2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH PONDS A AND B WINYAH GENERATING STATION

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Table of Contents

1. Annual Groundwater Monitoring Report Summary

The South Carolina Public Service Authority (Santee Cooper) has prepared this 2024 multiunit Annual Groundwater Monitoring Corrective Action Report for the Ash Ponds A and B 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).

WGS Ash Ponds A and B are two CCR units within the same hydrogeologic system essentially located on an island surrounded by a permitted industrial cooling pond and an intake and discharge canal system. Accordingly, both CCR units are being addressed together in this multiunit Annual Report. In accordance with § 257.90(e)(6), an overview of the current status of groundwater monitoring and corrective action programs for the CCR units is provided below:

At the start of the current annual reporting period (January 1, 2024), Ash Ponds A and B continued groundwater monitoring with implementation of the corrective action program in accordance with § 257.98. For the February 2024 semi-annual monitoring event, statistically significant levels (SSLs) above the groundwater protection standard (GWPS) for arsenic were identified in monitoring wells WAP-9, WAP-17, WAP-18, WAP-19, and WAP-27; and for lithium in monitoring wells WAP-9, WAP-17, WAP-18, and WAP-19. For the July 2024 semi-annual monitoring event, SSLs above the GWPS for arsenic were identified in monitoring wells WAP-9, WAP-17, WAP-18, WAP-19, and WAP-27; and for lithium in monitoring wells WAP-9, WAP-17, WAP-18, and WAP-19.

On April 19, 2019, an assessment of corrective measures and an evaluation of the nature and extent of contamination was initiated per §257.95(g)(3) and it was completed on September 11, 2019. A public meeting was held on December 10, 2019 to discuss six remedial alternatives per § 257.96. A remedy was selected pursuant to § 257.97 and the remedy selection report was completed on March 31, 2022. Remedial activities were initiated in 2022 and are ongoing. At the end of the current annual reporting period (December 31, 2024), Ash Ponds A and B continue to implement the corrective action 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.

Ash Ponds A and B at WGS were surface impoundments historically used for wastewater treatment which are no longer receiving CCR or non-CCR waste streams and are undergoing closure by removal. They are 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 Ash Ponds A & B 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 and § 257.98, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

As required by § 257.93(h)(2), the initial statistical evaluation of the detected Appendix IV constituents identified SSLs exceeding GWPS, specifically arsenic, lithium, and molybdenum at both Ash Pond A and Ash Pond B. Therefore, an assessment of corrective measures and an evaluation of the nature & extent of contamination was initiated per §257.95(g)(3). Additional groundwater sampling during the nature & extent evaluation showed that the extent of the SSLs was confined to the uppermost aquifer on-site and did not extend north and east of the Industrial Cooling Pond. An Assessment of Corrective Measures report (ACM) was completed on September 11, 2019, and is available on the publicly available CCR website. A public meeting was held on December 10, 2019, to discuss the six alternatives presented in the ACM for a remedy per § 257.96(e).

In March 2022, the remedy was selected; therefore, the groundwater monitoring program transitioned from assessment to corrective action monitoring. Consistent with previous results, arsenic and lithium continue to be the only Appendix IV constituents present in groundwater at SSLs above the GWPS at Ash Ponds A & B. Of note, molybdenum, which was detected above the GWPS during prior sampling events, was not detected at an SSL in 2024 in either Ash Pond A or B. Similarly, lithium, which was detected above the GWPS during prior sampling events, was not detected at an SSL in 2024 in Ash Pond B.

The selected remedial alternative is closure by removal (CBR) of CCR and a layer of subsurface soil followed by monitored natural attenuation (MNA). The removed CCR is either beneficially used or disposed of in on-site landfills. This remedy eliminates the source through removal, thereby meeting the source control requirement stated in the CCR Rule. Over time, removing the source material and a layer of subsurface contaminated soils allows the concentrations of these constituents in downgradient groundwater to attenuate. Through the on-going beneficial use of reclaimed ponded ash, the amount of material that will need to be removed has been greatly reduced prior to selecting the final groundwater remedy. This

beneficial use program's success makes the option of CBR viable. The other component of the selected remedy will be to address the presence of arsenic, lithium, and molybdenum in the groundwater above the GWPSs. To address the limited and local CCR impacts, groundwater is being addressed through MNA, which is a viable remedial technology recognized by state and federal regulators that is applicable to inorganic compounds in groundwater. MNA occurs due to naturally occurring processes within the aquifer following source control or removal. MNA, in combination with source removal, is intended to reduce concentrations of arsenic, lithium, and molybdenum in groundwater at the Ash Pond A & B boundary, thereby attaining the groundwater protection standard.

The development of the corrective action groundwater monitoring program for MNA was completed by reevaluating the current groundwater sampling plan. This evaluation concluded that the assessment monitoring protocol currently being implemented was sufficient to meet the needs of the corrective action groundwater monitoring program at this time while source removal continues, which is consistent with § 257.98(a)(1)(i) and thus will continue to be implemented during the regularly scheduled semi-annual groundwater monitoring events. It is anticipated that the corrective action groundwater monitoring program will be reevaluated once source removal is complete in 2026 to ensure ongoing adequacy or make the necessary revisions.

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 (2) rounds of groundwater samples (February and July) in accordance with § 257.95(b) and § 257.95(d)(1) and recorded the concentrations in the facility's operating record as required by § 257.95(d)(1). Groundwater monitoring results are summarized in Table 1 and laboratory analytical reports are provided in Appendix B.
- Completed statistical evaluation to determine statistically significant exceedances of GWPS for Appendix IV in accordance with § 257.93(h)(2) (Appendix A).
- Continued characterization of nature and extent [§ 257.95(g)(1)].
- 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.
- Added WAP-27 to the compliance groundwater monitoring network as of the first sampling event of 2024.

- Installed monitoring well WAP-30 as part of the ongoing nature and extent characterization to establish vertical delineation and collected one sample during the second semiannual sampling event.

2.2.3 Problems Encountered

Arsenic concentrations above the groundwater protection standard were identified in the vertical extent well WAP-23 during the first semi-annual sampling event. The well was resampled for arsenic in May to verify the results. The arsenic concentrations have remained consistently elevated for all three WAP-23 samples collected in 2024. Of note, the WAP-23 arsenic concentrations were above those found in the nearby WAP-27, which monitors the surficial aquifer.

2.2.4 Actions to Resolve Problems

Due to the abnormality of the WAP-23 results, the well was evaluated to determine potential pathways that would lead to elevated arsenic concentrations. The well construction logs were reviewed and revealed that WAP-23 was installed without a surface casing. Therefore, a likely source is vertical migration from the surficial aquifer due to inability to adequately prevent infiltration from the surficial aquifer. In response, monitoring well WAP-30 was installed on May 22, 2024. Santee Cooper's staff Professional Geologist assisted in the well installation to ensure that a proper surface casing was established during WAP-30's installation. WAP-30 was sampled once in 2024 during the July semi-annual sampling event. Arsenic concentrations were non-detect.

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 Relevant State Director [§ 257.106(d)]; and post to the facility's publicly available website [§ 257.107(d)].
- Conduct semi-annual groundwater monitoring consistent with § 257.98(a)(1) and § 257.95(d)(1).
- Conduct semi-annual statistical analysis of corrective action monitoring analytical data to determine if SSLs of the detected Appendix IV constituents are present above GWPS.
- Continue ongoing characterization of nature and extent including installation of any additional wells if necessary to further define the contaminant plumes. [§ 257.95(g)(1)]. Continue comparison of WAP-23 and WAP-30 results to determine if vertical delineation of arsenic has been re-established.
- Consider abandoning WAP-23 due to inadequate well construction.
- Continue sampling WAP-30 to verify the newly installed well successfully vertically delineates CCR constituents.
- Continue field implementation of the remedy including any associated additional groundwater monitoring activities such as additional geochemical analysis, as appropriate.
- 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.
- Continue improving understanding of the dynamic hydraulic environment surrounding Ash Ponds A & B. Currently evaluating installing standpipes and/or completing a transducer study to improve surface water level and groundwater level data collection.

- Update the Selection of Remedy report to reflect changing hydrologic site conditions and use of adaptive site management.

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 location of the CCR units and associated upgradient and downgradient monitoring wells for Ash Ponds A and B are 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;

Monitoring well WAP-30 was installed on May 22, 2024, to serve as a nature and extent well for vertical delineation of Ash Pond B. The record for this well is included in Appendix C.

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 (2) 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 Ash Ponds A and B 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 results, along with field sampling forms, are also provided in Appendix B.

2.3.4 40 CFR § 257.90(e)(4)

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

The groundwater monitoring program transitioned from an assessment monitoring program to the corrective action monitoring program in 2022. A summary of the evolution of the monitoring programs is provided in this section.

As required by § 257.93(h) a statistical analysis of the Appendix III constituents was completed 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-9, WAP-10, WAP-17, WAP-18, and WAP-19. Constituents with analytical results exceeding the UTLs were identified as statistically significant increases (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 Ash Ponds A and B. An evaluation of alternate sources 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 § 257.95. As required by § 257.93(h)(2), the statistical evaluation of the detected Appendix IV constituents determined a statistically significant exceedance of groundwater protection standards, specifically for arsenic, lithium, and molybdenum at Ash Ponds A & B. Therefore, per §257.95(g)(3), an assessment of corrective measures and an evaluation of the nature and extent of contamination was initiated on April 15, 2019. The ACM report was created considering the presence and distribution of arsenic, lithium, and molybdenum, Ash Ponds A and B's configuration and operational history, hydrogeologic setting, and the results of the evaluation of the nature and extent of contamination available at the time of the ACM.

In March 2022, the remedy was selected; therefore, the groundwater monitoring program transitioned from assessment to corrective action monitoring. The development of the corrective action groundwater monitoring program for MNA (a component of the selected remedy) was completed by reevaluating the current groundwater sampling plan. This evaluation concluded that the assessment monitoring protocol currently being implemented was sufficient to meet the needs of the corrective action groundwater monitoring program at this time, which is consistent with § 257.98(a)(1)(i) and thus will continue to be implemented during the regularly scheduled semi-annual groundwater monitoring events. It is anticipated that the corrective action groundwater monitoring program will be reevaluated around the time that source removal is complete in 2025 to ensure ongoing adequacy.

For the February 2024 semi-annual monitoring event, SSLs above the groundwater protection standard (GWPS) for arsenic were identified in monitoring wells WAP-9, WAP-17, WAP-18, WAP-19, and WAP-27; and for lithium in monitoring wells WAP-9, WAP-17, WAP-18, and WAP-19. For the July 2024 semi-annual monitoring event, SSLs above the GWPS for arsenic were identified in monitoring wells WAP-9, WAP-17, WAP-18, WAP-19, and WAP-27; and for lithium in monitoring wells WAP-9, WAP-17, WAP-18, and WAP-19. These are generally consistent with previous results.

2.3.5 40 CFR § 257.90(e)(5)

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

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

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).

The existing groundwater model was used in 2022 to evaluate how pond closure of WGS Ash Ponds A & B with the construction of the new landfill in the footprint of Ash Pond A may affect groundwater flow direction. The groundwater flow in the vicinity of Ash Ponds A & B and the Class 3 Landfill Area 2 has historically been radial with groundwater discharge into the surrounding surface water of the Industrial

Cooling Pond and the connecting cooling water intake and discharge canals. The model conditions were updated to simulate changes in groundwater flow following closure of Ash Pond A by removal of CCR and affected soils, backfilled with clean soil to provide the required separation between groundwater and the new landfill, and covered by the Class 3 Landfill Area 2 in 65 acres of the 90-acre footprint of Ash Pond A, with a liner meeting construction standards for a new CCR landfill. Modeled recharge was reduced from 6-inches per year to zero in the Class 3 Landfill area because by design rainfall and leachate were prevented from infiltrating into the subsurface due to the liner. Modeled recharge remained 6-inches per year around Ash Pond B and the remaining 25 acres of Ash Pond A because those areas will remain open and will be graded for drainage. The groundwater flow model predicted that as recharge to the surficial aquifer decreases over time as the ash pond is closed and the new Class 3 Landfill is constructed, groundwater flow will shift to the north-northwest. Therefore, piezometers are planned to be installed on the south side of the Class 3 Landfill Area 2 in 2025 adjacent Ash Pond A to monitor for these predicted changes. This will provide the ability to proactively address any potential changes to the groundwater monitoring network for ongoing compliance.

TABLES

Table 1 - Summary of Analytical Results
Winyah Generating Station Ash Ponds A and B Corrective Action 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	pCi/L	pCi/L	pCi/L	ug/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	EPA 6010D	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-*	Background	2/5/24	AF90695		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-*	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	25.0	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	4.64	<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	7.15	24.82	4.64	56.0	18.40	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	4.64	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
Ash Pond A Wells																																		
WAP-6	Corrective Action	2/7/24	AF90604		4470	345	205	<0.10	602	1702	6.17	<5.0	73.9	132	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	123	<0.2	<5.0	2.13	2.17	4.3	<10.0	<1.0	8.88	19.16	6.17	2140	18.09	-39.0	0	0.950
WAP-6	Corrective Action	7/2/24	AG03733		4180	313	176	<0.10	580	1542	5.83	<5.0	60.4	110	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	84.3	<0.2	<5.0	1.40	1.78	3.18	<10.0	<1.0	10.06	17.08	5.83	1883	23.75	-32.0	0	0.890
WAP-6	**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-17	Corrective Action	2/13/24	AF90618		3630	331	169	<0.10	757	1460	6.15	<5.0	84.7	46.3	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	76.9	<0.2	17.1	0.999	1.29	2.189	<10.0	<1.0	6.01	20.87	6.15	2040	19.01	33.0	3.60	0.820
WAP-17	Duplicate	2/13/24	AF90619		3710	328	162	<0.10	725	1538	***	<5.0	84.2	46.1	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	78.2	<0.2	17.6	0.976	0.681	1.659	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-17	Corrective Action	7/16/24	AG03748		4220	315	240	<0.10	813	1566	5.78	<5.0	70.3	48.1	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	76.9	<0.2	9.38	1.34	1.61	2.95	<10.0	<1.0	8.96	19.92	5.78	2140	25.77	-146	2.60	1.06
WAP-17	Duplicate	7/15/24	AG03749		4190	309	240	<0.10	813	1604	***	5.2	69.7	47.4	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	77.9	<0.2	9.36	1.20	0.579	1.779	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-17	**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-18	Corrective Action	2/12/24	AF90620		799	69	29.3	<0.10	132	357.5	5.75	<5.0	137	81.7	<0.5	<0.5	<5.0	0.58	<0.10	<1.0	84.6	<0.2	158	0.591	0.211	0.802	<10.0	<1.0	9.91	21.13	5.75	506	17.29	77.0	6.60	1.52
WAP-18	Corrective Action	7/15/24	AG03750		811	75.5	46.4	<0.10	152	382.5	5.37	<5.0	117	103	<0.5	<0.5	<5.0	0.71	<0.10	<1.0	80.9	<0.2	210	0.949	2.42	3.369	<10.0	<1.0	11.32	19.72	5.37	551	27.04	112	3.40	1.33
WAP-18	**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-19	Corrective Action	2/8/24	AF90621		4320	646	56.7	0.19	1800	2871	5.89	<5.0	124	57.0	<0.5	<0.5	<5.0	12.1	0.19	<1.0	1450	<0.2	30.9	0.922	1.78	2.702	<10.0	<1.0	22.02	21.37	5.89	3060	19.03	83.0	3.20	0.820
WAP-19	Resample	5/2/24	AF90769		***	***	***	***	***	***	6.05	***	***	***	***	***	***	4.3	***	***	988	***	***	***	***	***	***	***	22.88	20.50	6.05	2930	22.13	-46.0	16.2	0.220
WAP-19	Corrective Action	7/22/24	AG03751		4660	711	31.1	0.34	1810	2891	6.34	<5.0	147	77.7	<0.5	<0.5	<5.0	0.86	0.34	<1.0	421	<0.2	13.4	2.06	2.63	4.69	<10.0	<1.0	23.21	20.18	6.34	3170	22.20	-141	7.50	7.50
WAP-19	**total samples**				2	2	2	2	2	2	3	2	2	2	2	2	4	2	2	2	4	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4
WAP-22	CMA/NE	2/12/24	AF90624		1440	187	146	<0.10	193	962.5	6.93	<5.0	<5.0	76.4	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	14.9	<0.2	<5.0	1.38	0.536	1.38	<10.0	<1.0	9.34	20.98	6.93	1310	18.65	-75.0	5.60	0.940
WAP-22	CMA/NE	7/15/24	AG03755		1290	190	141	<0.10	140	930.0	6.83	<5.0	<5.0	73.6	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	13.3	<0.2	<5.0	2.07	0.264	2.334	<10.0	<1.0	10.55	19.77	6.83	1210	27.32	-132	2.00	0.920
WAP-22	**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
Ash Pond B Wells																																		
WAP-10	Corrective Action	2/7/24	AF90605		10000	658	784	<0.10	902	3371	6.57	<5.0	<5.0	286	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	66.8	<0.2	<5.0	2.11	0.936	3.046	<10.0	<1.0	5.52	20.59	6.57	4193	15.92	-52.0	5.10	0.990
WAP-10	Duplicate	2/7/24	AF90606		10200	640	788	<0.10	939	3200	***	<5.0	<5.0	275	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	66.7	<0.2	<5.0	1.89	0.147	1.837	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-10	Resample	5/2/24	AF90768		***	***	***	***	***	***	6.85	***	***	***	***	***	***	***	***	***	61.1	***	***	***	***	***	***	***	6.58	19.73	6.85	4010	22.38	-74.0	3.40	0.260
WAP-10	Corrective Action	7/10/24	AG03735		10300	667	868	<0.10	999	3336	6.47	<5.0	<5.0	290	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	70.6	<0.2	<5.0	4.84	1.58	6.42	<10.0	<1.0	6.89	19.22	6.47	4023	24.55	-94.0	0	0.890
WAP-10	Duplicate	7/10/24	AG03736		10700	655	859	<0.10	997	3350	***	5.7	<5.0	286	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	72.3	<0.2	<5.0	5.16	4.90	10.06	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-10	**total samples**				4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
WAP-21	Corrective Action	2/15/24	AF90623		3160	102	60.8	<0.10	3.15	572.5	6.37	<5.0	5.6	38.6	<0.5	<0.5	<5.0	<0.5	<0.10	1.2	<5.0	<0.2	<5.0	0.581	1.67	2.251	<10.0	<1.0	23.56	19.50	6.37	766	20.91	-51.0	0	0.830
WAP-21	Corrective Action	7/15/24	AG03754		3170	114	66.0	<0.10	<2.00	562.5	6.24	<5.0	<5.0	44.7	<0.5	<0.5	<5.0	0.64	<0.10	2.5	<5.0	***	<5.0	1.37	1.37	2.74	<10.0	<1.0	24.64	18.42	6.24	660	27.49	-45.0	0	0.830
WAP-21	Resample	7/16/24	AG03587		***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	<0.2	***	***	***	***	***	***	***	***	***	***	***	***	***	***
WAP-21	**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-23	CMA/NE	2/15/24	AF90625		6360	411	387	0.34	589	1890	6.67	<5.0	996	201	<0.5	<0.5	<5.0	<0.5	0.34	<1.0	376	<0.2	<5.0	1.74	1.53	3.27	<10.0	<1.0	23.03	20.20	6.67	2600	20.87	-86.0	0	0.880
WAP-23	Resample	5/2/24	AF90760		***	***	***	***	***	***	6.60	***	966	***	***	***	***	***	***	***	341	***	***	***	***	***	***	***	24.45	18.78	6.6	2530	23.21	-82.0	6.50	0.220
WAP-23	CMA/NE	7/16/24	AG03756		5270	402	301	0.48	513	1885	6.52	5.5	775	190	<0.5	<0.5	<5.0	<0.5	0.48	<1.0	342	<0.2	<5.0	2.12	3.43	5.55	<10.0	<1.0	26.06	17.57	6.52	2550	27.18	-136	0	0.840
WAP-23	**total samples**				2	2	2	2	2	2	3	2	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4
WAP-24	CMA/NE	2/19/24	AF90626		134	67.9	60.2	<0.10	11.0	345.0	7.50	<5.0	<5.0	<5.0	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	<5.0	<0.2	<5.0	0.583	-0.887	0.563	<10.0	<1.0	7.56	21.21	7.50	524	18.54	-102	0.100	0.930
WAP-24	CMA/NE	7/10/24	AG03757		107	59.3	59.7	<0.10	5.97	293.5	7.53	<5.0	<5.0	<5.0	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	<5.0	<0.2	<5.0	0.330	1.01	1.34	<10.0	<1.0	9.44	19.33	7.53	476	26.36	-141	0	0.900
WAP-24	**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-25	CMA/NE	2/19/24	AF90627		23.7	66.6	10.9	<0.10	9.01	257.5	7.12	<5.0	<5.0	9.7	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	<5.0	<0.2	<5.0	1.72	-0.281	1.72	<10.0	<1.0	7.66	19.44	7.12	410	16.94	-113	0	1.02
WAP-25	CMA/NE	7/11/24	AG03758		23.8	67.7	11.6	<0.10	<2.0	238.8	7.03	<5.0	<5.0	10.1	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	5.39	<0.2	<5.0	0.474	1.34	1.814	<10.0	<1.0	8.89	18.21	7.03	403	24.72	-156	0	0.880
WAP-25	**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-26	CMA/NE	2/19/24	AF90628		19.0	16.7	11.1	<0.10	37.0	100.0	4.85	<5.0	<5.0	28.9	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	<5.0	<0.2	<5.0	0.853	-5.48	0.853	<10.0	<1.0	6.71	20.85	4.85	146	17.21	35.0	4.10	1.10
WAP-26	Duplicate	2/19/24	AF90629		18.0	15.9	11.0	<0.10	37.5	98.75	***	<5.0	<5.0	27.1	<0.5	<0.5	<5.0	<0.5	<0.10	<1.0	<5.0	<0.2	<5.0	0.741	0.0686	0.8095	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-26	CMA/NE	7/23/24	AG03759		20.1	15.9	9.60	<0.1	38.9	91.25	4.83	<5.0	<5.0	32.1	<0.5	<0.5	<5.0	<0.5	<0.1	<1.0	<5.0	<0.2	<5.0	0.883	0.326	1.01	<10.0	<1.0	8.60	18.96	4.63	134	25.46	-19.0	0	0.940
WAP-26	Duplicate	7/23/24	AG03760		20.6	14.2	10.0	<0.1	37.2	71.25	***	<5.0	<5.0	31.7	<0.5	<0.5	<5.0	<0.5	<0.1	<1.0	<5.0	<0.2	<5.0	1.27	1.20	2.47	<10.0	<1.0	***	***	***	***	***	***	***	***
WAP-26	**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-27	Corrective Action	2/15/24	AF90630		2330	116	148	0.10	85.2	715.0	6.31	<5.0	93.2	99.8	<0.5	<0.5	<5.0	<0.5	0.10	<1.0	8.66	<0.2	<5.0	1.74	-2.47	1.14	<10.0	<1.0	22.56	20.63	6.31	1180	20.45	-83.0	0	0.790
WAP-27	Corrective Action	7/16/24	AG03761		2240	121	134	0.35	82.0	583.8	6.13	5.7	122	89.5	<0.5	<0.5	<5.0	<0.5	0.35	<1.0	16.3	<0.2	<5.0	1.19	1.53	2.72	<10.0	<1.0	24.98	18.20	6.13	1100	26.09	-89.0	0	0.920
WAP-27	**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-30	CMA/NE	7/16/24	AG03765		669	175	180	0.12	106	931.2	6.71	6.8	<5.0	92.6	<0.5	<0.5	<5.0	<0.5	0.12	<1.0	8.42	<0.2	20.1	0.535	-0.284	0.535	<10.0	<1.0	25.79	17.58	6.71	1230	26.20	-120	0	0.850
WAP-30	**total samples**				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1

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 # 96001), Davis & Brown (Certification # 21117), Shealy Environmental Services, Inc (Certification # 32010), Tex America Laboratories Inc. Savannah (Certification # 96001), Rogers & Callcot, Inc. (Certification # 23106001), 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 top 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	-	-	-	-

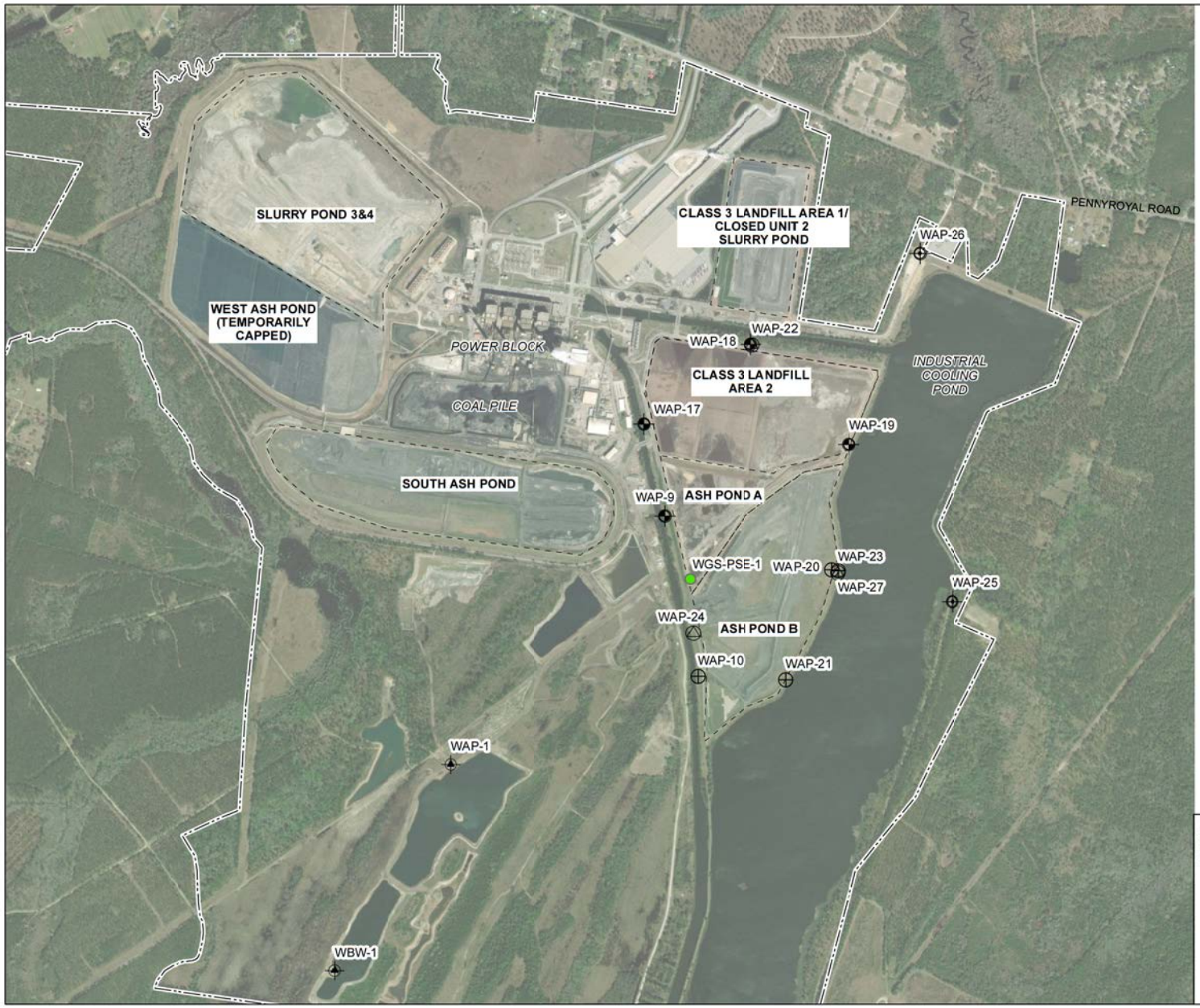
Notes:

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
- ASH POND A MONITORING WELL
- ASH POND B MONITORING WELL
- ASH PONDS A&B NATURE & EXTENT WELL
- PROPERTY BOUNDARY 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

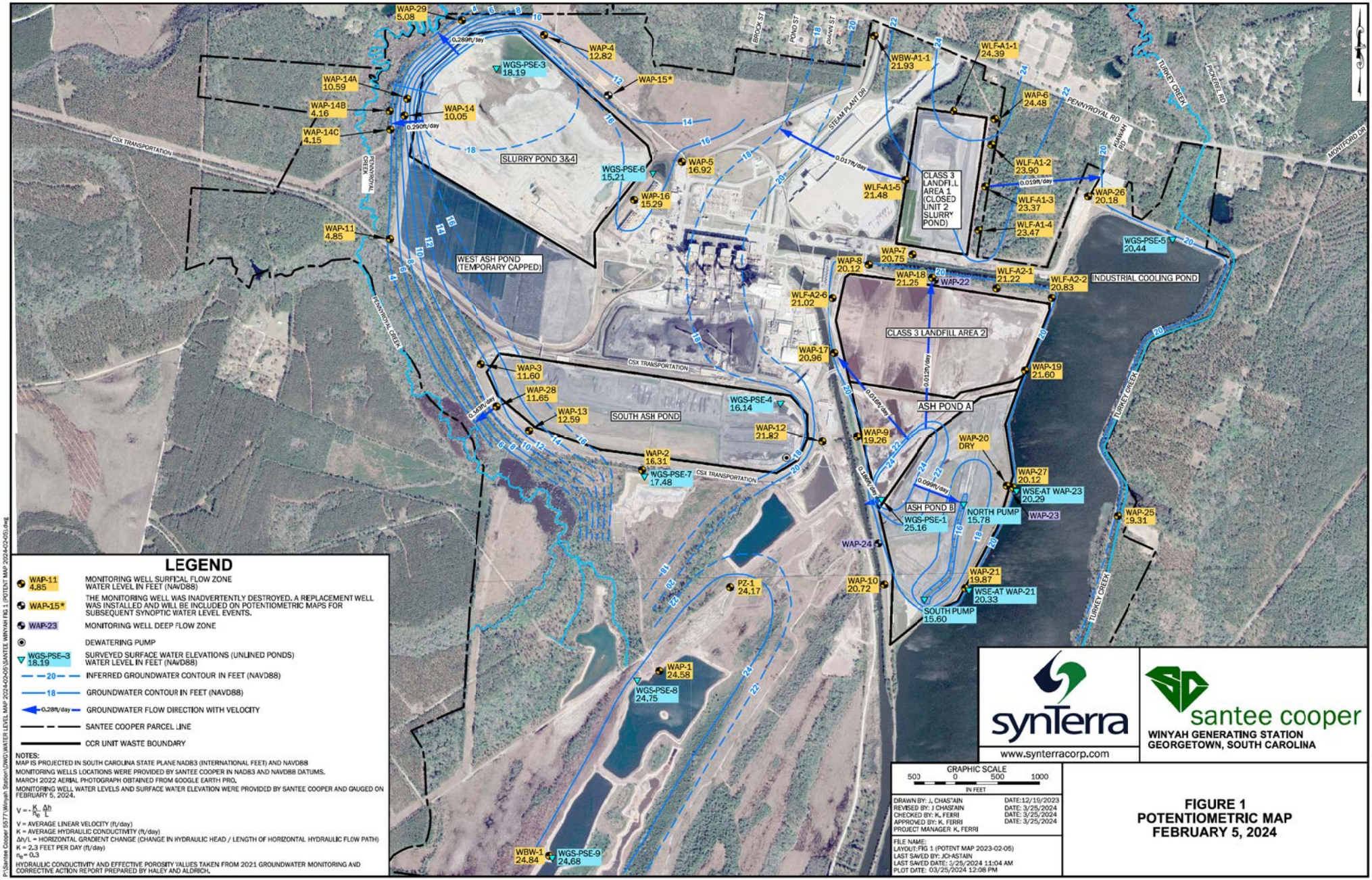
0 1,000 2,000
SCALE IN FEET

SANTEE COOPER
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

LOCATION OF ASH PONDS A & B 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)
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
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

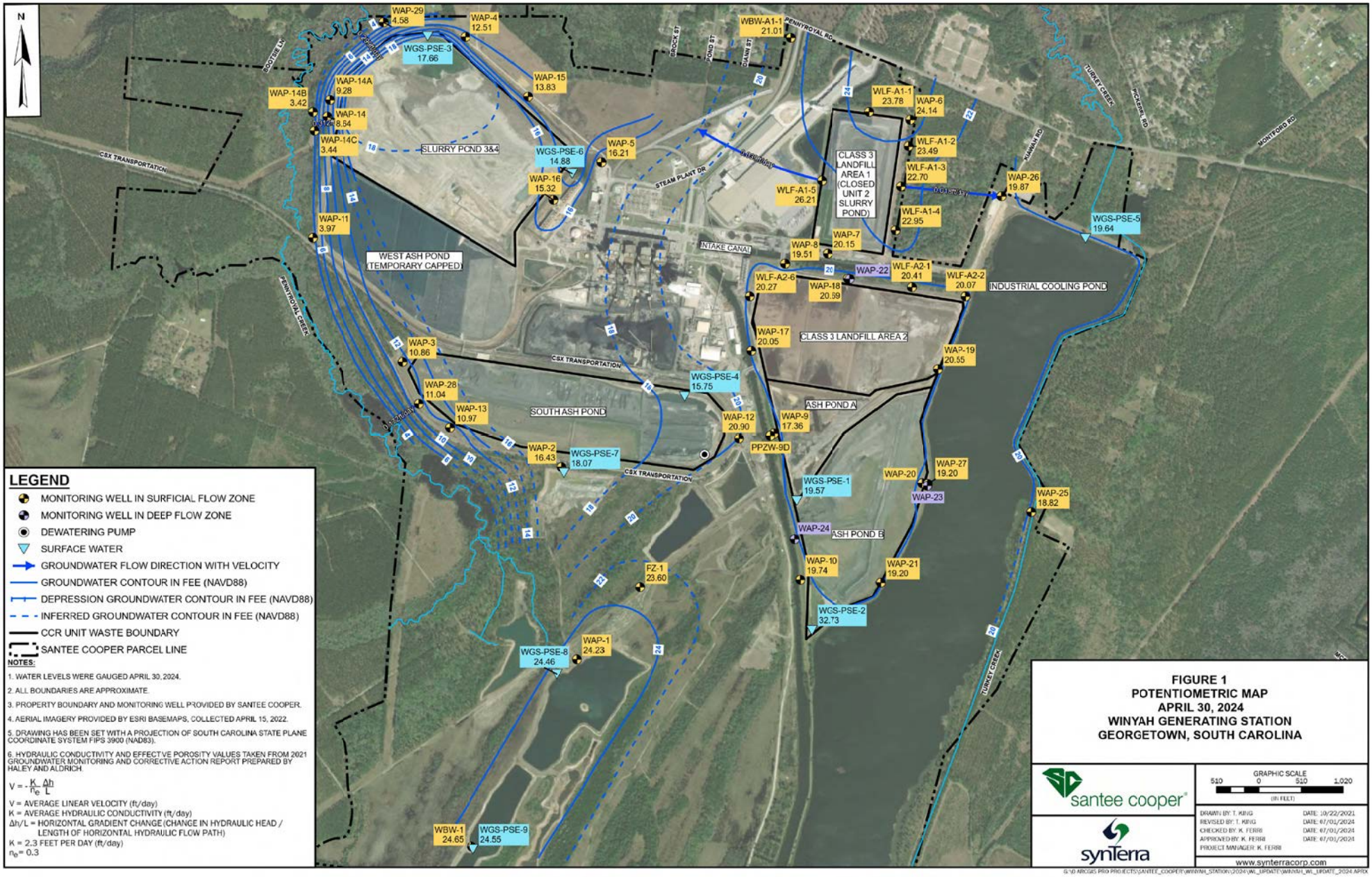

FIGURE 1
POTENTIOMETRIC MAP
APRIL 30, 2024
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

santee cooper

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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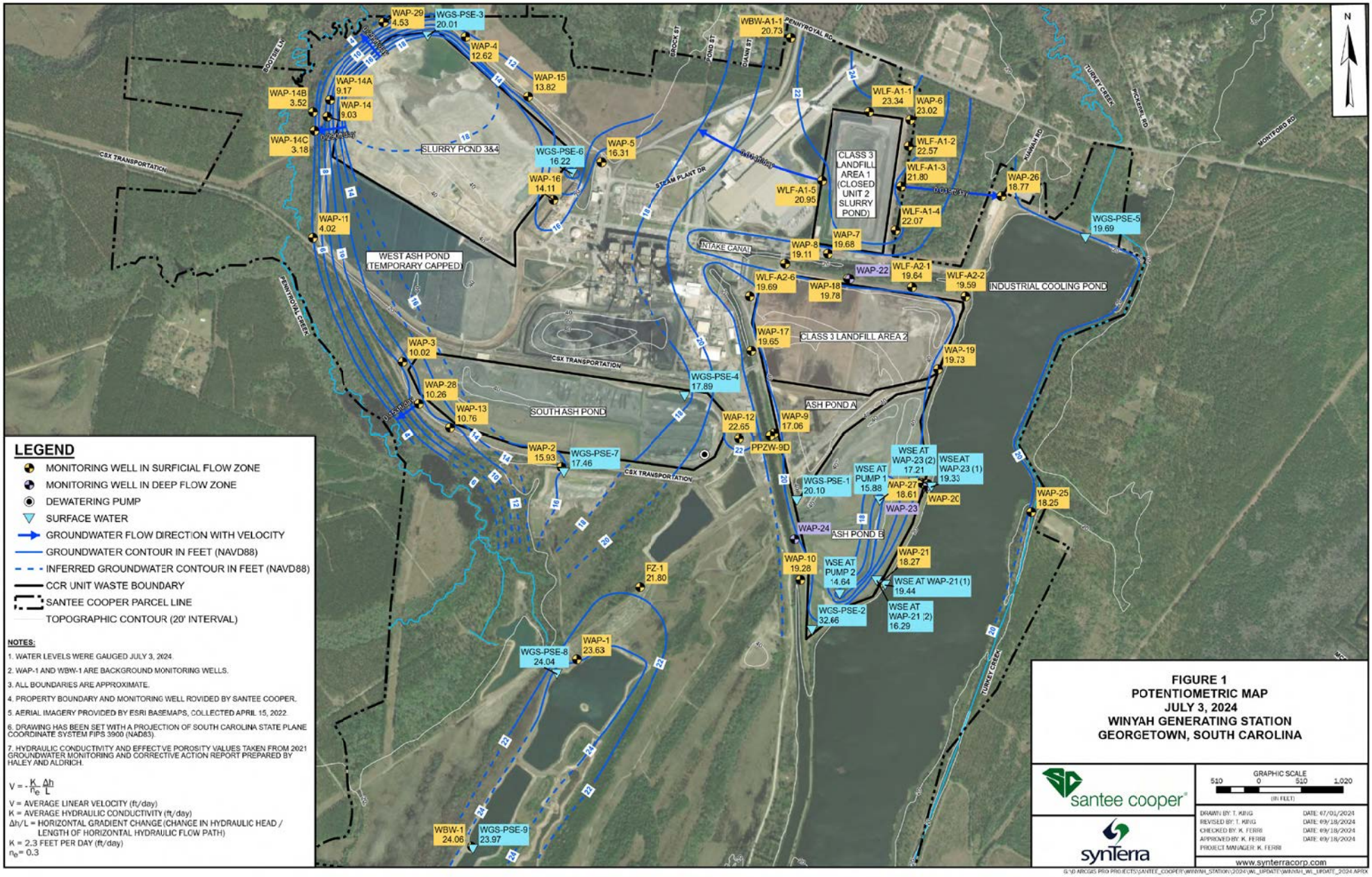

LEGEND

- 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

santee cooper

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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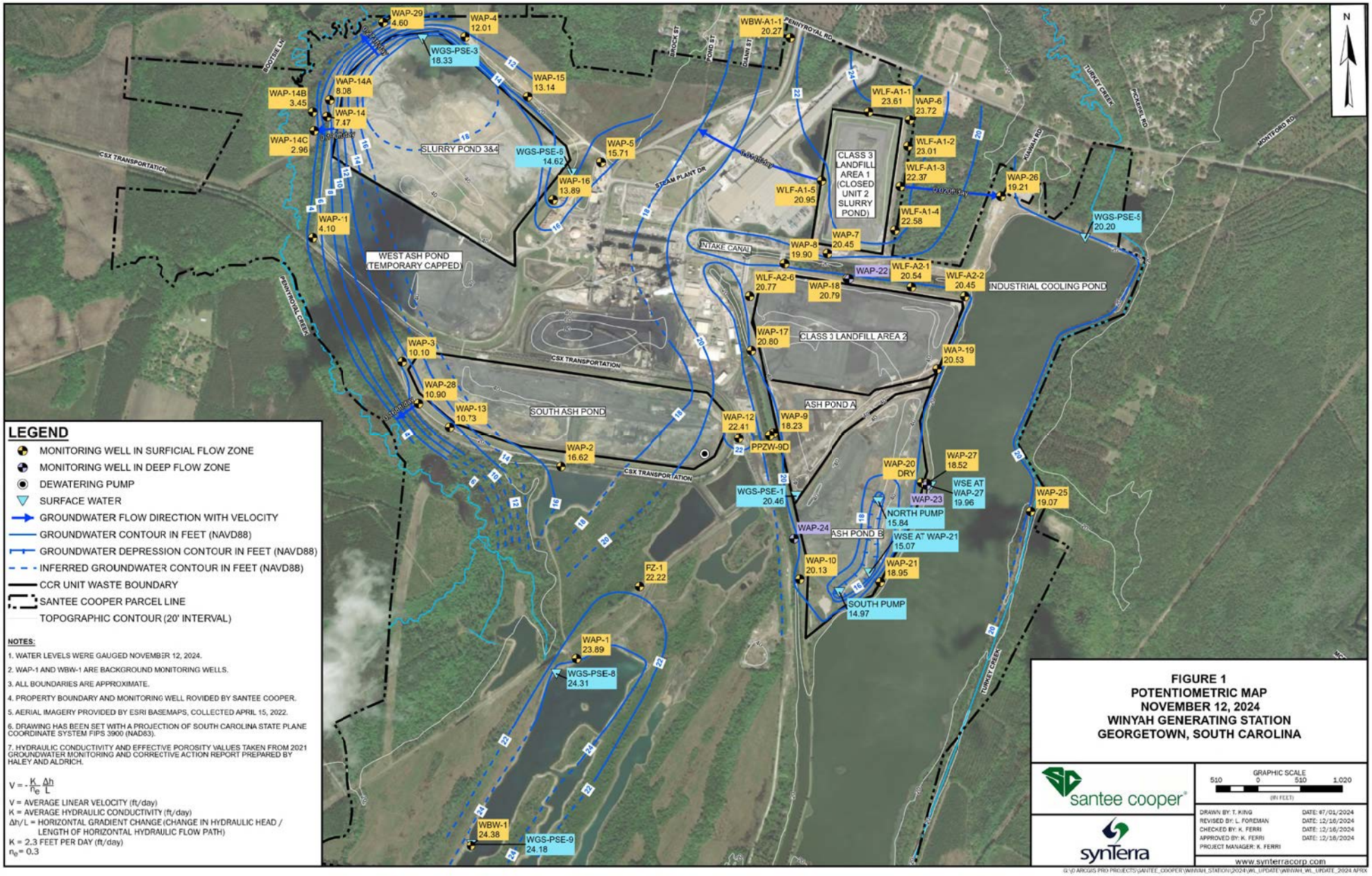

LEGEND

- 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)
$\Delta h/L$ = 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
NOVEMBER 12, 2024
WINYAH GENERATING STATION
GEORGETOWN, SOUTH CAROLINA

santee cooper

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

synTerra

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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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. 132892-100-005-02

SUBJECT: Statistical Evaluation of the February 2024 Semiannual Corrective Action Groundwater Monitoring Data, Winyah Generating Station, Ash Pond A

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the February 2024 semiannual corrective action monitoring event for Winyah Generating Station (WGS) Ash Pond A. Data for this groundwater sampling event were validated on April 16, 2024, by Santee Cooper.

BACKGROUND

All coal combustion residual (CCR) and non-CCR wastewater inflows to the WGS Ash Pond A ceased prior to the regulatory deadline of April 11, 2021. The unit has completed closure-by-removal of the CCR as the first step in groundwater remediation as outlined in the Remedy Selection Report dated March 30, 2022. During previous groundwater sampling events, assessment monitoring identified the presence of arsenic, lithium, and molybdenum in one or more downgradient wells at a statistically significant level (SSL) above the Groundwater Protection Standards (GWPS).

Recent analytical testing results were evaluated to determine if SSLs exist above the GWPS of Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background 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) as certified by Haley & Aldrich, Inc. on October 14, 2017.

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

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, approximately 88 percent of trends analyzed are identified as stable or decreasing for the compliance wells for Appendix IV constituents. 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.

[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.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table 1). Based on previous compliance sampling data and statistical evaluations, interwell comparisons were used. No outliers were removed. Consistent with previous results, arsenic and lithium remain the only Appendix IV constituents present in groundwater at SSLs above GWPS, and groundwater monitoring will continue.

- Arsenic SSLs at WAP-9, WAP-17, WAP-18, and WAP-19
- Lithium SSLs at WAP-9, WAP-17, WAP-18, and WAP-19

Molybdenum, which was previously identified as a SSL, was not identified in the February 2024 event after using a LCL comparison for WAP-18. While landfill construction was completed in December 2022, Ash Pond A closure activities are not yet complete. As closure activities continue in the footprint of Ash Pond A, downgradient groundwater conditions may remain in a state of flux, contributing to potential short-term fluctuations in some of the concentrations of Appendix IV SSLs. The fluctuations are expected to subside once aquifer equilibrium conditions are restored.

Enclosures:

Table 1 – WGS Ash Pond A February 2024 Semiannual Corrective Action Monitoring Data

TABLE

TABLE 1
WGS ASH POND A
FEBRUARY 2024 SEMIANNUAL CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis						
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution	February 2024 Concentration	Detect?	LCL 95%	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above Background at Individual Well	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	NA				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-9	0/17	100%	0.002-0.025	0.006	0.005	0.009		0.0000245	0.00495	0.825	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-17	0/18	100%	0.002-0.025	0.00594	0.005	0.008		0.00002311	0.004808	0.8088	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-18	0/17	100%	0.002-0.025	0.006	0.005	0.009		0.0000245	0.00495	0.825	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-19	0/17	100%	0.002-0.025	0.006	0.005	0.009		0.0000245	0.00495	0.825	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		0.010		
WAP-1	5/23	78%	0.003-0.005	0.00524	0.005	0.00619	0.0085	0.00000159	0.001261	0.2405	0.01	mg/L	N	0	0	Yes	No	NA									
WAP-9	24/24	0%	-	0.192	0.1895	0.4015	0.42	0.01247	0.1117	0.5808	0.01	mg/L	Y	24	0	No	No	Decreasing	Normal	0.074	Y	0.151		Y		Y	Yes
WAP-17	23/23	0%	-	0.124	0.11	0.1076	0.24	0.0001618	0.04022	0.3251	0.01	mg/L	Y	23	0	No	No	Decreasing	Non-parametric	0.085	Y	0.096		Y		Y	Yes
WAP-18	21/21	0%	-	0.452	0.26	1.32	1.53	0.1757	0.4192	0.9263	0.01	mg/L	Y	21	0	No	No	Stable	Non-parametric	0.137	Y	0.236		Y		Y	Yes
WAP-19	21/21	0%	-	0.133	0.117	0.256	0.474	0.009718	0.09858	0.7422	0.01	mg/L	Y	21	0	Yes	No	Increasing	Non-parametric	0.124	Y	0.081		Y		Y	Yes
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									
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	Increasing	Non-parametric				0.094		2.0		
WAP-9	24/24	0%	-	0.0785	0.07165	0.1287	0.15	0.0005372	0.02318	0.2951	2	mg/L	N	0	0	Yes	No	Stable		0.132	Y			Y		N	No
WAP-17	23/23	0%	-	0.0481	0.0462	0.06971	0.1	0.0002657	0.0163	0.3386	2	mg/L	N	0	0	Yes	No	Decreasing		0.046	Y			N		N	No
WAP-18	21/21	0%	-	0.0991	0.0915	0.139	0.141	0.0003905	0.01976	0.2079	2	mg/L	N	0	0	No	No	Stable		0.082	Y			N		N	No
WAP-19	21/21	0%	-	0.0557	0.0512	0.1	0.104	0.0004111	0.02027	0.3641	2	mg/L	N	0	0	No	No	Stable		0.057	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-9	0/17	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-17	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-18	0/17	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-19	0/17	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
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	NA				0.0005		0.01		
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-9	0/23	100%	0.0005-0.004	0.000717	0.0005	0.00185		6.097E-07	0.0007808	1.088	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-17	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-18	1/17	94%	0.0005-0.0005	0.000511	0.0005	0.000536	0.00068	1.906E-09	0.00004366	0.0855	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-19	0/17	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	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				0.005		0.1		
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-9	0/22	100%	0.005-0.01	0.005123	0.005	0.0095		0.000010075	0.0031441	0.2851	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-17	0/18	100%	0.005-0.005	0.005	0.005	0.005		3.189E-21	5.647E-11	1.129E-08	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-18	0/17	100%	0.005-0.005	0.005	0.005	0.005		3.388E-21	5.821E-11	1.164E-08	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-19	0/17	100%	0.005-0.005	0.005	0.005	0.005		3.388E-21	5.821E-11	1.164E-08	0.1	mg/L	N	0	0	NA	NA	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	0.00815	0.00838	0.000032237	0.001799	1.468	0.006	mg/L	Y	1	0	No	No	Increasing	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	Increasing									
WAP-9	1/19	95%	0.0005-0.0005	0.0005008	0.0005	0.000516	0.000666	1.347E-09	0.00003671	0.0732	0.006	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-17	0/20	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.006	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-18	9/19	53%	0.0005-0.0005	0.000942	0.0005	0.002283	0.0033	0.000000647	0.0008044	0.8543	0.006	mg/L	N	0	0	Yes	No	Increasing		0.00058	Y			N		N	No
WAP-19	4/19	79%	0.0005-0.0005	0.00145	0.0005	0.006628	0.0123	0.000008251	0.002873	1.981	0.006	mg/L	Y	2	0	Yes	No	NA	Non-parametric	0.0121	Y	0.0005		Y		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									
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	Non-parametric				0.140		4.0		
WAP-9	2/22	91%	0.1-0.1	0.1	0.1	0.1	0.11	0.000004545	0.002132	0.02122	4	mg/L	N	0	0	No	No	NA									
WAP-17	12/23	48%	0.1-0.1	0.143	0.1	0.248	0.32	0.0003758	0.06131	0.4286	4	mg/L	N	0	0	Yes	No	Stable		0.100	N			N		N	No
WAP-18	16/22	27%	0.1-0.1	0.972	0.985	1.964	2.51	0.5312	0.7288	0.7499	4	mg/L	N	0	0	No	No	Stable		0.100	N			N		N	No
WAP-19	18/22	18%	0.1-0.1	0.226	0.18	0.569	0.6	0.0202	0.1415	0.6251	4	mg/L	N	0	0	Yes	No	Increasing		0.190	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		0.0000074O7	0.002722	1.196	0.015	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.010		0.015		
WAP-1	4/22	82%	0.001-0.01	0.00197	0.001	0.004457	0.00456	0.000004041	0.00201	1.02	0.015	mg/L	N	0	0	Yes	No	NA									
WAP-9	0/23	100%	0.001-0.05	0.0035	0.001	0.0225		0.0001032	0.01016	2.902	0.015	mg/L	N	0	1	NA	NA	NA		0.001	N			N		N	No
WAP-17	0/18	100%	0.001-0.01	0.00183	0.001	0.003625		0.000004559	0.002135	1.165	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-18	0/17	100%	0.001-0.01	0.00197	0.001	0.004		0.0000047O5	0.002183	1.108	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-19	0/17	100%	0.001-0.01	0.00197	0.001	0.004		0.0000047O5	0.002183	1.108	0.015	mg/L	N	0	0	NA	NA	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	0.000003308	0.001791	0.193	0.04	mg/L	N	0	0	No	No	NA	Non-parametric				0.012		0.040		
WAP-1	1/21	95%	0.005-0.01	0.00912	0.01	0.01	0.0116	0.000004322	0.002079	0.2279	0.04	mg/L	N	0	0	No	No	NA									
WAP-9	21/21	0%	-	0.0744	0.069	0.113	0.13	0.0005882	0.02425	0.3261	0.04	mg/L	Y	20	0	No	No	Decreasing	Normal	0.123	Y	0.048		Y		Y	Yes
WAP-17	22/22	0%	-	0.261	0.23	0.5447	0.825	0.03661	0.1913	0.7319	0.04	mg/L	Y	20	0	No	No	Decreasing	Normal	0.076	Y	0.192		Y		Y	Yes
WAP-18	21/21	0%	-	0.228	0.203	0.5	0.54	0.01938	0.1392	0.6095	0.04	mg/L	Y	21	0	No	No	Stable	Normal	0.085	Y	0.176		Y		Y	Yes
WAP-19	21/21	0%	-	0.33	0.255	0.77	1.45	0.08099	0.2846	0.8624	0.04	mg/L	Y	21	0	Yes	No	Stable	Non-parametric	1.450	Y	0.240		Y		Y	Yes
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									
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	NA				0.0002		0.002		
WAP-9	0/17	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-17	0/18	100%	0.0002-0.00024	0.000202	0.0002	0.000206		8.889E-11	0.000009428	0.04662	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N		N	No
WAP-18	0/17	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-19	0/17	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		0.00006226	0.00907	0.8105	0.1	mg/L	N	0	0	NA	NA	NA	NA				0.050		0.1		
WAP-1	0/21	100%	0.005-0.01	0.00908	0.01	0.01		0.000004348	0.002012	0.2224	0.1	mg/L	N	0	0	NA	NA	NA									
WAP-9	9/21	57%	0.005-0.01	0.0135	0.01	0.0298	0.034	0.00006778	0.008233	0.6079	0.1	mg/L	N	0	0	No	No	Decreasing		0.005	N			N		N	No
WAP-17	21/21	0%	-	0.0604	0.0434	0.11	0.35	0.004839	0.06956	1.151	0.1	mg/L	Y	2	0	No	No	Stable		0.017	Y			N		N	No
WAP-18	20/20	0%	-	0.352	0.1505	1.38	2.9	0.4495	0.6705	1.907	0.1	mg/L	Y	12	0	Yes	No	Stable	Non-parametric	0.158	Y	0.034		Y		N	No
WAP-19	18/20	10%	0.005-0.05	0.0396	0.04005	0.05689	0.0947	0.0003733	0.019312	0.4883	0.1	mg/L	N	0	0	Yes	No	Stable		0.037	Y			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		5.97		
WAP-1	16/21	24%	4-4	3.29	4	5.34	5.97	2.521	1.588	0.482	5	pCi/L	Y	4	0	No	No	Decreasing									
WAP-9	18/21	14%	4-4	3.64	4	5.34	5.72	1.891	1.375	0.3778	5	pCi/L	Y	3	0	No	No	Stable		4.300	Y			N		N	No
WAP-17	14/21	33%	4-4	2.79	3.41	4.39	5.51	2.695	1.642	0.5888	5	pCi/L	Y	1	0	No	No	Decreasing		2.189	Y			N		N	No
WAP-18	14/21	33%	4-4	3.15	4	4.31	4.46	1.765	1.329	0.4224	5	pCi/L	N	0	0	No	No	Decreasing		0.802	Y			N		N	No
WAP-19	12/21	43%	4-4	3.2	4	4.39	4.94	1.408	1.187	0.3713	5	pCi/L	N	0	0	No	No	Stable		2.702	Y			N		N	No
CCR Appendix-IV: Selenium, Total (mg/L)																											
WBW-1	0/20	100%	0.0025-0.02	0.0114	0.01	0.02		0.00002334	0.004831	0.4347	0.05	mg/L	N	0	0	NA	NA	NA	NA				0.020		0.05		
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-9	0/23	100%	0.0025-0.05	0.0123	0.01	0.02		0.00008575	0.00926	0.7539	0.05	mg/L	N	0	1	NA	NA	NA		0.010	N			N		N	No
WAP-17	0/18	100%	0.0025-0.02	0.011	0.01	0.02		0.00002143	0.004629	0.4219	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
WAP-18	0/17	100%	0.0025-0.02	0.0116	0.01	0.02		0.0000273	0.005225	0.4497	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
WAP-19	0/17	100%	0.0025-0.02	0.0116	0.01	0.02		0.0000273	0.005225	0.4497	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-9	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-17	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-18	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-19	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No

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TECHNICAL MEMORANDUM

December 9, 2024
File No. 132892-102

SUBJECT: Statistical Evaluation of the July 2024 Semiannual Corrective Action Groundwater Monitoring Data, Winyah Generating Station, Ash Pond A

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the July 2024 semiannual corrective action monitoring event for Winyah Generating Station (WGS) Ash Pond A. Data for this groundwater sampling event were validated on October 9, 2024, by Santee Cooper and provided to Haley & Aldrich.

BACKGROUND

Coal combustion residual (CCR) and non-CCR wastewater inflows to the WGS Ash Pond A ceased prior to the regulatory deadline of April 11, 2021. The unit has completed closure-by-removal of the CCR as the first step in groundwater remediation as outlined in the Remedy Selection Report dated March 30, 2022. During previous groundwater sampling events, assessment monitoring identified the presence of arsenic, lithium, and molybdenum in one or more downgradient wells at a statistically significant level (SSL) above the Groundwater Protection Standards (GWPS).

Recent analytical testing results were evaluated to determine if SSLs exist above the GWPS of Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background 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) as certified by Haley & Aldrich, Inc. on October 14, 2017.

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

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, approximately 83 percent of trends analyzed are identified as stable or decreasing for the compliance wells for Appendix IV constituents. Dynamic site conditions, due to both natural conditions and closure activities, may result in variability in the trends. 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.

[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.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table 1). Based on previous compliance sampling data and statistical evaluations, interwell comparisons were used. No outliers were removed. Consistent with previous results, arsenic and lithium remain the only Appendix IV constituents present in groundwater at SSLs above GWPS, and groundwater monitoring will continue:

- Arsenic SSLs at WAP-9, WAP-17, WAP-18, and WAP-19
- Lithium SSLs at WAP-9, WAP-17, WAP-18, and WAP-19

Molybdenum, which was previously identified as a SSL, was not identified as a SSL in the July 2024 event; however, there is a recent increasing trend. While landfill construction within the footprint of a portion of Ash Pond A was completed in December 2022, Ash Pond A closure activities are not yet complete. As closure activities continue in the footprint of Ash Pond A, downgradient groundwater conditions may remain in a state of flux, contributing to potential short-term fluctuations in some of the concentrations of Appendix IV SSLs. The fluctuations are expected to subside once aquifer equilibrium conditions are restored.

Enclosures:

Table 1 – WGS Ash Pond A July 2024 Semiannual Corrective Action Monitoring Data

TABLE

TABLE 1

WGS ASH POND A

JULY 2024 SEMIANNUAL CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis						
Location Id	Frequency of Detection	Percent Non-Detects	Rangeof 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	July 2024 Concenration	Detect?	LCL 95%	Upper Tolerance Limit	Sil	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above Background at Individual Well	SSL
CCR Apendix-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		0.025		
WAP-1	0/20	100%	0.005-0.025	0.00585	0.005	0.006		0.00002077	0.004557	0.779	0.006	mg/L	N	0	1	NA	NA	NA									
WAP-9	0/18	100%	0.005-0.025	0.00594	0.005	0.008		0.00002311	0.004808	0.8088	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-17	0/19	100%	0.005-0.025	0.00589	0.005	0.007		0.00002188	0.004677	0.7935	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-18	0/18	100%	0.005-0.025	0.00594	0.005	0.008		0.00002311	0.004808	0.8088	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-19	0/18	100%	0.005-0.025	0.00594	0.005	0.008		0.00002311	0.004808	0.8088	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	0/22	100%	0.001-0.005	0.00445	0.005	0.005		8.312E-07	0.0009117	0.2047	0.01	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.010		0.010		
WAP-1	6/24	75%	0.001-0.005	0.00542	0.005	0.00847	0.0096	0.000002312	0.00152	0.2803	0.01	mg/L	N	0	0	No	No	NA									
WAP-9	25/25	0%	-	0.187	0.189	0.399	0.42	0.01259	0.1122	0.5995	0.01	mg/L	Y	25	0	No	No	Decreasing	Normal	0.055	Y	0.153		Y		Y	Yes
WAP-17	24/24	0%	-	0.121	0.109	0.1964	0.24	0.001666	0.04082	0.336	0.01	mg/L	Y	24	0	Yes	No	Decreasing	Non-parametric	0.070	Y	0.096		Y		Y	Yes
WAP-18	22/22	0%	-	0.437	0.2545	1.304	1.53	0.1724	0.4153	0.9497	0.01	mg/L	Y	22	0	No	No	Stable	Non-parametric	0.117	Y	0.216		Y		Y	Yes
WAP-19	22/22	0%	-	0.133	0.1185	0.2548	0.474	0.009265	0.09625	0.7211	0.01	mg/L	Y	22	0	Yes	No	Increasing	Non-parametric	0.147	Y	0.082		Y		Y	Yes
CCR Apendix-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	Non-parametric				0.094		2.0		
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	Increasing									
WAP-9	25/25	0%	-	0.0798	0.0719	0.1276	0.15	0.0005544	0.02355	0.2951	2	mg/L	N	0	0	Yes	No	Stable		0.110	Y			Y		N	No
WAP-17	24/24	0%	-	0.0481	0.04625	0.06942	0.1	0.0002542	0.01594	0.3311	2	mg/L	N	0	0	Yes	No	Decreasing		0.048	Y			N		N	No
WAP-18	22/22	0%	-	0.0954	0.09175	0.1384	0.141	0.0003748	0.01936	0.2029	2	mg/L	N	0	0	No	No	Stable		0.103	Y			Y		N	No
WAP-19	22/22	0%	-	0.0567	0.05235	0.0992	0.104	0.0004135	0.02034	0.3588	2	mg/L	N	0	0	No	No	Stable		0.078	Y			N		N	No
CCR Apendix-IV: Beryllium, Total (mg/L)																											
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		
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-9	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-17	0/19	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-18	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-19	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
CCR Apendix-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	NA				0.0005		0.01		
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									
WAP-9	0/24	100%	0.0005-0.004	0.000708	0.0005	0.001775		5.85E-07	0.0007649	1.08	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-17	0/19	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-18	1/18	94%	0.0005-0.0005	0.00051	0.0005	0.000527	0.00068	1.8E-09	0.00004243	0.08319	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-19	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	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	Non-parametric				0.005		0.1		
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									
WAP-9	0/23	100%	0.005-0.01	0.00522	0.005	0.00925		0.000001993	0.001412	0.2606	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-17	0/19	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-18	0/18	100%	0.005-0.005	0.005	0.005	0.005		3.189E-21	5.647E-11	1.129E-08	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-19	0/18	100%	0.005-0.005	0.005	0.005	0.005		3.189E-21	5.647E-11	1.129E-08	0.1	mg/L	N	0	0	NA	NA	NA		0.005	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	Increasing	Non-parametric				0.0084		0.008		
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	Increasing									
WAP-9	1/20	95%	0.0005-0.0005	0.000508	0.0005	0.000508	0.00066	1.28E-09	0.00003578	0.07043	0.006	mg/L	N	0	0	No	No	NA		0.0005	N			N		N	No
WAP-17	0/21	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.006	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-18	10/20	50%	0.0005-0.0005	0.00093	0.00052	0.002227	0.0033	6.157E-07	0.0007846	0.8437	0.006	mg/L	N	0	0	Yes	No	Increasing		0.00371	Y			N		N	No
WAP-19	6/21	71%	0.0005-0.0005	0.00156	0.0005	0.00602	0.0121	0.000007836	0.002799	1.795	0.006	mg/L	Y	2	0	Yes	No	NA	Non-parametric	0.0009	Y	0.0005		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	Non-parametric				0.140		4.0		
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									
WAP-9	2/24	92%	0.1-1.5	0.159	0.1	0.1085	0.11	0.08162	0.2857	1.8	4	mg/L	N	0	0	No	No	NA		1.500	N			Y		N	No
WAP-17	12/24	50%	0.1-0.1	0.141	0.1	0.247	0.32	0.003672	0.0606	0.429	4	mg/L	N	0	0	No	No	Stable		0.100	N			N		N	No
WAP-18	16/23	30%	0.1-0.1	0.934	0.91	1.988	2.51	0.5401	0.7349	0.7869	4	mg/L	N	0	0	No	No	Stable		0.100	N			N		N	No
WAP-19	19/24	21%	0.1-1.5	0.284	0.185	0.597	0.6	0.08589	0.2931	1.031	4	mg/L	N	0	0	Yes	No	Increasing		0.360	Y			Y		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	Non-parametric				0.010		0.015		
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									
WAP-9	0/24	100%	0.001-0.05	0.0034	0.001	0.0025		0.00009893	0.009947	2.929	0.015	mg/L	N	0	1	NA	NA	NA		0.001	N			N		N	No
WAP-17	0/19	100%	0.001-0.01	0.00179	0.001	0.00325		0.000004342	0.002084	1.164	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-18	0/18	100%	0.001-0.01	0.00192	0.001	0.003625		0.000004537	0.00213	1.111	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-19	0/18	100%	0.001-0.01	0.00192	0.001	0.003625		0.000004537	0.00213	1.111	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
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		0.040		
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	No	No	NA									
WAP-9	22/22	0%	-	0.0748	0.0695	0.1225	0.13	0.0005646	0.02376	0.3176	0.04	mg/L	Y	21	0	No	No	Decreasing	Normal	0.034	Y	0.065		Y		Y	Yes
WAP-17	23/23	0%	-	0.253	0.22	0.5394	0.825	0.03642	0.1908	0.7532	0.04	mg/L	Y	21	0	Yes	No	Decreasing	Normal	0.077	Y	0.591		Y		Y	Yes
WAP-18	22/22	0%	-	0.222	0.1935	0.495	0.54	0.01944	0.1394	0.629	0.04	mg/L	Y	22	0	No	No	Stable	Normal	0.081	Y	0.176		Y		Y	Yes
WAP-19	23/23	0%	-	0.363	0.26	0.9662	1.45	0.09255	0.3042	0.8383	0.04	mg/L	Y	23	0	Yes	No	Stable	Non-parametric	0.401	Y	0.240		Y		Y	Yes

TABLE 1

WGS ASH POND A

JULY 2024 SEMIANNUAL CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis						
Location Id	Frequency of Detection	Percent Non-Detects	Rangeof 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	July 2024 Concentration	Detect?	LCL 95%	Upper Tolerance Limit	SU	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above Background at Individual Well	SSL
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	NA				0.0002		0.002		
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-9	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			
WAP-17	0/19	100%	0.00020-0.00024	0.000202	0.0002	0.000204		8.421E-11	0.000009177	0.04541	0.002	mg/L	N	0	0	NA	NA	NA		0.00020	N			N			
WAP-18	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			
WAP-19	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			
CCR Appendix-IV: Molybdenum, Total (mg/L)																											
WBW-1	0/22	100%	0.006-0.05	0.0109	0.01	0.01		0.00008009	0.008949	0.8203	0.1	mg/L	N	0	0	NA	NA	NA	NA				0.050		0.1		
WAP-1	0/22	100%	0.006-0.01	0.00886	0.01	0.01		0.0000046	0.002145	0.242	0.1	mg/L	N	0	0	NA	NA	NA									
WAP-9	9/22	59%	0.006-0.01	0.0132	0.01	0.02962	0.034	0.00006787	0.008238	0.6263	0.1	mg/L	N	0	0	No	No	Decreasing		0.035	N			N			
WAP-17	22/22	0%	-	0.0581	0.04325	0.108	0.35	0.004727	0.06875	1.183	0.1	mg/L	Y	2	0	Yes	No	Stable		0.039	Y			N			
WAP-18	21/21	0%	-	0.345	0.158	1.3	2.9	0.428	0.6542	1.897	0.1	mg/L	Y	13	0	Yes	No	Increasing	Non-parametric	0.210	Y	0.034		Y			
WAP-19	19/21	10%	0.006-0.05	0.0383	0.0391	0.057	0.0947	0.0003872	0.01968	0.5135	0.1	mg/L	N	0	0	Yes	No	Stable		0.013	Y			N			
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		5.97		
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	Stable									
WAP-9	19/22	14%	4-4	3.62	4	5.326	5.72	1.811	1.346	0.3718	5	pCi/L	Y	3	0	No	No	Decreasing		3.180	Y			N			
WAP-17	15/22	32%	4-4	2.8	3.225	4.372	5.51	2.568	1.603	0.5732	5	pCi/L	Y	1	0	No	No	Decreasing		2.950	Y			N			
WAP-18	15/22	32%	4-4	3.16	4	4.306	4.46	1.684	1.298	0.4111	5	pCi/L	N	0	0	No	No	Decreasing		3.369	Y			N			
WAP-19	13/22	41%	4-4	3.26	4	4.675	4.94	1.442	1.201	0.368	5	pCi/L	N	0	0	No	No	Stable		4.690	Y			N			
CCR Appendix-IV: Selenium, Total (mg/L)																											
WBW-1	0/21	100%	0.005-0.02	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		0.05		
WAP-1	0/23	100%	0.005-0.02	0.0108	0.01	0.02		0.00001672	0.00409	0.38	0.05	mg/L	N	0	0	NA	NA	NA									
WAP-9	0/24	100%	0.005-0.05	0.0122	0.01	0.02		0.00008224	0.009068	0.7441	0.05	mg/L	N	0	1	NA	NA	NA		0.010	N			N			
WAP-17	0/19	100%	0.005-0.02	0.0109	0.01	0.02		0.00002029	0.004504	0.4124	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N			
WAP-18	0/18	100%	0.005-0.02	0.0115	0.01	0.02		0.00002584	0.005083	0.4409	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N			
WAP-19	0/18	100%	0.005-0.02	0.0115	0.01	0.02		0.00002584	0.005083	0.4409	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N			
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%	0.0008-0.001	0.000955	0.001	0.001		4.05E-08	0.0002012	0.2107	0.002	mg/L	N	0	0	NA	NA	NA									
WAP-9	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			
WAP-17	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		0.001	N			N			
WAP-18	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			
WAP-19	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			

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TECHNICAL MEMORANDUM

July 15, 2024
File No. 132892-100-005-02

SUBJECT: Statistical Evaluation of the February 2024 Semiannual Corrective Action Groundwater Monitoring Data, Winyah Generating Station, Ash Pond B

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the February 2024 semiannual corrective action groundwater monitoring event for Winyah Generating Station (WGS) Ash Pond B. Data for this groundwater sampling event were validated on April 16, 2024 by Santee Cooper.

BACKGROUND

All coal combustion residual (CCR) and non-CCR wastewater inflows to WGS Ash Pond B ceased prior to the regulatory deadline of April 11, 2021. The unit is undergoing closure-by-removal as outlined in the Remedy Selection Report dated March 30, 2022. During previous groundwater sampling events, assessment monitoring identified the presence of arsenic, lithium, and molybdenum in one or more downgradient wells at a statistically significant level (SSL) above the Groundwater Protection Standards (GWPS).

Recent analytical testing results were evaluated to ascertain if SSLs exist above GWPS for Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background 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) as certified by Haley & Aldrich, Inc. on October 14, 2017.

An interwell evaluation was used for statistical analysis, which compares the most recent values from downgradient compliance wells against a background dataset composed of upgradient well data. The TL method was used to evaluate potential SSLs above GWPS. The GWPS for each of the Appendix IV constituents has been set equal to the highest value of the maximum contaminant level, regional screening level (RSL), or site background concentration. Compliance well data from the most recent groundwater sampling event were compared to the corresponding GWPS to determine if a SSL existed. Statistical analysis results are presented in Table 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. 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 March 2023 and updated in the Chemstat output. The background dataset will be updated in Table 1 again after four additional data points are collected (second semiannual event of 2025) in accordance with the Unified Guidance.

TREND ANALYSIS

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

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table 1). Based on previous compliance sampling data and statistical evaluations, interwell comparisons were used.

Consistent with previous results, arsenic has one SSL above the GWPS.

- Arsenic SSL at WAP-27

As noted in the second 2022 semiannual statistical memorandum, monitoring well WAP-27, which is constructed with a deeper screened zone, was integrated by Santee Cooper as a temporary substitute for WAP-20 until the water table is restored to historical levels.

As noted by the lack of lithium and/or molybdenum SSLs during the first semiannual event of 2024 which have been identified previously, concentrations continue to decrease. Concentrations are expected to continue to decrease once closure is complete and equilibrium groundwater conditions are restored. The expected date for completing CCR removal for Ash Pond B is 2025. Groundwater trends will continue to be monitored during future sampling events.

Enclosures:

Table 1 – WGS Ash Pond B February 2024 Corrective Action Monitoring Data

TABLE

TABLE 1

WGS ASH POND B

FEBRUARY 2024 CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis							
Location Id	Frequency of Detection	Percent Non-Detecti	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	Febrary 2024 Concentration	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above Background at Individual Well	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	NA				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-10	0/17	100%	0.002-0.025	0.006	0.005	0.009		0.0000245	0.00495	0.825	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N		N	No
WAP-21	0/17	100%	0.002-0.05	0.00865	0.005	0.03		0.000138	0.01175	1.358	0.006	mg/L	N	0	2	NA	NA	NA		0.005	N			N		N	No
WAP-27	0/6	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.006	mg/L	N	0	0	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	NA				0.009		0.010		
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									
WAP-10	12/23	48%	0.003-0.005	0.0264	0.0055	0.114	0.14	0.001686	0.04105	1.556	0.01	mg/L	Y	8	0	Yes	No	Decreasing		0.005	N			N		N	No
WAP-21	2/21	90%	0.003-0.03	0.00587	0.005	0.00672	0.00572	0.0000313	0.005594	0.9534	0.01	mg/L	N	0	1	NA	NA	NA		0.006	N			N		N	No
WAP-27	6/6	0%	-	0.0866	0.08795	0.0974	0.0988	0.00008509	0.009224	0.1065	0.01	mg/L	Y	6	0	No	No	Stable	Normal	0.093	Y	0.079		Y		Y	Yes
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	0.061	0.094	0.000744	0.02728	0.6632	2	mg/L	N	0	0	No	No	Increasing									
WAP-10	23/23	0%	-	0.275	0.27	0.373	0.396	0.001345	0.03668	0.1336	2	mg/L	N	0	0	Yes	No	Stable		0.286	Y			Y		N	No
WAP-21	21/21	0%	-	0.0555	0.0506	0.1	0.15	0.0009435	0.03072	0.5538	2	mg/L	N	0	0	Yes	No	Decreasing		0.039	Y			N		N	No
WAP-27	6/6	0%	-	0.113	0.114	0.1217	0.123	0.0000656	0.008099	0.0718	2	mg/L	N	0	0	No	No	Stable		0.100	Y			Y		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-10	0/17	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-21	0/17	100%	0.0005-0.005	0.000765	0.0005	0.0014		0.000001191	0.001091	1.427	0.004	mg/L	N	0	1	NA	NA	NA		0.0005	N			N		N	No
WAP-27	0/6	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
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	NA				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-10	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		0.0005	N			N		N	No
WAP-21	0/17	100%	0.0005-0.005	0.000765	0.0005	0.0014		0.000001191	0.001091	1.427	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-27	0/6	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	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	NA				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-10	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		0.005	N			N		N	No
WAP-21	1/17	94%	0.005-0.05	0.00909	0.005	0.03368	0.0296	0.0001466	0.01211	1.331	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-27	0/6	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
CCR Appendix-IV: Cobalt, Total (mg/L)																											
WBW-1	6/21	71%	0.0005-0.0005	0.00123	0.0005	0.00815	0.00838	0.000003237	0.001799	1.468	0.006	mg/L	Y	1	0	Yes	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	Increasing									
WAP-10	0/21	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.006	mg/L	N	0	0	NA	NA	NA		0.0005	N			N		N	No
WAP-21	2/21	90%	0.0005-0.01	0.00127	0.0005	0.005	0.00231	0.000005076	0.002253	1.779	0.006	mg/L	N	0	1	Yes	No	NA		0.0005	N			N		N	No
WAP-27	2/6	67%	0.0005-0.0005	0.000552	0.0005	0.0006675	0.00068	6.657E-09	0.00008:59	0.1479	0.006	mg/L	N	0	0	No	No	Stable		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-10	2/22	91%	0.1-0.1	0.103	0.1	0.119	0.15	0.0001275	0.01129	0.1094	4	mg/L	N	0	0	No	No	NA		0.100	N			N		N	No
WAP-21	0/22	100%	0.1-0.1	0.1	0.1	0.1		1.322E-18	1.15E-09	1.15E-08	4	mg/L	N	0	0	NA	NA	NA		0.100	N			N		N	No
WAP-27	2/6	67%	0.1-0.1	0.108	0.1	0.1375	0.15	0.0004167	0.02041	0.1884	4	mg/L	N	0	0	No	No	Stable		0.100	N			N		N	No
CCR Appendix-IV: Lead, Total (mg/L)																											
WBW-1	0/20	100%	0.001-0.01	0.00227	0.001	0.01		0.000007407	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	0.000004041	0.00201	1.02	0.015	mg/L	N	0	0	Yes	No	NA									
WAP-10	0/22	100%	0.001-0.01	0.00175	0.001	0.0025		0.000003804	0.00195	1.114	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-21	2/17	88%	0.001-0.01	0.00248	0.001	0.0102	0.011	0.000009543	0.003089	1.244	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-27	0/6	100%	0.001-0.0025	0.00125	0.001	0.002125		0.000000375	0.0006124	0.4899	0.015	mg/L	N	0	0	NA	NA	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	0.000003208	0.001791	0.193	0.04	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.012		0.040		
WAP-1	1/21	95%	0.005-0.01	0.00912	0.01	0.01	0.0116	0.000004322	0.002079	0.2279	0.04	mg/L	N	0	0	Yes	No	NA									
WAP-10	21/21	0%	-	0.03	0.026	0.0549	0.0658	0.0001473	0.01213	0.4041	0.04	mg/L	Y	3	0	No	No	Stable	Non-parametric	0.066	Y	0.023		Y		N	No
WAP-21	1/21	95%	0.005-0.01	0.0098	0.01	0.01	0.0209	0.00000965	0.003107	0.3168	0.04	mg/L	N	0	0	Yes	No	NA		0.005	N			N		N	No
WAP-27	4/6	33%	0.005-0.005	0.00813	0.008975	0.01375	0.0111	0.000006524	0.002554	0.3144	0.04	mg/L	N	0	0	No	No	NA		0.009	Y			N		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	NA				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-10	0/17	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	N			N		N	No
WAP-21	0/17	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	N			N		N	No
WAP-27	0/6	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	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	NA				0.050		0.10		
WAP-1	0/21	100%	0.005-0.01	0.00905	0.01	0.01		0.000004048	0.002012	0.2224	0.1	mg/L	N	0	0	NA	NA	NA									
WAP-10	0/21	100%	0.005-0.01	0.00905	0.01	0.01		0.000004048	0.002012	0.2224	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N		N	No
WAP-21	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		0.005	N			N		N	No
WAP-27	0/6	100%	0.005-0.01	0.00583	0.005	0.00875		0.000004167	0.002041	0.3499	0.1	mg/L	N	0	0	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		5.97		
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	Decreasing									
WAP-10	21/21	0%	-	4.86	5.34	6.9	6.91	2.679	1.637	0.3366	5	pCi/L	Y	12	0	No	No	Decreasing		3.046	Y			N		N	No
WAP-21	17/21	19%	4-4	3.08	4	5.04	5.67	2.778	1.667	0.5413	5	pCi/L	Y	2	0	No	No	Decreasing		2.251	Y			N		N	No
WAP-27	6/6	0%	-	1.88	1.765	2.713	3.02	0.3454	0.5877	0.3134	5	pCi/L	N	0	0	Yes	No	Stable		1.740	Y			N		N	No
CCR Appendix-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-10	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		0.010	N			N		N	No
WAP-21	0/17	100%	0.005-0.025	0.0129	0.01	0.011		0.00003143	0.005607	0.4332	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
WAP-27	0/6	100%	0.01-0.02	0.0117	0.01	0.02		0.00002381	0.00488	0.3795	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	0.0002055	0.2167	0.002	mg/L	N	0	0	NA	NA	NA									
WAP-10	0/17	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No
WAP-21	0/17	100%	0.001-0.01	0.00153	0.001	0.0028		0.000004765	0.002183	1.427	0.002	mg/L	N	0	1	NA	NA	NA		0.001	N			N		N	No
WAP-27	0/6	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 Corrective Action Groundwater Monitoring Data, Winyah Generating Station, Ash Pond B

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the July 2024 semiannual corrective action groundwater monitoring event for Winyah Generating Station (WGS) Ash Pond B. Data for this groundwater sampling event were validated on October 9, 2024 by Santee Cooper and provided to Haley & Aldrich.

BACKGROUND

Coal combustion residual (CCR) and non-CCR wastewater inflows to WGS Ash Pond B ceased prior to the regulatory deadline of April 11, 2021. The unit is undergoing closure-by-removal as outlined in the Remedy Selection Report dated March 30, 2022. During previous groundwater sampling events, assessment monitoring identified the presence of arsenic, lithium, and molybdenum in one or more downgradient wells at a statistically significant level (SSL) above the Groundwater Protection Standards (GWPS).

Recent analytical testing results were evaluated to ascertain if SSLs exist above GWPS for Appendix IV groundwater monitoring constituents. Using interwell evaluations, data from the semiannual sampling event for downgradient monitoring wells were compared to the GWPS established from background 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) as certified by Haley & Aldrich, Inc. on October 14, 2017.

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

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, each well with analyzed trends is identified as stable or decreasing for the compliance wells. It is important to note that increasing trends are not part of the comparison criteria for triggering a SSL. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

As stated, Appendix IV constituent detections from downgradient well samples were compared to their respective GWPS (Table 1). Based on previous compliance sampling data and statistical evaluations, interwell comparisons were used.

Consistent with previous results, arsenic has one SSL above the GWPS.

- Arsenic SSL at WAP-27

As noted in the second 2022 semiannual statistical memorandum, monitoring well WAP-27, which is constructed with a deeper screened zone, was integrated by Santee Cooper as a temporary substitute for WAP-20 until the water table is restored to historical levels.

As noted by the lack of lithium and/or molybdenum SSLs during 2024 sampling events, which have been identified previously, concentrations continue to decrease. Concentrations are expected to continue to decrease once closure is complete and equilibrium groundwater conditions are restored; however, until then, some variability in the data is expected. The expected date for completing CCR removal for Ash Pond B is first quarter of 2025. Groundwater trends will continue to be monitored during future sampling events.

Enclosures:

Table 1 – WGS Ash Pond B July 2024 Corrective Action Monitoring Data

TABLE

TABLE 1
WGS ASH POND B
JULY 2024 CORRECTIVE ACTION MONITORING DATA

																			Inter-well Analysis						
Location Id	Frequency of Detection	Percent Non-Detects	Range of Non-Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standard Deviation	Coefficient of Variance	CCR MCL/RSL	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances	Number of Non-Detection Exceedances	Outlier Presence	Outlier Removed	Trend	Distribution	July 2024 Concentration	Detect?	95 LCL	Upper Tolerance Limit	SSI	GWPS (Higher of MCL/RSL or Background Limit)	Exceedance above Background at Individual Well	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		0.025		
WAP-1	0/20	100%	0.002-0.025	0.00585	0.005	0.006		0.00002077	0.001557	0.779	0.006	mg/L	N	0	1	NA	NA	NA									
WAP-10	0/18	100%	0.002-0.025	0.00594	0.005	0.008		0.00002311	0.001808	0.8088	0.006	mg/L	N	0	1	NA	NA	NA		0.005	N			N			No
WAP-21	0/18	100%	0.002-0.05	0.00844	0.005	0.02875		0.0001106	0.01143	1.353	0.006	mg/L	N	0	2	NA	NA	NA		0.005	N			N			No
WAP-27	1/7	86%	0.005-0.005	0.0051	0.005	0.00549	0.0057	0.00000007	0.00026	0.05188	0.006	mg/L	N	0	0	NA	NA	NA		0.006	Y			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	NA				0.010		0.010		
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									
WAP-10	12/24	50%	0.003-0.005	0.0255	0.00525	0.131	0.14	0.001632	0.0404	1.584	0.01	mg/L	Y	8	0	Yes	No	Decreasing		0.005	N			N			No
WAP-21	2/22	91%	0.003-0.03	0.00583	0.005	0.005709	0.00572	0.00002984	0.001463	0.9373	0.01	mg/L	N	0	1	Yes	No	NA		0.005	N			N			No
WAP-27	7/7	0%	-	0.0917	0.0883	0.115	0.122	0.0002498	0.0158	0.1724	0.01	mg/L	Y	7	0	No	No	Stable	Normal	0.122	Y	0.079		Y			Yes
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	Non-parametric				0.094		2.000		
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	Increasing									
WAP-10	24/24	0%	-	0.275	0.27	0.3259	0.396	0.001296	0.03601	0.1308	2	mg/L	N	0	0	Yes	No	Stable		0.290	Y			Y			No
WAP-21	22/22	0%	-	0.055	0.04765	0.1085	0.15	0.0009038	0.03006	0.5469	2	mg/L	N	0	0	Yes	No	Decreasing		0.045	Y			N			No
WAP-27	7/7	0%	-	0.109	0.113	0.1215	0.123	0.0001322	0.0115	0.105	2	mg/L	N	0	0	No	No	Stable		0.090	Y			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	NA				0.0005		0.004		
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									
WAP-10	0/18	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N			No
WAP-21	0/18	100%	0.0005-0.005	0.00075	0.0005	0.001175		0.000001125	0.001061	1.414	0.004	mg/L	N	0	1	NA	NA	NA		0.0005	N			N			No
WAP-27	0/7	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA		0.0005	N			N			No
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	NA				0.0005		0.005		
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									
WAP-10	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		0.0005	N			N			No
WAP-21	0/18	100%	0.0005-0.005	0.00075	0.0005	0.001175		0.000001125	0.001061	1.414	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	N			N			No
WAP-27	0/7	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L	N	0	0	NA	NA	NA		0.0005	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	NA				0.0050		0.100		
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									
WAP-10	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		0.005	N			N			No
WAP-21	1/18	94%	0.005-0.05	0.00887	0.005	0.03266	0.0296	0.0001389	0.01178	1.329	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N			No
WAP-27	0/7	100%	0.005-0.005	0.005	0.005	0.005		0	0	0	0.1	mg/L	N	0	0	NA	NA	NA		0.005	N			N			No
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	Increasing	Non-parametric				0.0084		0.008		
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	Increasing									
WAP-10	0/22	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.006	mg/L	N	0	0	NA	NA	NA		0.0005	N			N			No
WAP-21	3/22	86%	0.0005-0.01	0.00124	0.0005	0.004866	0.00231	0.000004852	0.001203	1.779	0.006	mg/L	N	0	1	Yes	No	NA		0.0006	Y			N			No
WAP-27	2/7	71%	0.0005-0.0005	0.000544	0.0005	0.000665	0.00068	5.929E-09	0.0007077	0.1415	0.006	mg/L	N	0	0	No	No	NA		0.0005	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	Non-parametric				0.140		4.00		
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									
WAP-10	2/23	91%	0.1-0.1	0.103	0.1	0.118	0.15	0.0001221	0.01105	0.1073	4	mg/L	N	0	0	No	No	NA		0.100	N			N			No
WAP-21	0/23	100%	0.1-0.1	0.1	0.1	0.1		0	0	0	4	mg/L	N	0	0	NA	NA	NA		0.100	N			N			No
WAP-27	3/7	57%	0.1-0.1	0.143	0.1	0.29	0.35	0.00869	0.09322	0.6526	4	mg/L	N	0	0	No	No	Stable		0.350	Y			Y			No
CCR Appendix-IV: Lead, Total (mg/L)																											
WBW-1	0/21	100%	0.001-0.01	0.00221	0.001	0.01		0.0000071114	0.001667	1.205	0.015	mg/L	N	0	0	NA	NA	NA	Non-parametric				0.0100		0.015		
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									
WAP-10	0/23	100%	0.001-0.01	0.00172	0.001	0.0025		0.0000003655	0.0001912	1.113	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N			No
WAP-21	3/18	83%	0.001-0.01	0.00248	0.001	0.01015	0.011	0.000008981	0.002997	1.207	0.015	mg/L	N	0	0	Yes	No	NA		0.003	Y			N			No
WAP-27	0/7	100%	0.001-0.0025	0.00121	0.001	0.00205		3.214E-07	0.0005669	0.4669	0.015	mg/L	N	0	0	NA	NA	NA		0.001	N			N			No
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	NA	NA	NA	Non-parametric				0.012		0.040		
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-10	23/23	0%	-	0.0331	0.026	0.06533	0.0706	0.0002424	0.01557	0.4698	0.04	mg/L	Y	5	0	No	No	Stable	Non-parametric	0.071	Y	0.023		Y			No
WAP-21	1/22	95%	0.005-0.01	0.00959	0.01	0.01	0.0209	0.00001024	0.0032	0.3338	0.04	mg/L	N	0	0	Yes	No	NA		0.005	N			N			No
WAP-27	5/7	29%	0.005-0.005	0.00929	0.00937	0.01474	0.0163	0.00001498	0.003871	0.4165	0.04	mg/L	N	0	0	No	No	Stable		0.016	Y			Y			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	NA				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-10	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		0.0002	U			N			No
WAP-21	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		0.0002	U			N			No
WAP-27	0/7	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.0002	U			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	NA				0.050		0.10		
WAP-1	0/22	100%	0.005-0.01	0.00886	0.01	0.01		0.0000046	0.001145	0.242	0.1	mg/L	N	0	0	NA	NA	NA									
WAP-10	0/22	100%	0.005-0.01	0.00886	0.01	0.01		0.0000046	0.001145	0.242	0.1	mg/L	N	0	0	NA	NA	NA		0.005	U			N			No
WAP-21	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		0.005	U			N			No
WAP-27	0/7	100%	0.005-0.01	0.00571	0.005	0.0085		0.000003571	0.001889	0.3307	0.1	mg/L	N	0	0	NA	NA	NA		0.005	U			N			No

TABLE 1
WGS ASH POND B
JULY 2024 CORRECTIVE ACTION MONITORING DATA

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		5.97		
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	Stable									
WAP-10	22/22	0%	-	4.93	5.485	6.89	6.91	2.661	1.631	0.3307	5	pCi/L	Y	13	0	No	No	Stable	Normal	6.420	Y	4.33		Y		N	No
WAP-21	18/22	18%	4-4	3.06	3.37	5.037	5.67	2.651	1.628	0.5314	5	pCi/L	Y	2	0	No	No	Decreasing		2.740	Y			N		N	No
WAP-27	7/7	0%	-	2	1.79	2.93	3.02	0.3898	0.6144	0.3129	5	pCi/L	N	0	0	Yes	No	Stable		2.720	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	0.001718	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-10	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		0.010	N			N		N	No
WAP-21	0/18	100%	0.005-0.025	0.0128	0.01	0.02075		0.00003007	0.001483	0.4291	0.05	mg/L	N	0	0	NA	NA	NA		0.010	N			N		N	No
WAP-27	0/7	100%	0.01-0.02	0.0114	0.01	0.02		0.00002143	0.001629	0.3703	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	0/20	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%	0.0001-0.001	0.000955	0.001	0.001		4.05E-08	0.002012	0.2107	0.002	mg/L	N	0	0	NA	NA	NA									
WAP-10	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-21	0/18	100%	0.001-0.01	0.0015	0.001	0.00235		0.0000045	0.001121	1.414	0.002	mg/L	N	0	1	NA	NA	NA		0.001	N			N		N	No
WAP-27	0/7	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA		0.001	N			N		N	No

Appendix B – Laboratory Analytical Results

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

Authorized Signature Only- Not Valid Unless Signed

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90634 **Location:** GW Well WBW-1 **Date:** 02/06/2024 **Sample Collector:** WJK/BB

Loc. Code WBW-1 **Time:** 14:12

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	0.42	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Barium	22.3	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Calcium	2.2	mg/L	02/13/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Cobalt	0.88	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Iron	98.7	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Magnesium	0.45	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	185	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Lithium	9.9	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	02/16/2024	KCWELLS	EPA 300.0
Chloride	4.50	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	10.9	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	75.00	mg/L	02/13/2024	KCWELLS	SM 2540C
Radium 226	0.0320	pCi/L	03/05/2024	GEL	EPA 903.1 Mod
Radium 228	2.16	pCi/L	02/23/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.192	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	4.54	SU	02/06/2024	WJK/BM	
Copper	<5.0	ug/L	02/13/2024	SKJACOBS	EPA 6020B
Nickel	1.3	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: 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 # AF90604 **Location:** GW Well WAP-9 **Date:** 02/07/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-9 **Time:** 11:12

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	0.29	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Arsenic	73.9	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Barium	132	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Calcium	345	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Iron	17300	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Magnesium	56.4	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Boron	4470	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Lithium	123	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	02/14/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	205	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	602	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	1702	mg/L	02/09/2024	KCWELLS	SM 2540C
Radium 226	2.13	pCi/L	03/05/2024	GEL	EPA 903.1 Mod
Radium 228	2.17	pCi/L	02/23/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.3	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.17	SU	02/07/2024	WJK/BM	
Copper	<5.0	ug/L	02/14/2024	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: Linda Williams - Manager Analytical Services Validation date: 4/15/24

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90605 **Location:** GW Well WAP-10 **Date:** 02/07/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-10 **Time:** 10:07

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	<0.1	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Barium	286	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Calcium	658	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Iron	21500	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Magnesium	83.5	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/20/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Boron	10000	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Lithium	65.8	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	02/20/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/22/2024	KCWELLS	EPA 300.0
Chloride	784	mg/L	02/22/2024	KCWELLS	EPA 300.0
Sulfate	902	mg/L	02/22/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	3371	mg/L	02/09/2024	KCWELLS	SM 2540C
Radium 226	2.11	pCi/L	03/05/2024	GEL	EPA 903.1 Mod
Radium 228	0.936	pCi/L	02/23/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.046	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.57	SU	02/07/2024	WJK/BM	
Copper	<5.0	ug/L	02/14/2024	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: Linda Williams - Manager Analytical Services Validation date: 4/15/24

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90606 **Location:** GW Well WAP-10 **Date:** 02/07/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-10 DUP **Time:** 10:12

Analysis	Result	Units	Test Date	Analyst	Method
Aluminum	<0.1	mg/L	02/20/2024	SKJACOBS	EPA 6020B
Arsenic	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Barium	275	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/20/2024	SKJACOBS	EPA 6020B
Calcium	640	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Iron	21000	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Magnesium	80.6	mg/L	02/14/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/20/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/14/2024	SKJACOBS	EPA 6020B
Boron	10200	ug/L	02/14/2024	SKJACOBS	EPA 6010D
Lithium	66.7	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	02/20/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	788	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	939	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	3200	mg/L	02/09/2024	KCWELLS	SM 2540C
Radium 226	1.69	pCi/L	03/05/2024	GEL	EPA 903.1 Mod
Radium 228	0.147	pCi/L	02/23/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.837	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Copper	<5.0	ug/L	02/14/2024	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

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90618 **Location:** GW Well WAP-17 **Date:** 02/13/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-17 **Time:** 13:48

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	84.7	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Barium	46.3	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Calcium	331	mg/L	03/01/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Iron	2330	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Boron	3610	ug/L	02/21/2024	SKJACOBS	EPA 6010D
Lithium	75.9	ug/L	02/21/2024	SKJACOBS	EPA 6010D
Molybdenum	17.1	ug/L	02/21/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/23/2024	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	169	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	757	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	1460	mg/L	02/16/2024	KCWELLS	SM 2540C
Radium 226	0.899	pCi/L	03/13/2024	GEL	EPA 903.1 Mod
Radium 228	1.29	pCi/L	03/08/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.189	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.15	SU	02/13/2024	WJK/BM	
Copper	<5.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Nickel	<0.5	ug/L	03/01/2024	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

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90619 **Location:** GW Well WAP-17 **Date:** 02/13/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-17 DUP **Time:** 13:53

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	84.2	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Barium	46.1	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Calcium	328	mg/L	03/01/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Iron	2320	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Boron	3710	ug/L	02/21/2024	SKJACOBS	EPA 6010D
Lithium	78.2	ug/L	02/21/2024	SKJACOBS	EPA 6010D
Molybdenum	17.6	ug/L	02/21/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/23/2024	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	162	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	725	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	1538	mg/L	02/16/2024	KCWELLS	SM 2540C
Radium 226	0.878	pCi/L	03/13/2024	GEL	EPA 903.1 Mod
Radium 228	0.681	pCi/L	03/08/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.559	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Copper	<5.0	ug/L	03/01/2024	SKJACOBS	EPA 6020B
Nickel	<0.5	ug/L	03/01/2024	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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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90620 **Location:** GW Well WAP-18 **Date:** 02/12/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-18 **Time:** 12:45

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	137	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	81.7	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/21/2024	SKJACOBS	EPA 6020B
Calcium	69	mg/L	02/29/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Cobalt	0.58	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Iron	1170	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	799	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Lithium	84.6	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Molybdenum	158	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/26/2024	EUROFINS SAV	EPA 7470
Zinc	<10.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Fluoride	<0.10	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	29.3	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	132	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	357.5	mg/L	02/16/2024	KCWELLS	SM 2540C
Radium 226	0.591	pCi/L	03/13/2024	GEL	EPA 903.1 Mod
Radium 228	0.211	pCi/L	03/08/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.802	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	5.75	SU	02/12/2024	WJK/BM	
Copper	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Nickel	0.80	ug/L	02/29/2024	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: Linda Williams - Manager Analytical Services Validation date: 4/15/24

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90621 **Location:** GW Well WAP-19 **Date:** 02/08/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-19 **Time:** 11:05

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	124	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	57.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/21/2024	SKJACOBS	EPA 6020B
Calcium	646	mg/L	02/29/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Cobalt	12.1	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Iron	20700	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	4320	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Lithium	1450	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Molybdenum	36.9	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/20/2024	EUROFINS SAV	EPA 7470
Zinc	23.2	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Fluoride	0.19	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	56.7	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	1800	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	2871	mg/L	02/09/2024	KCWELLS	SM 2540C
Radium 226	0.922	pCi/L	03/13/2024	GEL	EPA 903.1 Mod
Radium 228	1.78	pCi/L	03/08/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.702	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	5.89	SU	02/08/2024	WJK/BM	
Copper	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Nickel	10.5	ug/L	02/29/2024	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: Linda Williams - Manager Analytical Services Validation date: 4/15/24

Authorized Signature Only- Not Valid Unless Signed

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90623 **Location:** GW Well WAP-21 **Date:** 02/15/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-21 **Time:** 12:20

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	5.5	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	38.8	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Calcium	102	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
Lead	1.2	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	3160	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	60.6	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	3.15	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	572.5	mg/L	02/23/2024	KCWELLS	SM 2540C
Radium 226	0.581	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	1.67	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.251	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.37	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 - Manager Analytical Services Validation date: 4/15/24

Authorized Signature Only- Not Valid Unless Signed

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90624 **Location:** GW Well WAP-22 **Date:** 02/12/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-22 **Time:** 11:47

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	76.4	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/21/2024	SKJACOBS	EPA 6020B
Boron	1440	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Calcium	197	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	14.9	ug/L	02/20/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/26/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/20/2024	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	1.35	pCi/L	03/13/2024	GEL	EPA 903.1 Mod
Radium 228	-0.535	pCi/L	03/08/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.35	pCi/L	03/13/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	02/16/2024	KCWELLS	EPA 300.0
Chloride	146	mg/L	02/16/2024	KCWELLS	EPA 300.0
Sulfate	153	mg/L	02/16/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	862.5	mg/L	02/16/2024	KCWELLS	SM 2540C
pH	6.93	SU	02/12/2024	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 # AF90625 **Location:** GW Well WAP-23 **Date:** 02/15/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-23 **Time:** 10:35

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	696	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	201	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Boron	6360	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Calcium	411	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	376	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	1.74	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	1.53	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.27	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	0.34	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	387	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	589	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	1890	mg/L	02/23/2024	KCWELLS	SM 2540C
pH	6.67	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 # AF90626 **Location:** GW Well WAP-24 **Date:** 02/19/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-24 **Time:** 12:49

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Barium	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Boron	134	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Calcium	67.9	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
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
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
Radium 226	0.563	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-0.867	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.563	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	60.2	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	11.0	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	345.0	mg/L	02/23/2024	KCWELLS	SM 2540C
pH	7.50	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: 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 # AF90627 **Location:** GW Well WAP-25 **Date:** 02/19/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-25 **Time:** 11:05

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Barium	8.7	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Boron	23.7	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Calcium	66.6	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
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
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
Radium 226	1.72	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-0.281	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.72	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	10.9	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	9.01	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	257.5	mg/L	02/23/2024	KCWELLS	SM 2540C
pH	7.12	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: 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 # AF90628 **Location:** GW Well WAP-26 **Date:** 02/19/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-26 **Time:** 09:44

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Barium	28.9	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Boron	19.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Calcium	16.7	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
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
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
Radium 226	0.853	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-5.48	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.853	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	11.1	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	37.0	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	100.0	mg/L	02/23/2024	KCWELLS	SM 2540C
pH	4.85	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: 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 # AF90629 **Location:** GW Well WAP-26 **Date:** 02/19/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-26 DUP **Time:** 09:49

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Barium	27.1	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/06/2024	SKJACOBS	EPA 6020B
Boron	18.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Calcium	15.9	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
Lithium	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/28/2024	EUROFINS SAV	EPA 7470
Molybdenum	<5.0	ug/L	02/26/2024	SKJACOBS	EPA 6010D
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
Radium 226	0.741	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	0.0686	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.8096	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	02/23/2024	KCWELLS	EPA 300.0
Chloride	11.0	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	37.5	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	88.75	mg/L	02/23/2024	KCWELLS	SM 2540C

Comments:

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

Analysis Validated: Linda Williams Final Validation Date: 4/15/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF90630 **Location:** GW Well WAP-27 **Date:** 02/15/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-27 **Time:** 11:25

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	93.2	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Barium	99.8	ug/L	02/29/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	03/05/2024	SKJACOBS	EPA 6020B
Calcium	116	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
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	2330	ug/L	02/26/2024	SKJACOBS	EPA 6010D
Lithium	8.58	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	148	mg/L	02/23/2024	KCWELLS	EPA 300.0
Sulfate	85.2	mg/L	02/23/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	715.0	mg/L	02/23/2024	KCWELLS	SM 2540C
Radium 226	1.74	pCi/L	03/17/2024	GEL	EPA 903.1 Mod
Radium 228	-2.47	pCi/L	03/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.74	pCi/L	03/21/2024	SJLEVY	EPA 903.1 Mod
pH	6.31	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 # AF98788 **Location:** GW Well WAP-10 **Date:** 05/02/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-10 **Time:** 11:39

Analysis	Result	Units	Test Date	Analyst	Method
Lithium	61.1	ug/L	05/16/2024	SKJACOBS	EPA 6010D
pH	6.65	SU	05/02/2024	JK	

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: 6/3/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF98789 **Location:** GW Well WAP-19 **Date:** 05/02/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-19 **Time:** 13:40

Analysis	Result	Units	Test Date	Analyst	Method
Cobalt	4.3	ug/L	05/09/2024	SKJACOBS	EPA 6020B
Lithium	988	ug/L	05/16/2024	SKJACOBS	EPA 6010D
pH	6.05	SU	05/02/2024	JK	

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: 6/3/24

Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF98790 **Location:** GW Well WAP-23 **Date:** 05/02/2024 **Sample Collector:** WJK/BM

Loc. Code WAP-23 **Time:** 14:26

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	666	ug/L	05/09/2024	SKJACOBS	EPA 6020B
Lithium	341	ug/L	05/16/2024	SKJACOBS	EPA 6010D
pH	6.60	SU	05/02/2024	JK	

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: 6/3/24

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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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03733 **Location:** GW Well WAP-9 **Date:** 07/02/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-9 **Time:** 15:15

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	65.4	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Barium	110	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/22/2024	SKJACOBS	EPA 6020B
Calcium	313	mg/L	07/19/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/19/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	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	4180	ug/L	07/19/2024	SKJACOBS	EPA 6010D
Lithium	84.3	ug/L	07/19/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/19/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/20/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	07/08/2024	KCWELLS	EPA 300.0
Chloride	176	mg/L	07/08/2024	KCWELLS	EPA 300.0
Sulfate	580	mg/L	07/08/2024	KCWELLS	EPA 300.0
Total Dissolved Solids	1542	mg/L	07/08/2024	KRMATHER	SM 2540C
Radium 226	1.40	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	1.78	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.18	pCi/L	08/14/2024	SJLEVY	EPA 903.1 Mod
pH	5.83	SU	07/02/2024	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 # AG03735 **Location:** GW Well WAP-10 **Date:** 07/10/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-10 **Time:** 13:01

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Barium	290	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Calcium	667	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	<5.0	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	10300	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Lithium	70.6	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	868	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Sulfate	969	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	3335	mg/L	07/17/2024	KRMATHER	SM 2540C
Radium 226	4.84	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	1.58	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	6.42	pCi/L	08/14/2024	SJLEVY	EPA 903.1 Mod
pH	6.47	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

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03736 **Location:** GW Well WAP-10 **Date:** 07/10/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-10 DUP **Time:** 13:06

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Barium	285	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Calcium	655	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	5.7	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	10700	ug/L	07/18/2024	SKJACOBS	EPA 6010D
Lithium	72.3	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	859	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Sulfate	967	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	3350	mg/L	07/17/2024	KRMATHER	SM 2540C
Radium 226	5.16	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	4.90	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	10.06	pCi/L	08/14/2024	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: Linda Williams - Manager Analytical Services Validation date: 9/30/24

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03748 **Location:** GW Well WAP-17 **Date:** 07/15/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-17 **Time:** 09:12

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	70.3	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Barium	48.1	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Calcium	315	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	4220	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Lithium	76.9	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Molybdenum	9.38	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/20/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.10	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Chloride	240	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Sulfate	813	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	1566	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	1.34	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	1.61	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.95	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	5.78	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

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03749 **Location:** GW Well WAP-17 **Date:** 07/15/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-17 DUP **Time:** 09:17

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	69.7	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Barium	47.4	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	309	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	5.2	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	4190	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Lithium	77.9	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Molybdenum	9.36	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	240	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Sulfate	813	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	1604	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	1.20	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	0.579	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.779	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 # AG03750 **Location:** GW Well WAP-18 **Date:** 07/15/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-18 **Time:** 11:35

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	117	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Barium	103	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/30/2024	SKJACOBS	EPA 6020B
Calcium	75.5	mg/L	07/24/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Cobalt	0.71	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	811	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Lithium	80.9	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Molybdenum	210	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	46.4	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Sulfate	152	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	382.5	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	0.949	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	2.42	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.369	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	5.37	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 # AG03751 **Location:** GW Well WAP-19 **Date:** 07/22/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-19 **Time:** 11:47

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	147	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Barium	77.7	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/09/2024	SKJACOBS	EPA 6020B
Calcium	711	mg/L	08/08/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Cobalt	0.89	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/09/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/08/2024	SKJACOBS	EPA 6020B
Boron	4660	ug/L	07/29/2024	SKJACOBS	EPA 6010D
Lithium	421	ug/L	07/29/2024	SKJACOBS	EPA 6010D
Molybdenum	13.4	ug/L	07/29/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	0.34	mg/L	08/02/2024	GEL	EPA 300.0
Chloride	31.1	mg/L	08/01/2024	GEL	EPA 300.0
Sulfate	1810	mg/L	08/02/2024	GEL	EPA 300.0
Total Dissolved Solids	2891	mg/L	07/24/2024	KRMATHER	SM 2540C
Radium 226	2.06	pCi/L	08/23/2024	GEL	EPA 903.1 Mod
Radium 228	2.63	pCi/L	08/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	4.69	pCi/L	08/29/2024	SJLEVY	EPA 903.1 Mod
pH	6.34	SU	07/22/2024	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 # AG03754 **Location:** GW Well WAP-21 **Date:** 07/15/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-21 **Time:** 13:32

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Barium	44.7	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Calcium	114	mg/L	07/24/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Cobalt	0.64	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Lead	2.5	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	3170	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Fluoride	<0.10	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Chloride	98.9	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Sulfate	<2.00	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	562.5	mg/L	07/17/2024	KRMATHER	SM 2540C
Radium 226	1.37	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	1.37	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.74	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.24	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 # AG05587 **Location:** GW Well WAP-21 **Date:** 07/16/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-21 Resample **Time:** 14:45

Analysis	Result	Units	Test Date	Analyst	Method
Mercury	<0.2	ug/L	07/22/2024	EUROFINS SAV	EPA 7470

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: 12/17/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03755 **Location:** GW Well WAP-22 **Date:** 07/15/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-22 **Time:** 12:26

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Barium	73.6	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Calcium	190	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
Selenium	<10.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/24/2024	SKJACOBS	EPA 6020B
Boron	1290	ug/L	07/23/2024	SKJACOBS	EPA 6010D
Lithium	13.3	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	141	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Sulfate	140	mg/L	07/22/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	830.0	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	2.07	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	0.264	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.334	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.83	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

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03756 **Location:** GW Well WAP-23 **Date:** 07/16/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-23 **Time:** 13:15

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	775	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Barium	190	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Calcium	402	mg/L	08/20/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Antimony	5.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Boron	5270	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	342	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/22/2024	EUROFINS SAV	EPA 7470
Fluoride	0.48	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	301	mg/L	07/21/2024	GEL	EPA 300.0
Sulfate	513	mg/L	07/21/2024	GEL	EPA 300.0
Total Dissolved Solids	1665	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	2.12	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	3.43	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	5.55	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.52	SU	07/16/2024	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 # AG03757 **Location:** GW Well WAP-24 **Date:** 07/10/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-24 **Time:** 14:13

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Barium	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Calcium	59.3	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	<5.0	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	107	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	07/20/2024	EUROFINS SAV	EPA 7470
Radium 226	0.330	pCi/L	08/07/2024	GEL	EPA 903.1 Mod
Radium 228	1.01	pCi/L	08/02/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.34	pCi/L	08/14/2024	SJLEVY	EPA 903.1 Mod
Fluoride	<0.10	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Chloride	59.7	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Sulfate	5.97	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	293.8	mg/L	07/17/2024	KRMATHER	SM 2540C
pH	7.53	SU	07/10/2024	ZM/BM	

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

Sample Validated: Linda Williams - Manager, Analytical Services

Final Validation Date: 9/30/24

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03758 **Location:** GW Well WAP-25 **Date:** 07/11/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-25 **Time:** 14:16

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Barium	10.1	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Calcium	67.7	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
Selenium	<10.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	07/23/2024	SKJACOBS	EPA 6020B
Boron	23.8	ug/L	07/22/2024	SKJACOBS	EPA 6010D
Lithium	5.39	ug/L	07/22/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/22/2024	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	11.6	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Sulfate	<2.0	mg/L	07/19/2024	LCWILLIA	EPA 300.0
Total Dissolved Solids	238.8	mg/L	07/17/2024	KRMATHER	SM 2540C
Radium 226	0.474	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	1.34	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.814	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	7.03	SU	07/11/2024	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 # AG03759 **Location:** GW Well WAP-26 **Date:** 07/23/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-26 **Time:** 10:42

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Barium	32.1	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Calcium	13.9	mg/L	08/20/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Boron	20.1	ug/L	07/30/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	08/02/2024	GEL	EPA 300.0
Chloride	9.60	mg/L	08/02/2024	GEL	EPA 300.0
Sulfate	36.9	mg/L	08/02/2024	GEL	EPA 300.0
Total Dissolved Solids	91.25	mg/L	07/26/2024	KRMATHER	SM 2540C
Radium 226	0.683	pCi/L	08/23/2024	GEL	EPA 903.1 Mod
Radium 228	0.326	pCi/L	08/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.01	pCi/L	08/29/2024	SJLEVY	EPA 903.1 Mod
pH	4.83	SU	07/23/2024	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

One Riverwood Drive
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Moncks Corner, SC 29461-2901
(843) 761-8000

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG03760 **Location:** GW Well WAP-26 **Date:** 07/23/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-26 DUP **Time:** 10:47

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Barium	31.7	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Calcium	14.2	mg/L	08/13/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/13/2024	SKJACOBS	EPA 6020B
Boron	20.6	ug/L	07/30/2024	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/30/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	08/01/2024	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	08/02/2024	GEL	EPA 300.0
Chloride	10.0	mg/L	08/02/2024	GEL	EPA 300.0
Sulfate	37.2	mg/L	08/02/2024	GEL	EPA 300.0
Total Dissolved Solids	71.25	mg/L	07/26/2024	KRMATHER	SM 2540C
Radium 226	1.27	pCi/L	08/23/2024	GEL	EPA 903.1 Mod
Radium 228	1.20	pCi/L	08/13/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.47	pCi/L	08/29/2024	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 # AG03761 **Location:** GW Well WAP-27 **Date:** 07/16/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-27 **Time:** 12:16

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	122	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Barium	89.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Calcium	121	mg/L	08/20/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Antimony	5.7	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Boron	2240	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	16.3	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/22/2024	EUROFINS SAV	EPA 7470
Fluoride	0.35	mg/L	08/06/2024	GEL	EPA 300.0
Chloride	134	mg/L	07/20/2024	GEL	EPA 300.0
Sulfate	82.0	mg/L	07/20/2024	GEL	EPA 300.0
Total Dissolved Solids	683.8	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	1.19	pCi/L	08/14/2024	GEL	EPA 903.1 Mod
Radium 228	1.53	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	2.72	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.13	SU	07/16/2024	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 # AG03765 **Location:** GW Well WAP-30 **Date:** 07/16/2024 **Sample Collector:** ZM/BM

Loc. Code WAP-30 **Time:** 14:16

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Barium	92.6	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Calcium	175	mg/L	08/20/2024	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Antimony	6.8	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	08/20/2024	SKJACOBS	EPA 6020B
Boron	669	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Lithium	8.42	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Molybdenum	20.1	ug/L	07/25/2024	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	07/22/2024	EUROFINS SAV	EPA 7470
Fluoride	0.12	mg/L	08/07/2024	GEL	EPA 300.0
Chloride	180	mg/L	07/21/2024	GEL	EPA 300.0
Sulfate	108	mg/L	07/21/2024	GEL	EPA 300.0
Total Dissolved Solids	931.2	mg/L	07/18/2024	KRMATHER	SM 2540C
Radium 226	0.535	pCi/L	08/13/2024	GEL	EPA 903.1 Mod
Radium 228	-0.284	pCi/L	08/07/2024	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.535	pCi/L	08/19/2024	SJLEVY	EPA 903.1 Mod
pH	6.71	SU	07/16/2024	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
Sample ID: 654972001
Matrix: GW
Collect Date: 07-FEB-24 10:07
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	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	Lc/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 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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

GEL LABORATORIES LLC
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Certificate of Analysis

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 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
Sample ID: 654972005
Matrix: GW
Collect Date: 06-FEB-24 11:19
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		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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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	Lc/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 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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: 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	Project:	SOOP00119
Sample ID:	654972008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	06-FEB-24 14:12		
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		2.16	+/-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	Lc/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 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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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

QC Summary

Report Date: March 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										

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SHevy	35594	2/9/24	0951		GEL	2/9/24	0951
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 indicates radioactive [illegible]
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 indicates [illegible]
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-C01 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 13, 2024

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

Re: ABS Lab Analytical
Work Order: 655802

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 16, 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,

Max Gloth for
Julie Robinson
Project Manager

Purchase Order: 125915/JM02.08.G01.1/36500
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: 655802 GEL Work Order: 655802

The Qualifiers in this report are defined as follows:

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

** Analyte is a Tracer compound

** Analyte is a surrogate compound

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

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

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

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

Reviewed by 

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

Certificate of Analysis

Report Date: March 13, 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:	AF90636	Project:	SOOP00119
Sample ID:	655802001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-FEB-24 10:13		
Receive Date:	16-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	+/-0.822	1.16	3.00	pCi/L			JE1	03/08/24	0946	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.47	+/-0.594	0.456	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			91.5	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 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:	AF90641	Project:	SOOP00119
Sample ID:	655802002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-FEB-24 14:05		
Receive Date:	16-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	-0.125	+/-0.626	1.26	3.00	pCi/L			JE1	03/08/24	0946	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.548	+/-0.327	0.279	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			85.7	(15%-125%)

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

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 13, 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:	AF90620	Project:	SOOP00119
Sample ID:	655802003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-FEB-24 12:45		
Receive Date:	16-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	0.211	+/-0.607	1.12	3.00	pCi/L			JE1	03/08/24	0946	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.591	+/-0.416	0.528	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			93.1	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90644	Project:	SOOP00119
Sample ID:	655802004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-24 09:48		
Receive Date:	16-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	0.781	+/-0.759	1.24	3.00	pCi/L			JE1	03/08/24	0946	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.169	+/-0.241	0.421	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			84.9	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90645	Project:	SOOP00119
Sample ID:	655802005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-24 09:53		
Receive Date:	16-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	0.515	+/-0.562	0.927	3.00	pCi/L			JE1	03/08/24	0946	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.503	+/-0.356	0.438	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			91.8	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90621	Project:	SOOP00119
Sample ID:	655802006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-24 11:05		
Receive Date:	16-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		1.78	+/-0.945	1.35	3.00	pCi/L			JE1	03/08/24	0946	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.922	+/-0.428	0.291	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			88.5	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90638	Project:	SOOP00119
Sample ID:	655802007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-FEB-24 10:10		
Receive Date:	16-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	0.639	+/-1.00	1.73	3.00	pCi/L			JE1	03/08/24	0947	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.33	+/-0.579	0.530	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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"			80.2	(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 13, 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:	AF90639	Project:	SOOP00119
Sample ID:	655802008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-FEB-24 11:05		
Receive Date:	16-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	0.184	+/-0.870	1.60	3.00	pCi/L			JE1	03/08/24	0947	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.491	+/-0.345	0.338	1.00	pCi/L			MJ2	03/13/24	0753	2571365	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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: March 13, 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:	AF90640	Project:	SOOP00119
Sample ID:	655802009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-FEB-24 11:10		
Receive Date:	16-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	1.24	+/-1.04	1.67	3.00	pCi/L			JE1	03/08/24	0947	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.528	+/-0.374	0.441	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			85.3	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90635	Project:	SOOP00119
Sample ID:	655802010	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-FEB-24 12:19		
Receive Date:	16-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	0.394	+/-0.951	1.70	3.00	pCi/L			JE1	03/08/24	0947	2572476	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.24	+/-0.502	0.386	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			78.3	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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QC Summary

Report Date: March 13, 2024

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

Contact: **Ms. Jeanette Gilmetti**

Workorder: **655802**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2572476										
QC1205657971 655802001 DUP										
Radium-228		1.51		1.40	pCi/L	7.46		(0% - 100%)	JE1	03/08/24 09:46
	Uncertainty	+/-0.822		+/-0.907						
QC1205657972 LCS										
Radium-228	73.2			66.6	pCi/L		91	(75%-125%)		03/08/24 09:46
	Uncertainty			+/-4.09						
QC1205657970 MB										
Radium-228			U	0.608	pCi/L					03/08/24 09:46
	Uncertainty			+/-0.873						
Rad Ra-226										
Batch 2571365										
QC1205655728 655802001 DUP										
Radium-226		1.47		1.29	pCi/L	12.8		(0% - 100%)	MJ2	03/13/24 09:02
	Uncertainty	+/-0.594		+/-0.569						
QC1205655730 LCS										
Radium-226	26.9			25.2	pCi/L		93.7	(75%-125%)		03/13/24 09:02
	Uncertainty			+/-2.32						
QC1205655727 MB										
Radium-226			U	0.112	pCi/L					03/13/24 09:02
	Uncertainty			+/-0.191						
QC1205655729 655802001 MS										
Radium-226	135	1.47		110	pCi/L		80.5	(75%-125%)		03/13/24 09:02
	Uncertainty	+/-0.594		+/-9.77						

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: **655802**

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 #: 655802

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2572476

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

GEL Sample ID#	Client Sample Identification
655802001	AF90636
655802002	AF90641
655802003	AF90620
655802004	AF90644
655802005	AF90645
655802006	AF90621
655802007	AF90638
655802008	AF90639
655802009	AF90640
655802010	AF90635
1205657970	Method Blank (MB)
1205657971	655802001(AF90636) Sample Duplicate (DUP)
1205657972	Laboratory Control Sample (LCS)

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

Data Summary:

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

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2571365

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

GEL Sample ID#	Client Sample Identification
655802001	AF90636
655802002	AF90641
655802003	AF90620
655802004	AF90644
655802005	AF90645
655802006	AF90621
655802007	AF90638
655802008	AF90639

655802009	AF90640
655802010	AF90635
1205655727	Method Blank (MB)
1205655728	655802001(AF90636) Sample Duplicate (DUP)
1205655729	655802001(AF90636) Matrix Spike (MS)
1205655730	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, 1205655729 (AF90636MS), 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.

655802

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 3 / 15 / 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.E01.1 / 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		
AF90636	WLF-A1-1	2/13/24	1013	WJTK BM	2	P	G	GW	2		X	X		
AF90641	WLF-A1-5	2/12/24	1405	〃	〃	〃	〃	〃	〃		〃	〃		
20	WAP-18	〃	1245	〃	〃	〃	〃	〃	〃		〃	〃		
44	WLF-A2-6	2/8/24	0948	〃	〃	〃	〃	〃	〃		〃	〃		
45	WLF-A2-6 DUP	〃	0953	〃	〃	〃	〃	〃	〃		〃	〃		
21	WAP-19	〃	1105	〃	〃	〃	〃	〃	〃		〃	〃		
AF90638	WLF-A1-3	2/14/24	1010	〃	〃	〃	〃	〃	〃		〃	〃		
39	WLF-A1-4	〃	1105	〃	〃	〃	〃	〃	〃		〃	〃		
40	WLF-A1-4 DUP	〃	1110	〃	〃	〃	〃	〃	〃		〃	〃		
35	WBW-A1-1	〃	1219	〃	〃	〃	〃	〃	〃		〃	〃		

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	36851	2/16/24	0925	[signature]	GEL	2/16/24	0925
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
[signature]	GEL	2/16/24	1450	[signature]	GEL	2/16/24	1450
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

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

☐ METALS (all)

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

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

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

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

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

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

NPDES
☐ Oil & Grease
☐ As
☐ TSS

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

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

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP	SDG/AR/COC/Work Order: 655802
Received By: QG	Date Received: 2/16/24
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: 12°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):

PM (or PMA) review: Initials MCR Date 2/19/24 Page 1 of 1

List of current GEL Certifications as of 13 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 13, 2024

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

Re: ABS Lab Analytical
Work Order: 655804

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 16, 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,

Max Gloth for
Julie Robinson
Project Manager

Purchase Order: 125915/JM02.09.G01.1/36500
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: 655804 GEL Work Order: 655804

The Qualifiers in this report are defined as follows:

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

** Analyte is a Tracer compound

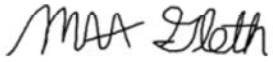
** Analyte is a surrogate compound

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

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

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

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

Reviewed by 

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

Certificate of Analysis

Report Date: March 13, 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:	AF90624	Project:	SOOP00119
Sample ID:	655804001	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	12-FEB-24 11:47		
Receive Date:	16-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	-0.535	+/-0.788	1.64	3.00	pCi/L			JE1	03/08/24	1059	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.35	+/-0.542	0.322	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			82.3	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 13, 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:	AF90608	Project:	SOOP00119
Sample ID:	655804002	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-FEB-24 14:04		
Receive Date:	16-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	+/-0.890	1.35	3.00	pCi/L			JE1	03/08/24	1100	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.578	+/-0.333	0.340	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			81.9	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90609	Project:	SOOP00119
Sample ID:	655804003	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	14-FEB-24 14:09		
Receive Date:	16-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	1.10	+/-1.01	1.63	3.00	pCi/L			JE1	03/08/24	1100	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.320	+/-0.323	0.506	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			64.3	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90642	Project:	SOOP00119
Sample ID:	655804004	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-FEB-24 11:35		
Receive Date:	16-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	1.83	+/-1.29	2.03	3.00	pCi/L			JE1	03/12/24	1000	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.03	+/-0.460	0.429	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			71.8	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 13, 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:	AF90643	Project:	SOOP00119
Sample ID:	655804005	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-FEB-24 12:41		
Receive Date:	16-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		4.91	+/-1.51	1.89	3.00	pCi/L			JE1	03/12/24	1000	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.0278	+/-0.261	0.585	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			72.6	(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 13, 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:	AF90618	Project:	SOOP00119
Sample ID:	655804006	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-FEB-24 13:48		
Receive Date:	16-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	1.29	+/-1.11	1.79	3.00	pCi/L			JE1	03/08/24	1100	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.899	+/-0.461	0.395	1.00	pCi/L			MJ2	03/13/24	0826	2571365	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"			80	(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 13, 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:	AF90619	Project:	SOOP00119
Sample ID:	655804007	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	13-FEB-24 13:53		
Receive Date:	16-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	0.681	+/-0.716	1.18	3.00	pCi/L			JE1	03/08/24	1100	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.878	+/-0.468	0.450	1.00	pCi/L			MJ2	03/13/24	0902	2571365	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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: March 13, 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:	AF90598	Project:	SOOP00119
Sample ID:	655804008	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-24 14:39		
Receive Date:	16-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		1.44	+/-0.813	1.17	3.00	pCi/L			JE1	03/08/24	1100	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.879	+/-0.454	0.471	1.00	pCi/L			MJ2	03/13/24	0902	2571365	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"			90.8	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 13, 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:	AF90637	Project:	SOOP00119
Sample ID:	655804009	Client ID:	SOOP001
Matrix:	GW		
Collect Date:	08-FEB-24 13:20		
Receive Date:	16-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		1.26	+/-0.783	1.14	3.00	pCi/L			JE1	03/08/24	1100	2572465	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.02	+/-0.672	0.333	1.00	pCi/L			MJ2	03/13/24	0902	2571365	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"			86.9	(15%-125%)

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

Column headers are defined as follows:

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

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

QC Summary

Report Date: March 13, 2024

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

Contact: **Ms. Jeanette Gilmetti**

Workorder: **655804**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Rad Gas Flow										
Batch 2572465										
QC1205657933 655804001 DUP										
Radium-228	U	-0.535	U	0.00679	pCi/L	N/A		N/A	JE1	03/08/24 11:00
	Uncertainty	+/-0.788		+/-0.454						
QC1205657934 LCS										
Radium-228	73.0			63.6	pCi/L		87.1	(75%-125%)		03/08/24 11:00
	Uncertainty			+/-3.85						
QC1205657932 MB										
Radium-228			U	1.35	pCi/L					03/08/24 12:18
	Uncertainty			+/-1.28						
Rad Ra-226										
Batch 2571365										
QC1205655728 655802001 DUP										
Radium-226		1.47		1.29	pCi/L	12.8		(0% - 100%)	MJ2	03/13/24 09:02
	Uncertainty	+/-0.594		+/-0.569						
QC1205655730 LCS										
Radium-226	26.9			25.2	pCi/L		93.7	(75%-125%)		03/13/24 09:02
	Uncertainty			+/-2.32						
QC1205655727 MB										
Radium-226			U	0.112	pCi/L					03/13/24 09:02
	Uncertainty			+/-0.191						
QC1205655729 655802001 MS										
Radium-226	135	1.47		110	pCi/L		80.5	(75%-125%)		03/13/24 09:02
	Uncertainty	+/-0.594		+/-9.77						

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: **655804**

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 #: 655804

Product: **GFPC, Ra228, Liquid**
Analytical Method: EPA 904.0/SW846 9320 Modified
Analytical Procedure: GL-RAD-A-063 REV# 5
Analytical Batch: 2572465

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

GEL Sample ID#	Client Sample Identification
655804001	AF90624
655804002	AF90608
655804003	AF90609
655804004	AF90642
655804005	AF90643
655804006	AF90618
655804007	AF90619
655804008	AF90598
655804009	AF90637
1205657932	Method Blank (MB)
1205657933	655804001(AF90624) Sample Duplicate (DUP)
1205657934	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Recounts
Sample 1205657932 (MB) was recounted due to a suspected blank false positive. The recount is reported. Samples 655804004 (AF90642) and 655804005 (AF90643) were re-eluted and recounted to verify sample results. The recounts are reported.

Product: **Lucas Cell, Ra226, Liquid**
Analytical Method: EPA 903.1 Modified
Analytical Procedure: GL-RAD-A-008 REV# 15
Analytical Batch: 2571365

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

GEL Sample ID#	Client Sample Identification
655804001	AF90624
655804002	AF90608

655804003	AF90609
655804004	AF90642
655804005	AF90643
655804006	AF90618
655804007	AF90619
655804008	AF90598
655804009	AF90637
1205655727	Method Blank (MB)
1205655728	655802001(AF90636) Sample Duplicate (DUP)
1205655729	655802001(AF90636) Matrix Spike (MS)
1205655730	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, 1205655729 (AF90636MS), 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.

655804

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 3 / 15 / 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.G001.1 / 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		
AF90624	WAP-22	2/12/24	1147	WJK BM	2	P	G	GW	2		X	X		
AF90608	WAP-12	2/14/24	1404											
AF90609	WAP-12 DUP	1	1409											
AF90642	WLF-A2-1	2/13/24	1135											
43	WLF-A2-2		1241											
18	WAP-17		1348											
19	WAP-17 DUP		1353											
AF90598	WAP-3	2/8/24	1439											
AF90637	WLF-A1-2	2/8/24	1320											

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
	36851	2/16/24	0925		GEL	2/16/24	0925
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
		2/16/24	1550		GEL	2/16/24	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: SOOP	SDG/AR/COC/Work Order: 655804
Received By: QG	Date Received: 2/16/24
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: 12°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):

PM (or PMA) review: Initials MCD Date 2/19/24 Page 1 of 1

List of current GEL Certifications as of 13 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	Lc/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:	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	Lc/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:	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	Lc/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:	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	Lc/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:	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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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

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

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

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

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

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Company :	Santee Cooper
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Contact:	Ms. Jeanette Gilmetti
Project:	ABS Lab Analytical

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

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

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

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

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

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

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

QC Summary

Report Date: March 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
	666	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		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: SOOP	**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

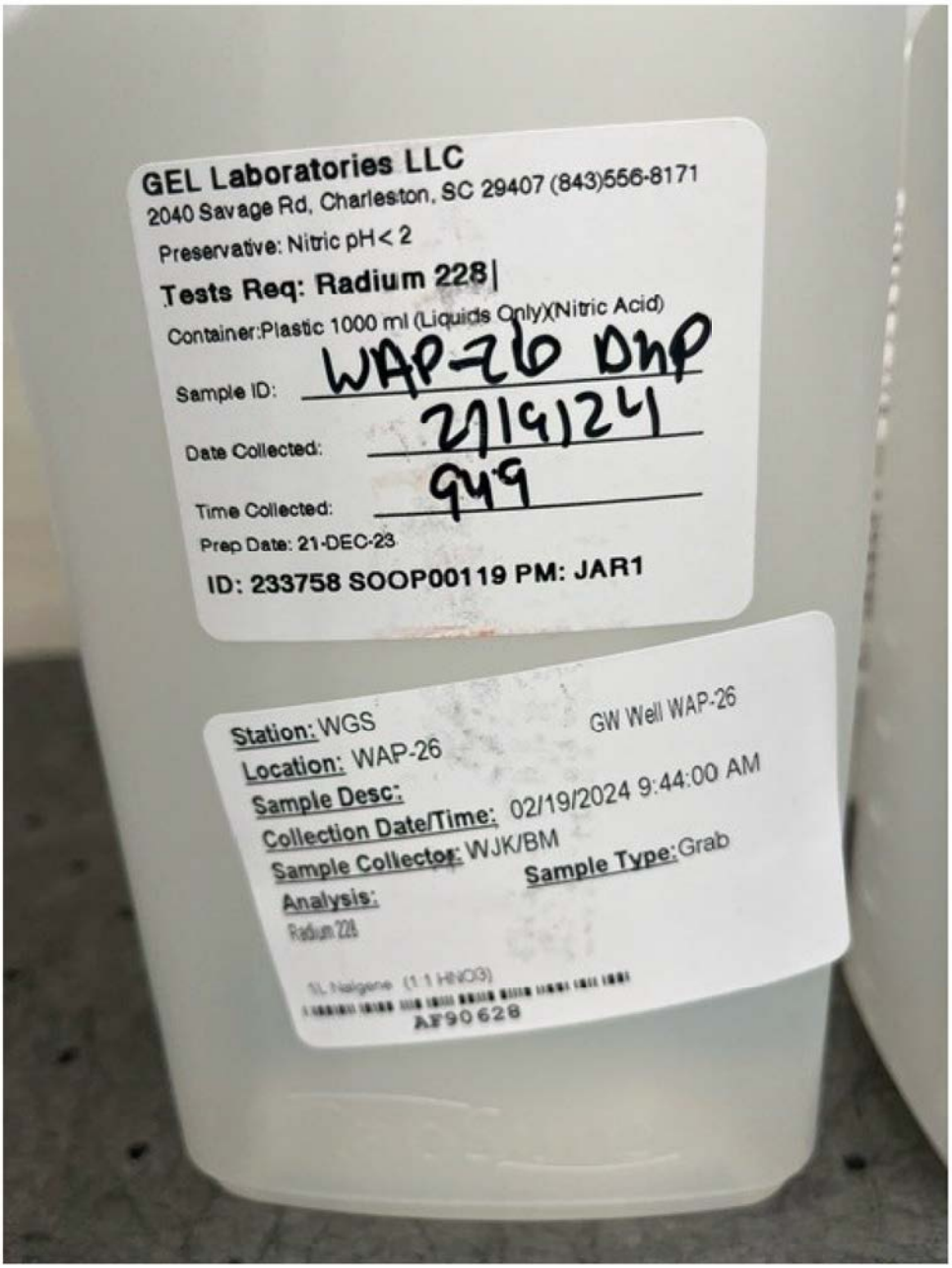
From: Jessica Ward <Jessica.Ward@gel.com>
Sent: Saturday, February 24, 2024 12:23 PM
To: Brown, Sherri <sherri.brown@santeecooper.com>
Cc: Team Robinson <Team.Robinson@gel.com>
Subject: Question about container labels for samples for Ra226/Ra228 delivered Friday 02/23

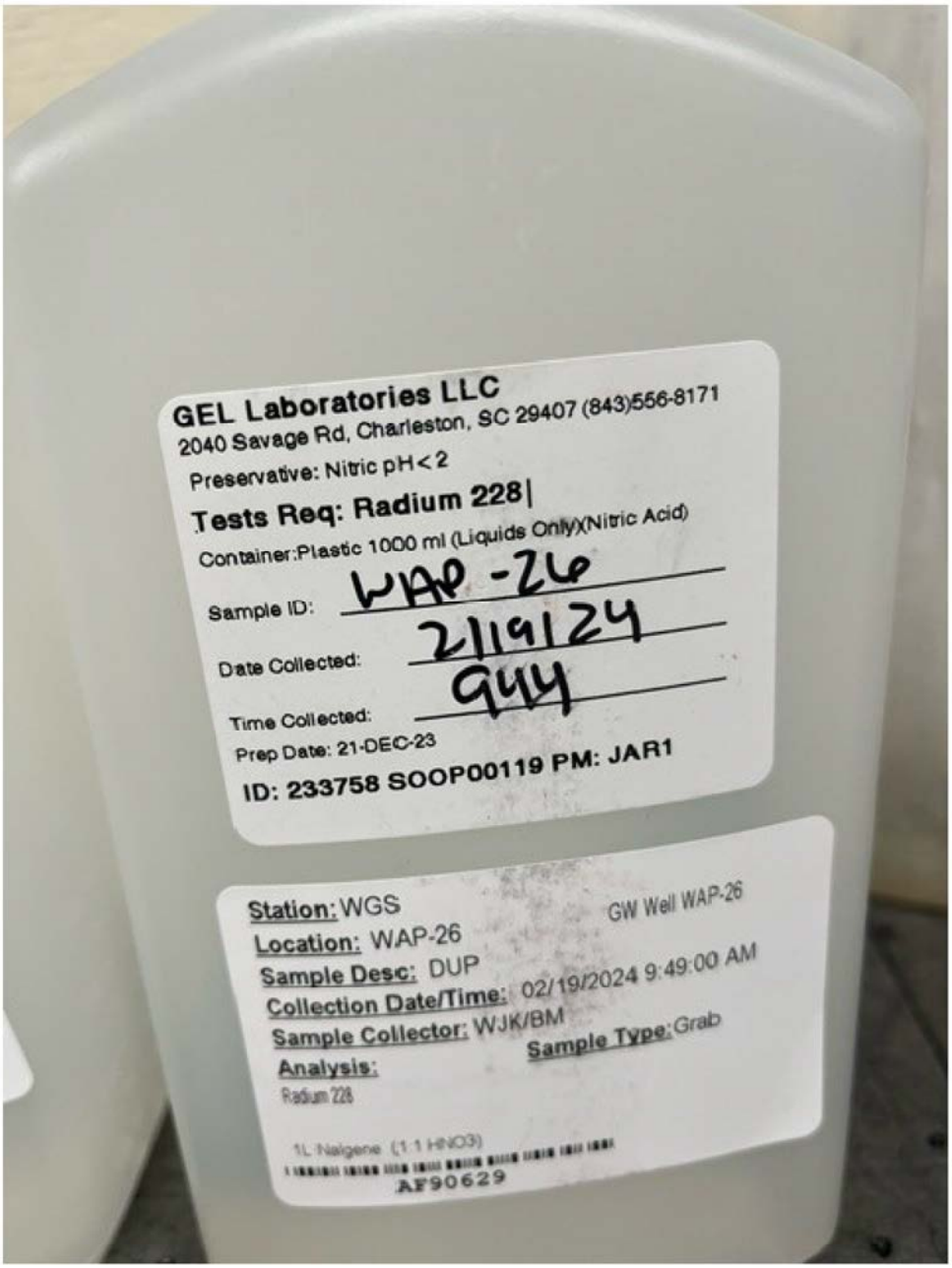
Sherri,
Attached are photos of the containers received for Ra226/228 analysis brought by courier on Friday 02/23. The containers for Sample ID AF90628 WAP-26 & AF90629 WAP-26 DUP have the labels that are switched on the containers (there is a DUP label on the non-DUP) for example. The receiving team 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?

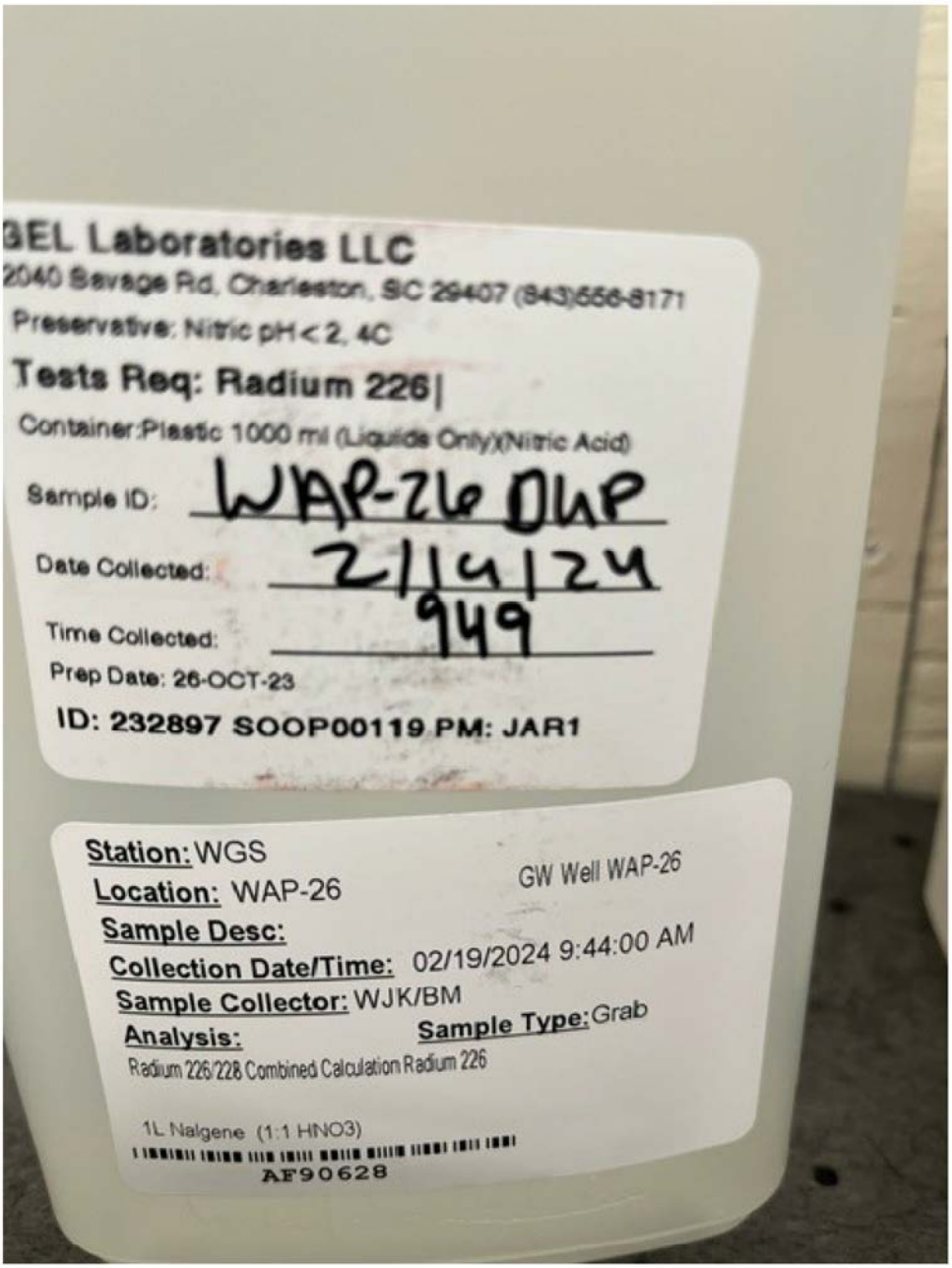
Thank you,
Jessica Ward
Project Manager Assistant

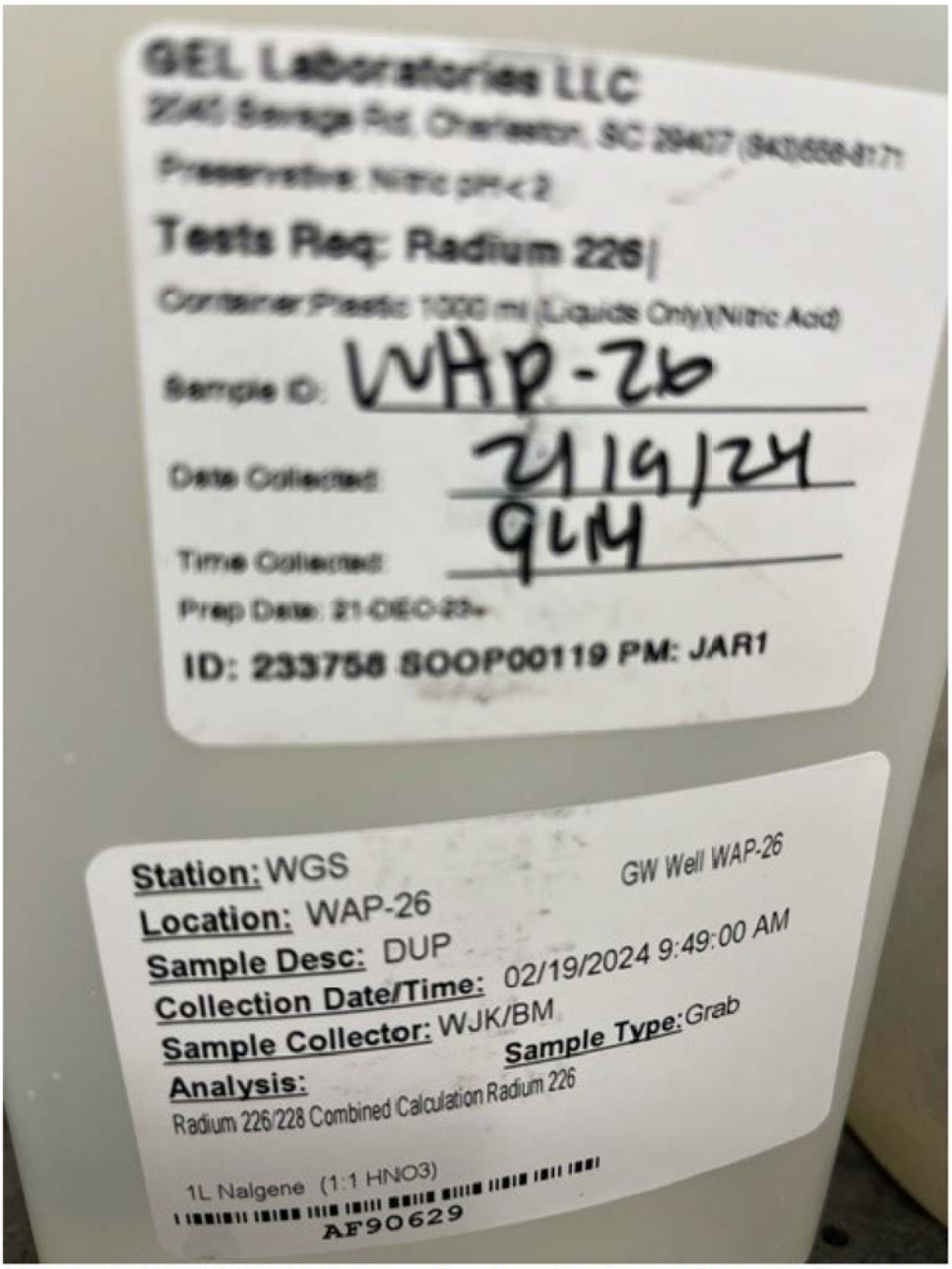
GEL Laboratories LLC EST. 1981

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
Sample Type: Grab
Analysis:
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 Only)(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 DUP
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

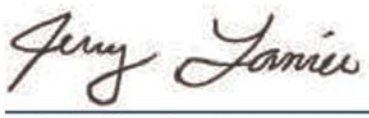
See page two for job notes and contact information.

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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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

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

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	1067											
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 2/27/2024 12:48:25 PM

JOB DESCRIPTION

125915/JM02.08.G01.1/36500

JOB NUMBER

680-246968-1

Eurofins Savannah
5102 LaRoche Avenue
Savannah GA 31404

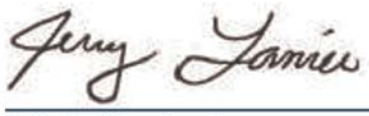
See page two for job notes and contact information.

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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2/27/2024 12:48:25 PM

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

Table of Contents

Job ID: 680-246968-1 — Eurofins Savannah

Job Narrative
680-246968-1

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.

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

Receipt
The samples were received on 2/21/2024 10:05 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 14.2°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.G01.1/36500

Job ID: 680-246968-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-246968-1	AF90642	Water	02/13/24 11:35	02/21/24 10:05
680-246968-2	AF90643	Water	02/13/24 12:41	02/21/24 10:05
680-246968-3	AF90618	Water	02/13/24 13:48	02/21/24 10:05
680-246968-4	AF90619	Water	02/13/24 13:53	02/21/24 10:05
680-246968-5	AF90641	Water	02/12/24 14:05	02/21/24 10:05
680-246968-6	AF90636	Water	02/13/24 10:13	02/21/24 10:05
680-246968-7	AF90638	Water	02/14/24 10:10	02/21/24 10:05
680-246968-8	AF90639	Water	02/14/24 11:05	02/21/24 10:05
680-246968-9	AF90640	Water	02/14/24 11:10	02/21/24 10:05
680-246968-10	AF90635	Water	02/14/24 12:19	02/21/24 10:05
680-246968-11	AF90608	Water	02/14/24 14:04	02/21/24 10:05
680-246968-12	AF90609	Water	02/14/24 14:09	02/21/24 10:05
680-246968-13	AF90630	Water	02/15/24 11:25	02/21/24 10:05
680-246968-14	AF90623	Water	02/15/24 12:20	02/21/24 10:05
680-246968-15	AF90633	Water	02/15/24 14:12	02/21/24 10:05
680-246968-16	AF90625	Water	02/15/24 10:35	02/21/24 10:05
680-246968-17	AF90613	Water	02/15/24 13:31	02/21/24 10:05
680-246968-18	AF90620	Water	02/12/24 12:45	02/21/24 10:05
680-246968-19	AF90624	Water	02/12/24 11:47	02/21/24 10:05

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

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/JM02.08.G01.1/36500

Job ID: 680-246968-1

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
Job ID: 680-246968-1
Project/Site: 125915/JM02.08.G01.1/36500

Client Sample ID: AF90642 **Lab Sample ID: 680-246968-1**

No Detections.

Client Sample ID: AF90643 **Lab Sample ID: 680-246968-2**

No Detections.

Client Sample ID: AF90618 **Lab Sample ID: 680-246968-3**

No Detections.

Client Sample ID: AF90619 **Lab Sample ID: 680-246968-4**

No Detections.

Client Sample ID: AF90641 **Lab Sample ID: 680-246968-5**

No Detections.

Client Sample ID: AF90636 **Lab Sample ID: 680-246968-6**

No Detections.

Client Sample ID: AF90638 **Lab Sample ID: 680-246968-7**

No Detections.

Client Sample ID: AF90639 **Lab Sample ID: 680-246968-8**

No Detections.

Client Sample ID: AF90640 **Lab Sample ID: 680-246968-9**

No Detections.

Client Sample ID: AF90635 **Lab Sample ID: 680-246968-10**

No Detections.

Client Sample ID: AF90608 **Lab Sample ID: 680-246968-11**

No Detections.

Client Sample ID: AF90609 **Lab Sample ID: 680-246968-12**

No Detections.

Client Sample ID: AF90630 **Lab Sample ID: 680-246968-13**

No Detections.

Client Sample ID: AF90623 **Lab Sample ID: 680-246968-14**

No Detections.

Client Sample ID: AF90633 **Lab Sample ID: 680-246968-15**

No Detections.

Client Sample ID: AF90625 **Lab Sample ID: 680-246968-16**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Detection Summary

Client: South Carolina Public Service Authority
Job ID: 680-246968-1
Project/Site: 125915/JM02.08.G01.1/36500

Client Sample ID: AF90613
Lab Sample ID: 680-246968-17

No Detections.

Client Sample ID: AF90620
Lab Sample ID: 680-246968-18

No Detections.

Client Sample ID: AF90624
Lab Sample ID: 680-246968-19

No Detections.

This Detection Summary does not include radiochemical test results.

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90642
Date Collected: 02/13/24 11:35
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-1
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		02/22/24 15:20	02/23/24 17:33	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90643
Date Collected: 02/13/24 12:41
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-2
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		02/22/24 15:20	02/23/24 17:39	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90618
Date Collected: 02/13/24 13:48
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-3
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		02/22/24 15:20	02/23/24 17:42	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90619
Date Collected: 02/13/24 13:53
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-4
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		02/22/24 15:20	02/23/24 17:44	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90641
Date Collected: 02/12/24 14:05
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-5
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		02/22/24 15:20	02/23/24 17:46	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90636
Date Collected: 02/13/24 10:13
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-6
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		02/22/24 15:20	02/23/24 17:48	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90638
Date Collected: 02/14/24 10:10
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-7
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		02/22/24 15:20	02/23/24 17:50	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90639
Date Collected: 02/14/24 11:05
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-8
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		02/22/24 15:20	02/23/24 17:52	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90640
Date Collected: 02/14/24 11:10
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-9
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		02/22/24 15:20	02/23/24 17:54	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90635
Date Collected: 02/14/24 12:19
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-10
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		02/22/24 15:20	02/23/24 17:56	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90608
Date Collected: 02/14/24 14:04
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-11
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		02/26/24 11:43	02/26/24 17:12	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90609
Date Collected: 02/14/24 14:09
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-12
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		02/26/24 11:43	02/26/24 17:18	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90630
Date Collected: 02/15/24 11:25
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-13
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/26/24 11:43	02/26/24 17:20	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90623
Date Collected: 02/15/24 12:20
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-14
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/26/24 11:43	02/26/24 17:22	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90633
Date Collected: 02/15/24 14:12
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-15
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/26/24 11:43	02/26/24 17:24	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90625
Date Collected: 02/15/24 10:35
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-16
Matrix: Water

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/26/24 11:43	02/26/24 17:26	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90613
Date Collected: 02/15/24 13:31
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-17
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		02/26/24 11:43	02/26/24 17:32	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90620
Date Collected: 02/12/24 12:45
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-18
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		02/26/24 11:43	02/26/24 17:34	1

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90624
Date Collected: 02/12/24 11:47
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-19
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		02/26/24 11:43	02/26/24 17:36	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-824088/1-A
Matrix: Water
Analysis Batch: 824292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 824088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/22/24 15:20	02/23/24 17:00	1

Lab Sample ID: LCS 680-824088/2-A
Matrix: Water
Analysis Batch: 824292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 824088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.384		ug/L		95	80 - 120

Lab Sample ID: 680-246896-E-1-E MS
Matrix: Water
Analysis Batch: 824292

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 824088

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U F1	1.00	0.5773	F1	ug/L		58	80 - 120

Lab Sample ID: 680-246896-E-1-F MSD
Matrix: Water
Analysis Batch: 824292

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 824088

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U F1	1.00	0.6176	F1	ug/L		62	80 - 120	7	20

Lab Sample ID: MB 680-824551/1-A
Matrix: Water
Analysis Batch: 824780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 824551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/26/24 11:43	02/26/24 17:08	1

Lab Sample ID: LCS 680-824551/2-A
Matrix: Water
Analysis Batch: 824780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 824551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.120		ug/L		85	80 - 120

Lab Sample ID: 680-246968-11 MS
Matrix: Water
Analysis Batch: 824780

Client Sample ID: AF90608
Prep Type: Total/NA
Prep Batch: 824551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U	1.00	0.8729		ug/L		87	80 - 120

Lab Sample ID: 680-246968-11 MSD
Matrix: Water
Analysis Batch: 824780

Client Sample ID: AF90608
Prep Type: Total/NA
Prep Batch: 824551

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	0.8121		ug/L		81	80 - 120	7	20

Metals

Prep Batch: 824088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246968-1	AF90642	Total/NA	Water	7470A	
680-246968-2	AF90643	Total/NA	Water	7470A	
680-246968-3	AF90618	Total/NA	Water	7470A	
680-246968-4	AF90619	Total/NA	Water	7470A	
680-246968-5	AF90641	Total/NA	Water	7470A	
680-246968-6	AF90636	Total/NA	Water	7470A	
680-246968-7	AF90638	Total/NA	Water	7470A	
680-246968-8	AF90639	Total/NA	Water	7470A	
680-246968-9	AF90640	Total/NA	Water	7470A	
680-246968-10	AF90635	Total/NA	Water	7470A	
MB 680-824088/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-824088/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-246896-E-1-E MS	Matrix Spike	Total/NA	Water	7470A	
680-246896-E-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 824292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246968-1	AF90642	Total/NA	Water	7470A	824088
680-246968-2	AF90643	Total/NA	Water	7470A	824088
680-246968-3	AF90618	Total/NA	Water	7470A	824088
680-246968-4	AF90619	Total/NA	Water	7470A	824088
680-246968-5	AF90641	Total/NA	Water	7470A	824088
680-246968-6	AF90636	Total/NA	Water	7470A	824088
680-246968-7	AF90638	Total/NA	Water	7470A	824088
680-246968-8	AF90639	Total/NA	Water	7470A	824088
680-246968-9	AF90640	Total/NA	Water	7470A	824088
680-246968-10	AF90635	Total/NA	Water	7470A	824088
MB 680-824088/1-A	Method Blank	Total/NA	Water	7470A	824088
LCS 680-824088/2-A	Lab Control Sample	Total/NA	Water	7470A	824088
680-246896-E-1-E MS	Matrix Spike	Total/NA	Water	7470A	824088
680-246896-E-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	824088

Prep Batch: 824551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246968-11	AF90608	Total/NA	Water	7470A	
680-246968-12	AF90609	Total/NA	Water	7470A	
680-246968-13	AF90630	Total/NA	Water	7470A	
680-246968-14	AF90623	Total/NA	Water	7470A	
680-246968-15	AF90633	Total/NA	Water	7470A	
680-246968-16	AF90625	Total/NA	Water	7470A	
680-246968-17	AF90613	Total/NA	Water	7470A	
680-246968-18	AF90620	Total/NA	Water	7470A	
680-246968-19	AF90624	Total/NA	Water	7470A	
MB 680-824551/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-824551/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-246968-11 MS	AF90608	Total/NA	Water	7470A	
680-246968-11 MSD	AF90608	Total/NA	Water	7470A	

Analysis Batch: 824780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246968-11	AF90608	Total/NA	Water	7470A	824551

Metals (Continued)

Analysis Batch: 824780 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-246968-12	AF90609	Total/NA	Water	7470A	824551
680-246968-13	AF90630	Total/NA	Water	7470A	824551
680-246968-14	AF90623	Total/NA	Water	7470A	824551
680-246968-15	AF90633	Total/NA	Water	7470A	824551
680-246968-16	AF90625	Total/NA	Water	7470A	824551
680-246968-17	AF90613	Total/NA	Water	7470A	824551
680-246968-18	AF90620	Total/NA	Water	7470A	824551
680-246968-19	AF90624	Total/NA	Water	7470A	824551
MB 680-824551/1-A	Method Blank	Total/NA	Water	7470A	824551
LCS 680-824551/2-A	Lab Control Sample	Total/NA	Water	7470A	824551
680-246968-11 MS	AF90608	Total/NA	Water	7470A	824551
680-246968-11 MSD	AF90608	Total/NA	Water	7470A	824551

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90642
Date Collected: 02/13/24 11:35
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:33

Client Sample ID: AF90643
Date Collected: 02/13/24 12:41
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:39

Client Sample ID: AF90618
Date Collected: 02/13/24 13:48
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:42

Client Sample ID: AF90619
Date Collected: 02/13/24 13:53
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:44

Client Sample ID: AF90641
Date Collected: 02/12/24 14:05
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:46

Client Sample ID: AF90636
Date Collected: 02/13/24 10:13
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:48

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90638
Lab Sample ID: 680-246968-7
Date Collected: 02/14/24 10:10
Matrix: Water
Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:50

Client Sample ID: AF90639
Lab Sample ID: 680-246968-8
Date Collected: 02/14/24 11:05
Matrix: Water
Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:52

Client Sample ID: AF90640
Lab Sample ID: 680-246968-9
Date Collected: 02/14/24 11:10
Matrix: Water
Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:54

Client Sample ID: AF90635
Lab Sample ID: 680-246968-10
Date Collected: 02/14/24 12:19
Matrix: Water
Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824088	DW	EET SAV	02/22/24 15:20
Total/NA	Analysis	7470A		1	824292	DW	EET SAV	02/23/24 17:56

Client Sample ID: AF90608
Lab Sample ID: 680-246968-11
Date Collected: 02/14/24 14:04
Matrix: Water
Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:12

Client Sample ID: AF90609
Lab Sample ID: 680-246968-12
Date Collected: 02/14/24 14:09
Matrix: Water
Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:18

Client Sample ID: AF90630

Lab Sample ID: 680-246968-13

Date Collected: 02/15/24 11:25

Matrix: Water

Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:20

Client Sample ID: AF90623

Lab Sample ID: 680-246968-14

Date Collected: 02/15/24 12:20

Matrix: Water

Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:22

Client Sample ID: AF90633

Lab Sample ID: 680-246968-15

Date Collected: 02/15/24 14:12

Matrix: Water

Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:24

Client Sample ID: AF90625

Lab Sample ID: 680-246968-16

Date Collected: 02/15/24 10:35

Matrix: Water

Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:26

Client Sample ID: AF90613

Lab Sample ID: 680-246968-17

Date Collected: 02/15/24 13:31

Matrix: Water

Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:32

Client Sample ID: AF90620

Lab Sample ID: 680-246968-18

Date Collected: 02/12/24 12:45

Matrix: Water

Date Received: 02/21/24 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:34

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.08.G01.1/36500

Job ID: 680-246968-1

Client Sample ID: AF90624
Date Collected: 02/12/24 11:47
Date Received: 02/21/24 10:05

Lab Sample ID: 680-246968-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			824551	DW	EET SAV	02/26/24 11:43
Total/NA	Analysis	7470A		1	824780	DW	EET SAV	02/26/24 17:36

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 / 29 / 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: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

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

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	HG			
AF90642	WLF-A2-1	2/13/24	1135	WJK BM	1	P	G	GW	2	7470 RL = 0.2 mg/L	X			
43	WLF-A2-2	"	1241	"	"	"	"	"	"		"			
18	WAP-17	"	1348	"	"	"	"	"	"		"			
19	WAP-17 DUP	"	1353	"	"	"	"	"	"		"			
AF90641	WLF-A1-5	2/12/24	1405	"	"	"	"	"	"		"			
AF90636	WLF-A1-1	2/13/24	1013	"	"	"	"	"	"		"			
AF90638	WLF-A1-3	2/14/24	1010	"	"	"	"	"	"		"			
39	WLF-A1-4	"	1105	"	"	"	"	"	"		"			
40	WLF-A1-4 DUP	"	1110	"	"	"	"	"	"		"			
35	WBW-A1-1	"	1219	"	"	"	"	"	"		"			

680-246968 Chain of Custody

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
SLevy	35594	2/20/24	1300			2/21/24	1005
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 14.2/14.2 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

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)

2/27/2024

Contract Lab Info: TA-SAV Contract Lab Due Date (Lab Only): 2 / 29 / 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: LCWILLIA @santeecooper.com

Date Results Needed by: ___/___/___

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

Rerun request for any flagged QC (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AF90608	WAP-12	2/14/24	1404	WJK BM	1	P	G	GW	2	7470 RL= 0.2 ug/L	X			
" 09	WAP-12 DUP	"	1409	"	"	"	"	"	"					
AF90630	WAP-27	2/15/24	1125											
" 23	WAP-21	"	1220											
" 33	WAP-29	"	1412											
AF90625	WAP-23		1035											
" 13	WAP-14A		1331											
AF90620	WAP-18	2/12/24	1245	"	"	"	"	"	"		"			
AF90624	WAP-22	2/12/24	1147	"	"	"	"	"	"		"			

Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Slevy	35594	2/20/24	1300			2/21/24	1005
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time

Sample Receiving (Internal Use Only)
TEMP (°C): 11.2 / 14.2 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

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

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: 680-246968-1

Login Number: 246968

List Source: Eurofins Savannah

List Number: 1

Creator: Stewart, Rendaisha

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: 680-246968-1
Project/Site: 125915/JM02.08.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

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

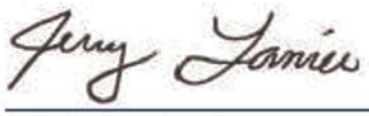
See page two for job notes and contact information.

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



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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.

Eurofins Savannah

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

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

Lab Sample ID: 680-247155-1

Date Collected: 02/21/24 10:15

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 19:30

Client Sample ID: AF90631

Lab Sample ID: 680-247155-2

Date Collected: 02/21/24 11:03

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 19:20

Client Sample ID: AF90615

Lab Sample ID: 680-247155-3

Date Collected: 02/20/24 11:13

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 19:37

Client Sample ID: AF90614

Lab Sample ID: 680-247155-4

Date Collected: 02/20/24 13:07

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 19:22

Client Sample ID: AF90617

Lab Sample ID: 680-247155-5

Date Collected: 02/20/24 09:51

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 19:10

Client Sample ID: AF90632

Lab Sample ID: 680-247155-6

Date Collected: 02/20/24 14:21

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 19:14

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
S Levy	35694	2/26/24	0806	E Hodge	COURIER	2/26/24	0806
Relinquished by:	Employee#	Date	Time	Received by:	Employee #	Date	Time
E Hodge	—	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.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: 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
Slevy	35594	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
☐ 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-30

4. ABANDONMENT: ☐ Yes ☒ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
red silty sand	10	10
gray sandy clay	20	30
sand clay and shell	10	40
sugar sand white gray	6	46
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Bentonite seal from 34-39'

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) 46 ft. Date Started: 5-21-24 Date Completed: 5-22-24

10. CASING: ☒ Threaded ☐ Welded
Diam.: 6" & 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 35.5 ft. depth
0 in. to 41 ft. depth
Height: (Above) Below
Surface 3 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 41 ft. and 46 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL 10 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 39 ft. to 46 ft.
Effective size 2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 34 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: Scott Hunt, Jr **CERT. NO.:** 2313
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: _____ Date: 5/27/2024
Well Driller

If D Level Driller, provide supervising driller's name:
Richy Lemire

DHEC 1903 (03/2004)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER