24	1550		GEL	2/23/24	1550
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

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

☐ **METALS (all)**

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

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

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

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

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

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

NPDES
☐ Oil & Grease
☐ As
☐ TSS

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

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

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 3 / 25 / 24 Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

Chain of Custody

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

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

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		
AF90628	WAP-26	2/19/24	0944	WJK BM	2	P	G	GW	2		X	X		
29	WAP-26 DUP	"	0949	"	"	"	"	"	"		"	"		
27	WAP-25	"	1105	"	"	"	"	"	"		"	"		
26	WAP-24	"	1249	"	"	"	"	"	"		"	"		
AF90630	27	2/15/24	1125	"	"	"	"	"	"		X	X		
23	WAP-28	"	1220	"	"	"	"	"	"		"	"		
1	WAP-29	"	1412	"	"	"	"	"	"		"	"		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	2/23/24	0931		GEL	2/23/24	0931
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
		2-23-24	1550		GEL	2/23/24	1550
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

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

☐ **METALS (all)**

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

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

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

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

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

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

NPDES
☐ Oil & Grease
☐ As
☐ TSS

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

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

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOP	**SDG/AR/COC/Work Order:** 656481
Received By: QG	**Date Received:** 2/23/24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other n/a

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

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

Comments (Use Continuation Form if needed):

for samples AF90629 and AF90628, the client label and GEL label don't match. The WAP-24 is labeled as dup with client label and vice versa.

PM (or PMA) review: Initials JW Date 2/26/24 Page 1 of 1

Max Gloth

From: Jessica Ward
Sent: Monday, February 26, 2024 12:30 PM
To: Sherri Levy
Cc: Team Robinson
Subject: Re: Question about container labels for samples for Ra226/Ra228 delivered Friday 02/23

Sherri,
Thank you for confirming I have labeled as requested.

Thank you,
Jessica Ward
Project Manager Assistant

GEL Laboratories LLC EST. 1981

2040 Savage Road, Charleston, SC 29407
Office Direct: 843.556.8171 ext. 4523 | Office Main: 843.556.8171 | Fax: 843.766.1178

Email: Jessica.Ward@gel.com

From: Sherri Levy <Sherri.Levy@santeecooper.com>
Sent: Monday, February 26, 2024 12:21 PM
To: Jessica Ward <Jessica.Ward@gel.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: Re: Question about container labels for samples for Ra226/Ra228 delivered Friday 02/23

Please follow the GEL labeled sample (handwritten info). The labels are actually swapped. Please let me know if you need further clarification. Sorry about that and thanks for catching it.

Warm Regards,

Sherri J. Levy
Laboratory Specialist III
Environmental Resources
☎843.761.8000 ext. 5709
sjbrown@santeecooper.com

santee cooper

From: Jessica Ward <Jessica.Ward@gel.com>
Sent: Monday, February 26, 2024 12:13 PM

To: Sherri Levy <Sherri.Levy@santeecooper.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: [EXTERNAL SENDER] Re: Question about container labels for samples for Ra226/Ra228 delivered Friday 02/23

Sherri,
I just wanted to follow up on the email sent Saturday in case it was lost in the Monday shuffle. Can you confirm how we should label the containers fro WAP-26/WAP-26 DUP, by following the GEL container label or the affixed client label. Pictures are on the email in this chain.

Thank you,
Jessica Ward
Project Manager Assistant

GEL Laboratories LLC EST. 1981

2040 Savage Road, Charleston, SC 29407
Office Direct: 843.556.8171 ext. 4523 | Office Main: 843.556.8171 | Fax: 843.766.1178
Email: Jessica.Ward@gel.com

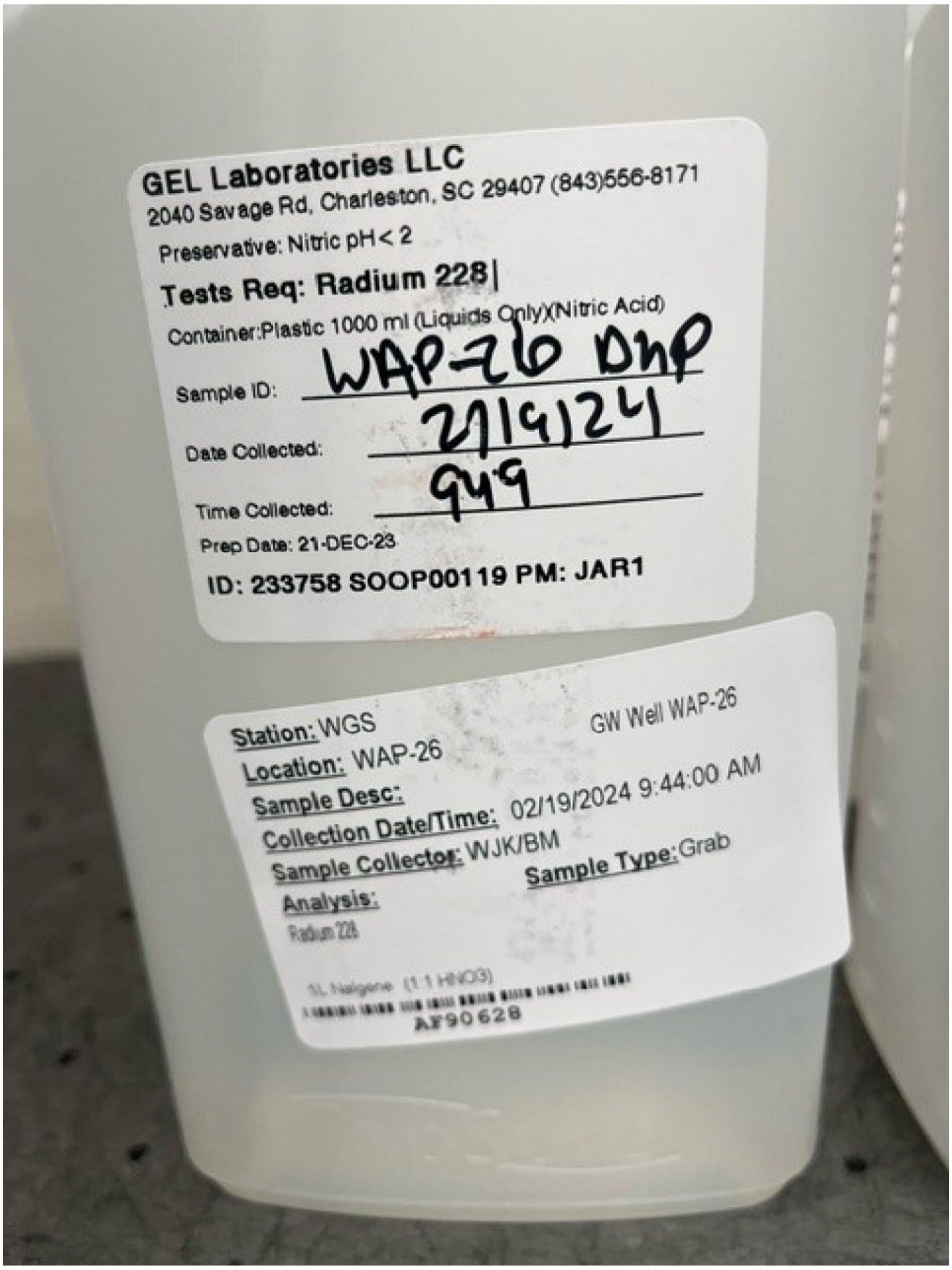
From: Jessica Ward <Jessica.Ward@gel.com>
Sent: Saturday, February 24, 2024 12:23 PM
To: Brown, Sherri <sherri.brown@santeecooper.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: Question about container labels for samples for Ra226/Ra228 delivered Friday 02/23

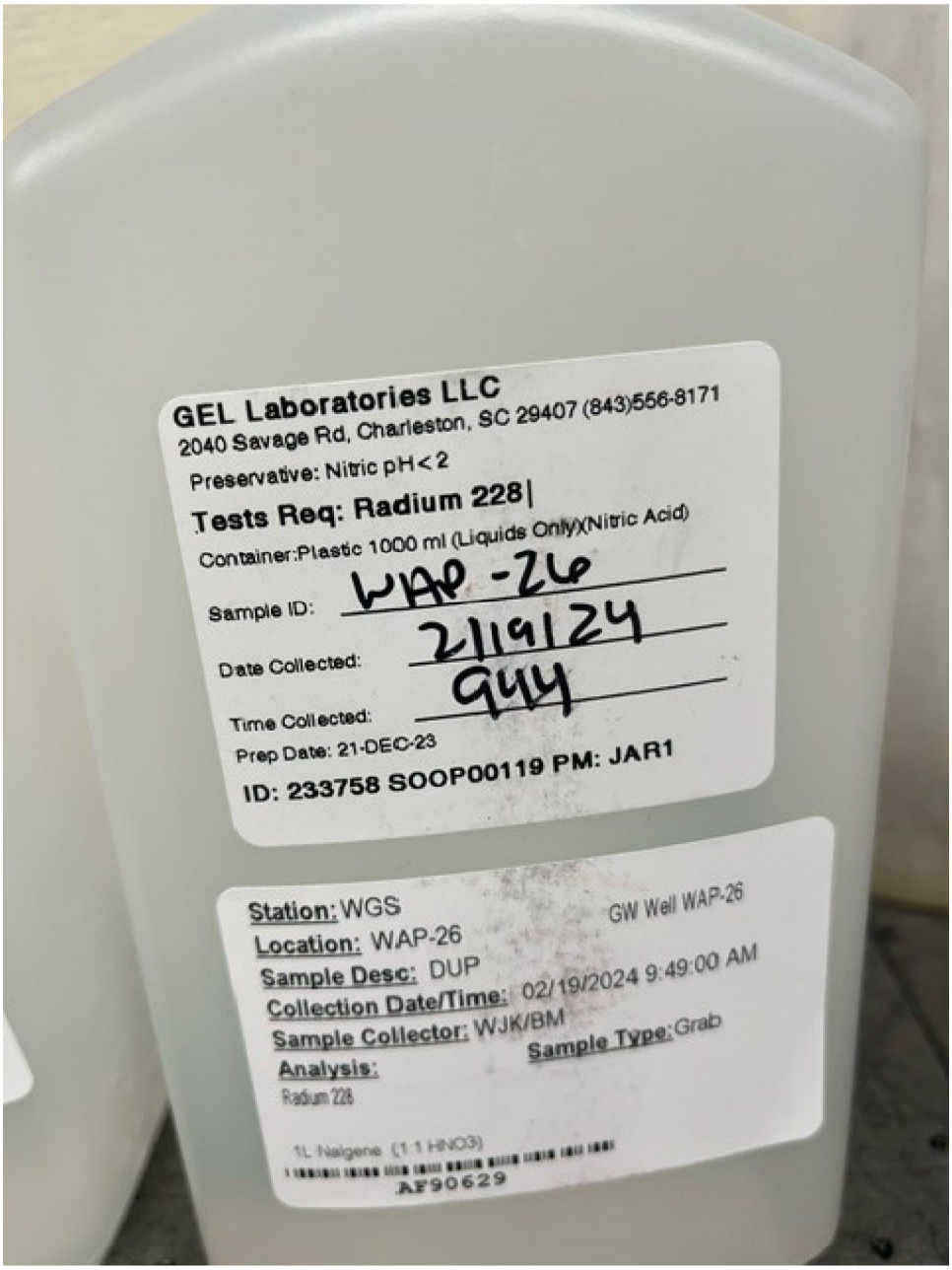
Sherri,
Attached are photos of the containers received for Ra226/228 analysis brought by courier on Friday 02/23. The containers for Sample ID AF90628 WAP-26 & AF90629 WAP-26 DUP have the labels that are switched on the containers (there is a DUP label on the non-DUP) for example. The receiving team wanted to ensure we labeled these correctly, can you please let me know should we label the containers based off of your labels affixed or the handwritten labels that GEL supplied on the containers for identifying the correct container for the sample IDs?

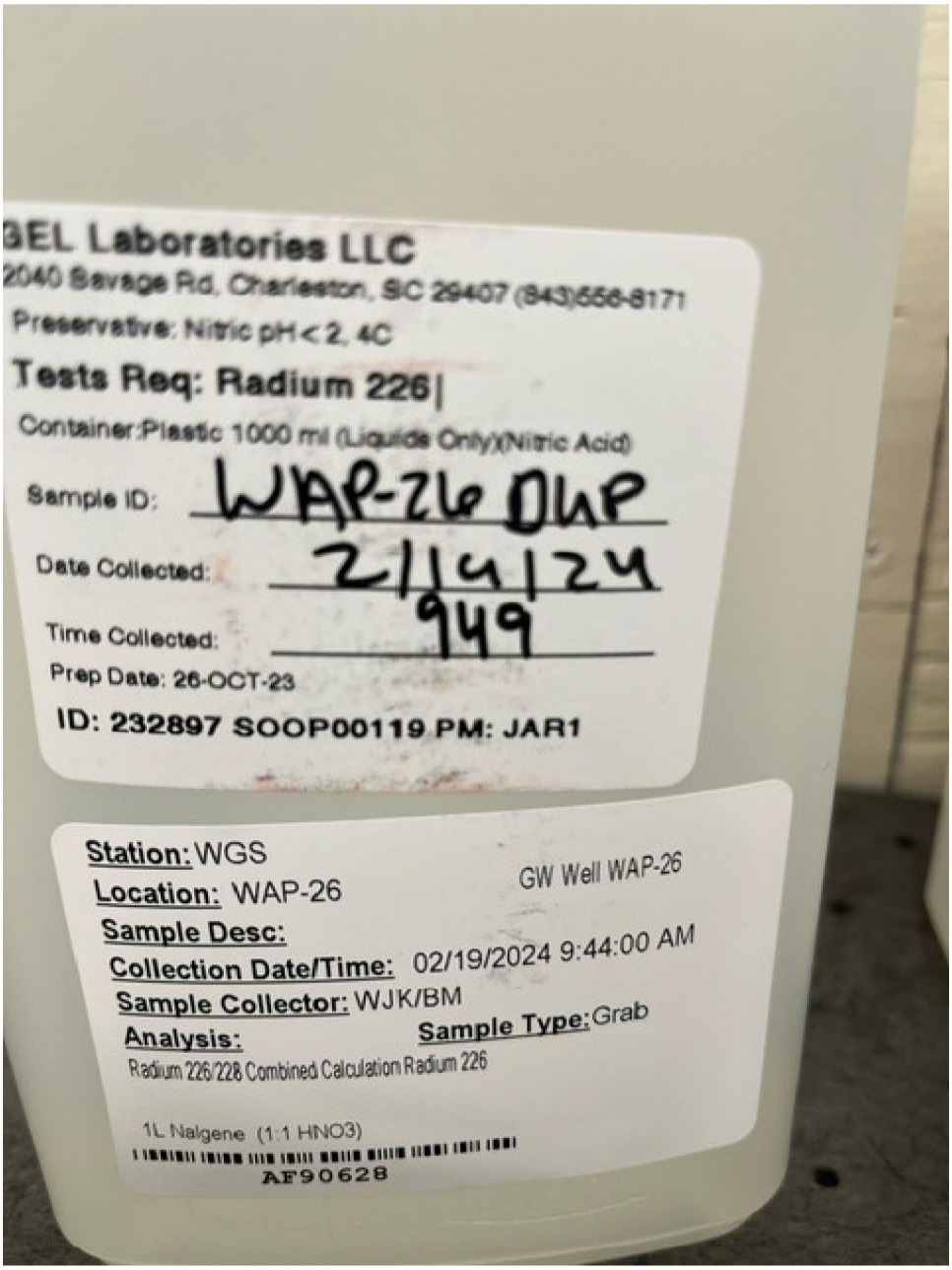
Thank you,
Jessica Ward
Project Manager Assistant

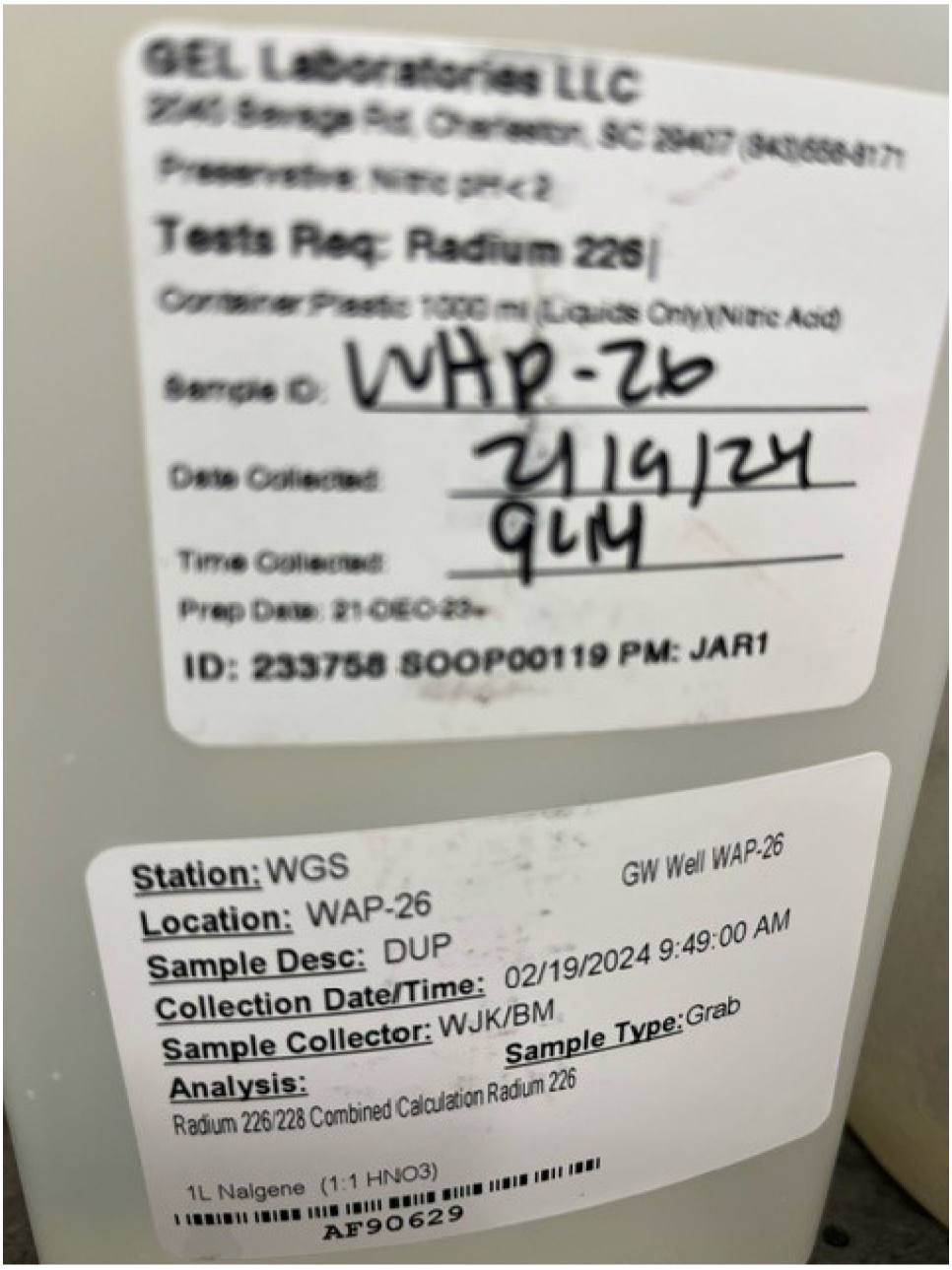
GEL Laboratories LLC EST. 1981

2040 Savage Road, Charleston, SC 29407
Office Direct: 843.556.8171 ext. 4523 | Office Main: 843.556.8171 | Fax: 843.766.1178
Email: Jessica.Ward@gel.com


GEL Laboratories LLC
2040 Savage Rd, Charleston, SC 29407 (843)556-8171
Preservative: Nitric pH< 2
Tests Req: Radium 228|
Container:Plastic 1000 ml (Liquids Only)(Nitric Acid)
Sample ID: WAP-26 DNP
Date Collected: 2/19/24
Time Collected: 949
Prep Date: 21-DEC-23
ID: 233758 SOOP00119 PM: JAR1
Station: WGS
Location: WAP-26
GW Well WAP-26
Sample Desc:
Collection Date/Time: 02/19/2024 9:44:00 AM
Sample Collector: WJK/BM
Analysis:
Sample Type: Grab
Radium 228
1L Nalgene (1:1 HNO3)
AF90628


GEL Laboratories LLC
2040 Savage Rd, Charleston, SC 29407 (843)556-8171
Preservative: Nitric pH < 2
Tests Req: Radium 228|
Container:Plastic 1000 ml (Liquids OnlyX(Nitric Acid)
Sample ID: WAP -26
Date Collected: 2/19/24
Time Collected: 944
Prep Date: 21-DEC-23
ID: 233758 SOOP00119 PM: JAR1
Station: WGS
Location: WAP-26
GW Well WAP-26
Sample Desc: DUP
Collection Date/Time: 02/19/2024 9:49:00 AM
Sample Collector: WJK/BM
Sample Type: Grab
Analysis:
Radium 228
1L Nalgene (1:1 HNO3)
AF90629


GEL Laboratories LLC
2040 Savage Rd, Charleston, SC 29407 (843)556-8171
Preservative: Nitric pH < 2, 4C
Tests Req: Radium 226
Container:Plastic 1000 ml (Liquids Only)(Nitric Acid)
Sample ID: WAP-26 OUP
Date Collected: 2/14/24
Time Collected: 949
Prep Date: 26-OCT-23
ID: 232897 SOOP00119 PM: JAR1
Station: WGS
Location: WAP-26
GW Well WAP-26
Sample Desc:
Collection Date/Time: 02/19/2024 9:44:00 AM
Sample Collector: WJK/BM
Analysis:
Sample Type: Grab
Radium 226/228 Combined Calculation Radium 226
1L Nalgene (1:1 HNO3)
AF90628



List of current GEL Certifications as of 19 March 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122024-05
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Pucrto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-23-21
Utah NELAP	SC000122023-38
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

eurofins | Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/22/2024 1:44:35 PM

JOB DESCRIPTION

125915/JM02.08.G01.3/36500

JOB NUMBER

680-246795-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization

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2/22/2024 1:44:35 PM

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

Table of Contents

Job ID: 680-246795-1 — Eurofins Savannah

Job Narrative
680-246795-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/15/2024 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.8°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-246795-1	AF90598	GW	02/08/24 14:39	02/15/24 10:30
680-246795-2	AF90605	GW	02/07/24 10:07	02/15/24 10:30
680-246795-3	AF90606	GW	02/07/24 10:12	02/15/24 10:30
680-246795-4	AF90604	GW	02/07/24 11:12	02/15/24 10:30
680-246795-5	AF90596	GW	02/06/24 10:25	02/15/24 10:30
680-246795-6	AF90597	GW	02/06/24 11:19	02/15/24 10:30
680-246795-7	AF90599	GW	02/06/24 12:45	02/15/24 10:30

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Method	Method Description	Protocol	Laboratory
7470A	Mercury (CVAA)	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90598 — Lab Sample ID: 680-246795-1

No Detections.

Client Sample ID: AF90605 — Lab Sample ID: 680-246795-2

No Detections.

Client Sample ID: AF90606 — Lab Sample ID: 680-246795-3

No Detections.

Client Sample ID: AF90604 — Lab Sample ID: 680-246795-4

No Detections.

Client Sample ID: AF90596 — Lab Sample ID: 680-246795-5

No Detections.

Client Sample ID: AF90597 — Lab Sample ID: 680-246795-6

No Detections.

Client Sample ID: AF90599 — Lab Sample ID: 680-246795-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90598
Date Collected: 02/08/24 14:39
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-1
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:32	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90605
Date Collected: 02/07/24 10:07
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-2
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:35	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90606
Date Collected: 02/07/24 10:12
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-3
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:37	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90604
Date Collected: 02/07/24 11:12
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-4
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:40	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90596
Date Collected: 02/06/24 10:25
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-5
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:24	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90597
Date Collected: 02/06/24 11:19
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-6
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:51	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90599
Date Collected: 02/06/24 12:45
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-7
Matrix: GW

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 16:53	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-823551/1-A
Matrix: Water
Analysis Batch: 823745

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 823551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/20/24 10:58	02/20/24 15:49	1

Lab Sample ID: LCS 680-823551/2-A
Matrix: Water
Analysis Batch: 823745

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 823551

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.542		ug/L		102	80 - 120		

Lab Sample ID: 400-251111-H-1-C MS
Matrix: Water
Analysis Batch: 823745

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 823551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U	1.00	0.9942		ug/L		99	80 - 120		

Lab Sample ID: 400-251111-H-1-D MSD
Matrix: Water
Analysis Batch: 823745

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 823551

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	0.9929		ug/L		99	80 - 120	0	20

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Metals

Prep Batch: 823551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246795-1	AF90598	Total/NA	GW	7470A	
680-246795-2	AF90605	Total/NA	GW	7470A	
680-246795-3	AF90606	Total/NA	GW	7470A	
680-246795-4	AF90604	Total/NA	GW	7470A	
680-246795-5	AF90596	Total/NA	GW	7470A	
680-246795-6	AF90597	Total/NA	GW	7470A	
680-246795-7	AF90599	Total/NA	GW	7470A	
MB 680-823551/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-823551/2-A	Lab Control Sample	Total/NA	Water	7470A	
400-251111-H-1-C MS	Matrix Spike	Total/NA	Water	7470A	
400-251111-H-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 823745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246795-1	AF90598	Total/NA	GW	7470A	823551
680-246795-2	AF90605	Total/NA	GW	7470A	823551
680-246795-3	AF90606	Total/NA	GW	7470A	823551
680-246795-4	AF90604	Total/NA	GW	7470A	823551
680-246795-5	AF90596	Total/NA	GW	7470A	823551
680-246795-6	AF90597	Total/NA	GW	7470A	823551
680-246795-7	AF90599	Total/NA	GW	7470A	823551
MB 680-823551/1-A	Method Blank	Total/NA	Water	7470A	823551
LCS 680-823551/2-A	Lab Control Sample	Total/NA	Water	7470A	823551
400-251111-H-1-C MS	Matrix Spike	Total/NA	Water	7470A	823551
400-251111-H-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	823551

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90598
Date Collected: 02/08/24 14:39
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-1
Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:32

Client Sample ID: AF90605
Date Collected: 02/07/24 10:07
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-2
Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:35

Client Sample ID: AF90606
Date Collected: 02/07/24 10:12
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-3
Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:37

Client Sample ID: AF90604
Date Collected: 02/07/24 11:12
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-4
Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:40

Client Sample ID: AF90596
Date Collected: 02/06/24 10:25
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-5
Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:24

Client Sample ID: AF90597
Date Collected: 02/06/24 11:19
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-6
Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:51

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.3/36500

Job ID: 680-246795-1

Client Sample ID: AF90599

Date Collected: 02/06/24 12:45
Date Received: 02/15/24 10:30

Lab Sample ID: 680-246795-7

Matrix: GW

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			823551	DW	EET SAV	02/20/24 10:58
Total/NA	Analysis	7470A		1	823745	DW	EET SAV	02/20/24 16:53

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info: TA-SAV Contract Lab Due Date (Lab Only): 2 / 22 / 24 Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

2/22/2024

Chain of Custody

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

Customer Email/Report Recipient:	Date Results Needed by:	Project/Task/Unit #:	Rerun request for any flagged QC
LINDA.WILLIAMS @santeecooper.com	___/___/___	125915 / JM02.08.G01.3 / 36500	(Yes) No

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Analysis Group: Hg			
AF90598	WAP-3	2/8/24	1439	WJK BM	1	P	G	GW	2	7470 RL=0.2 µg/L	X			
AF90605	WAP-10	2/7/24	1007											
06	WAP-10 DUP		1012											
04	WAP-9		1112											
AF90596	WAP-2	2/6/24	1025	WJK BB										
97	WAP-2R		1119											
99	WAP-4		1245											

680-246795 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SLevy	35594	2/14/24	1000				
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
						2/15/24	1030

Sample Receiving (Internal Use Only)
TEMP (°C):_____ Initial:_____
Correct pH: Yes No
Preservative Lot#: 14.8/14.8
Date/Time/Init for preservative:

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

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

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

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

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

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

NPDES
☐ Oil & Grease
☐ As
☐ TSS

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

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

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-246795-1

Login Number: 246795

List Source: Eurofins Savannah

List Number: 1

Creator: Munro, Caroline

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-246795-1
Project/Site: 125915/JM02.08.G01.3/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-24

eurofins | Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/3/2024 10:38:40 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-247155-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization

Generated
3/3/2024 10:38:40 AM

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

Table of Contents

Job ID: 680-247155-1 — Eurofins Savannah

Job Narrative
680-247155-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/26/2024 10:39 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 17.0°C.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

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

Job ID: 680-247155-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-247155-1	AF90610	Water	02/21/24 10:15	02/26/24 10:39
680-247155-2	AF90631	Water	02/21/24 11:03	02/26/24 10:39
680-247155-3	AF90615	Water	02/20/24 11:13	02/26/24 10:39
680-247155-4	AF90614	Water	02/20/24 13:07	02/26/24 10:39
680-247155-5	AF90617	Water	02/20/24 09:51	02/26/24 10:39
680-247155-6	AF90632	Water	02/20/24 14:21	02/26/24 10:39
680-247155-7	AF90611	Water	02/19/24 14:45	02/26/24 10:39
680-247155-8	AF90612	Water	02/19/24 14:20	02/26/24 10:39
680-247155-9	AF90628	Water	02/19/24 09:44	02/26/24 10:39
680-247155-10	AF90629 Dup	Water	02/19/24 09:49	02/26/24 10:39
680-247155-11	AF90627	Water	02/19/24 11:05	02/26/24 10:39
680-247155-12	AF90626	Water	02/19/24 12:49	02/26/24 10:39

Method Summary

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

Job ID: 680-247155-1

Method	Method Description	Protocol	Laboratory
7470A	Mercury (CVAA)	SW846	EET SAV
7470A	Preparation, Mercury	SW846	EET SAV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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

Job ID: 680-247155-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Detection Summary

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

Job ID: 680-247155-1

Client Sample ID: AF90610 — **Lab Sample ID: 680-247155-1**

No Detections.

Client Sample ID: AF90631 — **Lab Sample ID: 680-247155-2**

No Detections.

Client Sample ID: AF90615 — **Lab Sample ID: 680-247155-3**

No Detections.

Client Sample ID: AF90614 — **Lab Sample ID: 680-247155-4**

No Detections.

Client Sample ID: AF90617 — **Lab Sample ID: 680-247155-5**

No Detections.

Client Sample ID: AF90632 — **Lab Sample ID: 680-247155-6**

No Detections.

Client Sample ID: AF90611 — **Lab Sample ID: 680-247155-7**

No Detections.

Client Sample ID: AF90612 — **Lab Sample ID: 680-247155-8**

No Detections.

Client Sample ID: AF90628 — **Lab Sample ID: 680-247155-9**

No Detections.

Client Sample ID: AF90629 Dup — **Lab Sample ID: 680-247155-10**

No Detections.

Client Sample ID: AF90627 — **Lab Sample ID: 680-247155-11**

No Detections.

Client Sample ID: AF90626 — **Lab Sample ID: 680-247155-12**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 680-247155-1

Client Sample ID: AF90610
Date Collected: 02/21/24 10:15
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-1
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:30	1

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

Job ID: 680-247155-1

Client Sample ID: AF90631
Date Collected: 02/21/24 11:03
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-2
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:20	1

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

Job ID: 680-247155-1

Client Sample ID: AF90615
Date Collected: 02/20/24 11:13
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-3
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:37	1

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

Job ID: 680-247155-1

Client Sample ID: AF90614
Date Collected: 02/20/24 13:07
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-4
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:22	1

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

Job ID: 680-247155-1

Client Sample ID: AF90617
Date Collected: 02/20/24 09:51
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-5
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:10	1

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

Job ID: 680-247155-1

Client Sample ID: AF90632
Date Collected: 02/20/24 14:21
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-6
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:14	1

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

Job ID: 680-247155-1

Client Sample ID: AF90611
Date Collected: 02/19/24 14:45
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-7
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:12	1

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

Job ID: 680-247155-1

Client Sample ID: AF90612
Date Collected: 02/19/24 14:20
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-8
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:35	1

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

Job ID: 680-247155-1

Client Sample ID: AF90628
Date Collected: 02/19/24 09:44
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-9
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:18	1

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

Job ID: 680-247155-1

Client Sample ID: AF90629 Dup
Date Collected: 02/19/24 09:49
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-10
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:32	1

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

Job ID: 680-247155-1

Client Sample ID: AF90627
Date Collected: 02/19/24 11:05
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-11
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:24	1

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

Job ID: 680-247155-1

Client Sample ID: AF90626
Date Collected: 02/19/24 12:49
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-12
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 19:16	1

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

Job ID: 680-247155-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-825019/1-A
Matrix: Water
Analysis Batch: 825097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 825019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/28/24 14:33	02/28/24 18:41	1

Lab Sample ID: LCS 680-825019/2-A
Matrix: Water
Analysis Batch: 825097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 825019

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			2.50	2.199		ug/L		88	80 - 120		

Lab Sample ID: 680-247070-C-7-F MS
Matrix: Water
Analysis Batch: 825097

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 825019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.200	U F1	1.00	1.944	F1	ug/L		194	80 - 120		

Lab Sample ID: 680-247070-C-7-G MSD
Matrix: Water
Analysis Batch: 825097

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 825019

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U F1	1.00	1.991	F1	ug/L		199	80 - 120	2	20

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

Job ID: 680-247155-1

Metals

Prep Batch: 825019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-247155-1	AF90610	Total/NA	Water	7470A	
680-247155-2	AF90631	Total/NA	Water	7470A	
680-247155-3	AF90615	Total/NA	Water	7470A	
680-247155-4	AF90614	Total/NA	Water	7470A	
680-247155-5	AF90617	Total/NA	Water	7470A	
680-247155-6	AF90632	Total/NA	Water	7470A	
680-247155-7	AF90611	Total/NA	Water	7470A	
680-247155-8	AF90612	Total/NA	Water	7470A	
680-247155-9	AF90628	Total/NA	Water	7470A	
680-247155-10	AF90629 Dup	Total/NA	Water	7470A	
680-247155-11	AF90627	Total/NA	Water	7470A	
680-247155-12	AF90626	Total/NA	Water	7470A	
MB 680-825019/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-825019/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-247070-C-7-F MS	Matrix Spike	Total/NA	Water	7470A	
680-247070-C-7-G MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 825097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-247155-1	AF90610	Total/NA	Water	7470A	825019
680-247155-2	AF90631	Total/NA	Water	7470A	825019
680-247155-3	AF90615	Total/NA	Water	7470A	825019
680-247155-4	AF90614	Total/NA	Water	7470A	825019
680-247155-5	AF90617	Total/NA	Water	7470A	825019
680-247155-6	AF90632	Total/NA	Water	7470A	825019
680-247155-7	AF90611	Total/NA	Water	7470A	825019
680-247155-8	AF90612	Total/NA	Water	7470A	825019
680-247155-9	AF90628	Total/NA	Water	7470A	825019
680-247155-10	AF90629 Dup	Total/NA	Water	7470A	825019
680-247155-11	AF90627	Total/NA	Water	7470A	825019
680-247155-12	AF90626	Total/NA	Water	7470A	825019
MB 680-825019/1-A	Method Blank	Total/NA	Water	7470A	825019
LCS 680-825019/2-A	Lab Control Sample	Total/NA	Water	7470A	825019
680-247070-C-7-F MS	Matrix Spike	Total/NA	Water	7470A	825019
680-247070-C-7-G MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	825019

Lab Chronicle

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

Job ID: 680-247155-1

Client Sample ID: AF90610
Date Collected: 02/21/24 10:15
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:30

Client Sample ID: AF90631
Date Collected: 02/21/24 11:03
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:20

Client Sample ID: AF90615
Date Collected: 02/20/24 11:13
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:37

Client Sample ID: AF90614
Date Collected: 02/20/24 13:07
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:22

Client Sample ID: AF90617
Date Collected: 02/20/24 09:51
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:10

Client Sample ID: AF90632
Date Collected: 02/20/24 14:21
Date Received: 02/26/24 10:39

Lab Sample ID: 680-247155-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:14

Lab Chronicle

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

Job ID: 680-247155-1

Client Sample ID: AF90611
Lab Sample ID: 680-247155-7
Date Collected: 02/19/24 14:45
Matrix: Water
Date Received: 02/26/24 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:12

Client Sample ID: AF90612
Lab Sample ID: 680-247155-8
Date Collected: 02/19/24 14:20
Matrix: Water
Date Received: 02/26/24 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:35

Client Sample ID: AF90628
Lab Sample ID: 680-247155-9
Date Collected: 02/19/24 09:44
Matrix: Water
Date Received: 02/26/24 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:18

Client Sample ID: AF90629 Dup
Lab Sample ID: 680-247155-10
Date Collected: 02/19/24 09:49
Matrix: Water
Date Received: 02/26/24 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:32

Client Sample ID: AF90627
Lab Sample ID: 680-247155-11
Date Collected: 02/19/24 11:05
Matrix: Water
Date Received: 02/26/24 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:24

Client Sample ID: AF90626
Lab Sample ID: 680-247155-12
Date Collected: 02/19/24 12:49
Matrix: Water
Date Received: 02/26/24 10:39

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			825019	RS	EET SAV	02/28/24 14:33
Total/NA	Analysis	7470A		1	825097	BJB	EET SAV	02/28/24 19:16

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Contract Lab Info: TA-SAV Contract Lab Due Date (Lab Only): 3 / 5 / 24 Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

Chain of Custody

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

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: / /

Project/Task/Unit #: 125915 / JM02.09.G01.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	HG
AF90610	WAP-13	2/21/24	1015	WJK BM	1	P	G	GW	2	T470 RL= 0.2 ug/L	X
1 31	WAP-28	1	1103								
AF90615	WAP-14C	2/20/24	1113								
14	WAP-14B	1	1307								
AF90617	WAP-16	1	0951								
1 32	WAP-28R	1	1421								
AF90611	WAP-14	2/19/24	1415								
1 12	WAP-14 DUP	1	1420	1	1	1	1	1	1		1

680-247155 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SHevy	35694	2/26/24	0806	EHodge	COURIER	2/26/24	0806
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
EHodge	—	2/26/24	1039				
Relinquished by:	**Employee#**	**Date**	**Time**	**Received by:**	**Employee #**	**Date**	**Time**
						2/26/24	1039

Sample Receiving (Internal Use Only)
TEMP (°C): _____ Initial: _____
Correct pH: Yes No
Preservative Lot#: 17-0/17.0
Date/Time/Init for preservative:

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

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

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

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

Coal
- ☐ Ultimate
- ☐ % Moisture
- ☐ Ash
- ☐ Sulfur
- ☐ BTUs
- ☐ Volatile Matter
- ☐ CHN

Other Tests:
- ☐ XRF Scan
- ☐ HGI
- ☐ Fineness
- ☐ Particulate Matter

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

NPDES
- ☐ Oil & Grease
- ☐ As
- ■ TSS

Oil
- ☐ Trans. Oil Qual.
- ☐ %Moisture
- ☐ Color
- ☐ Acidity
- ☐ Dielectric Strength
- ☐ IFT
- ☐ Dissolved Gases

Used Oil
- ☐ Flashpoint
- ☐ Metals in oil (As,Cd,Cr,Ni,Pb Hg)
- ☐ TX
- ☐ GOFER

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

Contract Lab Info: TA - SAV Contract Lab Due Date (Lab Only): 3 / 5 / 24 Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

Chain of Custody

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

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com

Date Results Needed by: ___/___/___

Project/Task/Unit #: 125915 / JM02.09.G81.1 / 36500

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	HG			
AF90628	WAP-26	2/19/24	0944	WJK BM	1	P	G	GW	2	7470 RL= 0.2 ug/L	X			
29	WAP-26 DUP	"	0949	"	"	"	"	"	"		"			
27	WAP-25	"	1105	"	"	"	"	"	"		"			
26	WAP-24	"	1249	"	"	"	"	"	"		"			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SHevy	35594	2/26/24	0806	EHodge	COURIER	2/26/24	0866
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
EHodge	—	2/26/24	1039				
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
						2/26/24	1039

Sample Receiving (Internal Use Only)
TEMP (°C): _____ Initial: _____
Correct pH: Yes No
Preservative Lot#: 17.0/17.0
Date/Time/Init for preservative:

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

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

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

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

Coal
- ☐ Ultimate
  - ☐ % Moisture
  - ☐ Ash
  - ☐ Sulfur
  - ☐ BTUs
  - ☐ Volatile Matter
  - ☐ CHN

Other Tests:
- ☐ XRF Scan
- ☐ HGI
- ☐ Fineness
- ☐ Particulate Matter

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

NPDES
- ☐ Oil & Grease
- ☐ As
- ☐ TSS

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

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

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-247155-1

Login Number: 247155

List Source: Eurofins Savannah

List Number: 1

Creator: Johnson, Corey M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Job ID: 680-247155-1
Project/Site: 125915/JM02.09.G01.1/36500

Laboratory: Eurofins Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-24

Appendix C – Well Construction Record

DHEC
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: (last) (first)
Address:
City: State: Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Georgetown
Name: Winyah Generating Station
Street Address: 661 Steam Plant Dr.
City: Georgetown Zip: 29440
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** WAP-15R

4. ABANDONMENT: ☐ Yes ☒ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
ORANGE SAND	2.0	2.0
TAN CLAY	1.0	3.0
GREY CLAYEY SAND	2.0	5.0
GRAY/WHITE SAND	5.0	10.0
WHITE SAND	10.0	20.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: BENTONITE SEAL 6 TO 8'

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☒ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 2-13-24 Date Completed: 2-13-24

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 10 ft. depth
_____ in. to _____ ft. depth
Height: Above/(Below)
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 10'
Set Between: 10 ft. and 20 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 8 ft. to 20 ft.
Effective size # 2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 6 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☒ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Brian Ewing **CERT. NO.:** 1947
Address: (Print)
SAEDACCO
9088 Northfield Drive
Fort Mill, SC 29707
Level: A B C (D) (circle one)
Telephone No.: (803)548-2180 Fax No.: (803)548-2181

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Brian Ewing (Well Driller) Date: 2/15/2024

If D Level Driller, provide supervising driller's name:
RICH LEMIRE

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: (last) (first)
Address:
City: State: Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Georgetown
Name: Winyah Generating Station
Street Address: 661 Steam Plant Dr.
City: Georgetown Zip: 29440
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** WAP-15

4. ABANDONMENT: ☒ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TREMI GROUTED FROM BOTTOM TO SURFACE

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 2-13-24 Date Completed: 2-13-24

10. CASING: ☐ Threaded ☐ Welded
Diam.:
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
in. to ft. depth
in. to ft. depth
Height: Above/(Below)
Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☒ No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☒ No Type: Amount:

18. PUMP: Date installed: Not installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Brian Ewing **CERT. NO.:** 1947
Address: (Print)
SAEDACCO
9088 Northfield Drive
Fort Mill, SC 29707
Level: A B C (D) (circle one)
Telephone No.: (803)548-2180 Fax No.: (803)548-2181

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Brian Ewing Date: 2/15/2024
Well Driller

If D Level Driller, provide supervising driller's name:
RICH LEMIRE

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER