

**2025 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
CLASS 2 LANDFILL
CROSS GENERATING STATION**

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1. Annual Groundwater Monitoring Report Summary

The South Carolina Public Service Authority (Santee Cooper) has prepared this 2025 Annual Groundwater Monitoring Corrective Action Report for the Class 2 Landfill at the Cross Generating Station (CGS). This 2025 Annual Report was prepared to comply with the United States Environmental Protection Agency (EPA) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities, 40 Code of Federal Regulations (CFR) Part 257, Subpart D dated April 17, 2015 (CCR Rule), specifically subsection § 257.90(e)(1) through (6).

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

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

At the start of the current annual reporting period (January 1, 2025), the CGS Class 2 Landfill continued to operate under a corrective action monitoring program in accordance with § 257.98. Statistically significant levels (SSLs) of cobalt in monitoring well POZ-4 were identified for the January and June 2025 sampling events.

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

At the end of the current annual reporting period (December 31, 2025), the CGS Class 2 Landfill remained in the corrective action groundwater monitoring program. Monitoring of the selected remedy will continue in 2026.

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

2. 40 CFR § 257.90 Applicability

2.1 40 CFR § 257.90(a) and (c)

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

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

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

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 2025 for the closed CGS Class 2 Landfill as required by the subject regulations. Groundwater sampling and analysis was conducted per the requirements of § 257.93, and the status of the groundwater monitoring program, as set forth in § 257.98, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

In 2025, the corrective action groundwater monitoring program continued in accordance with § 257.98. An SSL of cobalt in POZ-4 continues to be the only exceedance of an Appendix IV groundwater protection standard (GWPS) downgradient of the Class 2 Landfill. It is worth noting that while the concentrations vary between sampling events, recent concentrations detected are lower than the historical range of concentrations for cobalt in POZ-4. This observation indicates the selected groundwater remedy is performing as anticipated.

During the 2019 Assessment of Corrective Measures and Nature & Extent evaluations, analytical results from the groundwater monitoring well installed in the uppermost aquifer at the downgradient property boundary (monitoring well CCMLF-1) showed intermittent results above the GWPS for cobalt. While off-site migration had not been confirmed, Santee Cooper notified SCDES and nearby residents and/or landowners that the GWPS for cobalt in a property boundary well had been exceeded per § 257.105(h)(8).

To evaluate potential for off-site migration and impacts to off-site drinking water supplies, samples were collected from both the single potable well that supplies drinking water for the surrounding closest residences and from multiple residential taps and analyzed for cobalt. Santee Cooper has continued to monitor this property boundary well in both the uppermost shallow and deeper aquifers and the same nearby residential potable well for cobalt through 2025. To date, any detections of cobalt (as laboratories have been able to decrease their detection limits) have been significantly below the groundwater protection standard in the nearby residents' drinking water. In 2025, cobalt concentrations at all property boundary monitoring wells, including the uppermost aquifer, were below the GWPS. Communication with SCDES and the residents has been ongoing.

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

The landfill was closed by installing a low-permeability geomembrane liner and clay cap cover along with surface water controls for drainage and erosion protection. The properly engineered and installed geomembrane cap virtually eliminates infiltration of water into the CCR material within the landfill. The enhanced water management improvements refer to capturing residual water present in the landfill at the time of closure, thereby removing as much of the source material potentially being released from the CCR unit as is feasible. The landfill closure and water management improvements were completed in August 2016 and January 2020, respectively, under the oversight of SCDES. The remaining component of the selected remedy is MNA, which is a viable remedial strategy recognized by state and federal regulators that is applicable to inorganic compounds in groundwater. MNA occurs due to naturally occurring processes within the aquifer following source control. The Monitored Natural Attenuation Demonstration report was finalized in 2025 and is included in Appendix C. As shown in the MNA demonstration, MNA—in combination with source control—should continue to reduce concentrations of cobalt in groundwater downgradient of the Class 2 Landfill, thereby attaining the GWPS in the future.

Further development of the corrective action groundwater monitoring program for MNA was completed in 2023 by reevaluating the existing Groundwater Monitoring Plan (GMP). This evaluation concluded that the assessment monitoring protocol currently being implemented is sufficient to meet the needs of corrective action groundwater monitoring program, which is consistent with § 257.98(a)(1)(i) and thus will continue to be implemented during the regularly scheduled semi-annual groundwater monitoring events.

2.2.2 Key Actions Completed

The following key actions were completed in 2025:

- Prepared 2024 Annual Report including:
 - The Annual Report was placed in the facility's operating record pursuant to § 257.105(h)(1);

- Pursuant to § 257.106(h)(1), the notification was sent to the relevant State Director within 30 days of the Annual Report being placed in the facility's operating record [§ 257.106(d)];
 - Pursuant to § 257.107(h)(1), the Annual Report was posted to the CCR Website within 30 days of the Annual Report being placed in the facility's operating record [§ 257.107(d)].
- Collected and analyzed two rounds of groundwater monitoring (January and June) in accordance with § 257.95(b) and § 257.95(d)(1) and recorded the concentrations in the facility's operating record as required by § 257.95(d)(1) (which is also consistent with § 257.98 (a)(1)). Groundwater monitoring results are summarized in Table 1 and laboratory analytical results are provided in Appendix B.
- Completed statistical evaluations associated with the January 2025 and June 2025 sampling events to determine statistically significant exceedance of GWPS for Appendix IV constituents in accordance with § 257.93(h)(2). Statistical results are summarized in Appendix A.
- Updated the statistical upper tolerance limits for background wells PM-1 and CBW-1 after the first semi-annual sampling event of 2025 in accordance with the Unified Guidance.
- In late 2022, it was decided to add existing state landfill compliance well POZ-3 to the CCR compliance groundwater monitoring network. Baseline sampling commenced to gather the eight independent samples required to complete statistical evaluations. POZ-3 was added to the compliance groundwater monitoring network and statistical evaluations after collecting the first semi-annual sample of 2025.
- Continued to characterize the nature and extent of Appendix IV constituents identified at statistically significant levels above the GWPS in accordance with § 257.95(g)(1).
- Continued to implement the semi-annual Corrective Action Groundwater Monitoring Program consistent with § 257.98(a)(1):
 - Continued monitoring boundary wells for cobalt and continued to collect drinking water samples from a nearby residential potable water well. Analytical results for these wells continue to show cobalt below the groundwater protection standard.
 - Continued monitoring surface water in the Bulltown Ditch for cobalt on a semi-annual basis. Analytical results continue to show cobalt is below the groundwater protection standard.
 - 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 an evaluation of the aquifer properties to support the selected remedy of monitored natural attenuation of cobalt. In November 2024, soil samples were obtained from six (6) Direct Push Technology (DPT) borings for a series of laboratory analyses. The report for this project was completed in 2025 and is included in Appendix C: Monitored Natural Attenuation Demonstration. As shown in the MNA demonstration, the estimated time to achieve GWPS for cobalt (6 ug/L) at POZ-4 is approximately 8 years.
- Continued to evaluate turbidity, oxidation-reduction potential, and well screen submersion trends sitewide in wells and to identify wells to be redeveloped 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.
- The CGS Groundwater Monitoring Plan was updated in December 2025 to make general revisions and improvements to reflect changes in site conditions and procedures. It will continue to be revised as necessary.

- The CGS Sampling and Analysis Plan was updated in December 2025 to make general revisions and improvements to reflect changes in site conditions and procedures. It will continue to be revised as necessary.

2.2.3 Problems Encountered

No problems were encountered.

2.2.4 Actions to Resolve Problems

No actions were required.

2.2.5 Project Key Activities for Upcoming Year

Key activities to be completed in 2026 include the following:

- Prepare the 2025 annual report; place it in the record as required by § 257.105(h)(1); notify the Relevant State Director [§ 257.106(d)]; and post to the facility's publicly available CCR website [§ 257.107(d)].
- Conduct semi-annual groundwater monitoring consistent with § 257.98(a)(1) and § 257.95(d)(1) and in accordance with the CGS GMP.
- Update the statistical upper tolerance limits for background wells PM-1 and CBW-1 after the second semi-annual sampling event of 2025 in accordance with the Unified Guidance.
- Conduct statistical analyses of semi-annual groundwater monitoring analytical results of the CCR compliance wells to determine if SSLs of the detected Appendix IV constituents are present.
- Use the existing groundwater fate and transport model as needed to compare cobalt concentrations in groundwater monitoring wells POZ-4 and POZ-6 against modeled values post-closure. Re-calibrate or enhance the model as needed to support MNA studies.
- Continue the evaluation of the aquifer properties to support the selected remedy of monitored natural attenuation of cobalt.
- Conduct additional nature and extent activities, including possible installation of additional monitoring well(s):
 - Continue monitoring the property boundary wells in the uppermost and deeper aquifers on a semi-annual basis.
 - Continue annual monitoring of the nearby residential potable water well.
 - Continue surface water monitoring of the Bulltown Ditch.
- Continue with 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.
- In 2026, wells will be further evaluated. If improvement is still not made, then more aggressive development methods (both mechanical and chemical) may be conducted and reported in the 2026 Annual Report.
- Update the Statistical Data Analysis Plan.

2.3 40 CFR § 257.90(e) - INFORMATION

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

2.3.1 40 CFR § 257.90(e)(1)

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

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

2.3.2 40 CFR § 257.90(e)(2)

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

No groundwater monitoring wells were installed or decommissioned in 2025.

2.3.3 40 CFR § 257.90(e)(3)

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

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

2.3.4 40 CFR § 257.90(e)(4)

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

The groundwater monitoring program remained in corrective action monitoring for the duration of 2025. A summary of the history of the evolution of the monitoring programs is provided in this section.

As required by § 257.93(h) a statistical analysis of the Appendix III constituents was completed on January 15, 2018. Based on the results of the statistical analysis and per § 257.94(h) an assessment monitoring program was initiated on February 14, 2018. As required by § 257.93(h)(2), the subsequent statistical evaluation of the detected Appendix IV constituents identified SSLs, specifically cobalt, above GWPS. Therefore, per § 257.95(g)(3), an assessment of corrective measures and nature and extent evaluation was initiated to evaluate the horizontal and vertical nature and extent of the SSLs downgradient of the CGS Class 2 Landfill.

The statistical analysis of Appendix IV constituents was conducted within 90 days of completing each semi-annual sampling and analysis event in 2025 and it was determined that an SSL of cobalt continues to be present downgradient of the Class 2 Landfill in POZ-4 only. During sampling events in January and June

2025, an SSL above GWPS was identified at the Class 2 Landfill in monitoring well POZ-4 for cobalt, consistent with previous results. All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results generally reflect the predicted cobalt groundwater fate and transport modeling results. Even though there is variability in the cobalt data, the statistical trends are all stable for the three downgradient wells, POZ-4, POZ-6, and POZ-7. The ongoing performance of the selected remedy in achieving GWPS will continue to be evaluated during subsequent semi-annual monitoring events. Of note, Appendix III constituents in multiple wells continue to have analytical results that are elevated above the background wells. In addition, this Class 2 Landfill has been identified as the alternate source of elevated Appendix III constituents for the adjacent Class 3 Landfill.

Further development of the corrective action groundwater monitoring program was completed by reevaluating the existing CGS GMP in 2025. It was determined that the current assessment monitoring plan being implemented is sufficient to meet the post-closure monitoring needs to continue to evaluate the performance of the selected remedy and thus will continue to be implemented during the regularly scheduled semi-annual groundwater monitoring events. This is consistent with § 257.98(a)(1)(i).

2.3.5 40 CFR § 257.90(e)(5)

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

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

Additionally, an overview of the performance of the remedy implementation to date is provided. The landfill closure and water management improvements were completed in August 2016 and January 2020, respectively, under the oversight of SCDES. The enhanced water management improvements refer to capturing water present in the landfill at the time of closure, thereby removing as much of the source material potentially being released from the CCR unit as is feasible. To account for any water draining through the toe drains, an improvement consisting of installing a seepage collection system, including discharge piping and lift stations, was implemented. The water captured from the toe drains is fully isolated from non-CCR contact stormwater and is redirected to the operational lined Class 3 Landfill Leachate Collection Pond before further treatment in the station's permitted wastewater treatment facility prior to discharge under NPDES permit #SC0037401.

Since the completion of the water management improvements, the uppermost shallow aquifer boundary well (CCMLF-1) has shown marked decreases in cobalt concentrations from 17.8 µg/L to 1.3 µg/L. The sampling results from both 2025 sampling events remained below the GWPS of 6 µg/L. The adjacent deeper aquifer boundary well (CCMLF-1D) has consistently been below the GWPS since monitoring of the property boundary began with the initial nature & extent activities in 2019. Additionally, the two other nature & extent wells that define lateral extent, CCMLF-2 and CAP-13, continue to demonstrate cobalt below the GWPS. These wells will continue to be monitored closely in 2026. The decline in cobalt concentrations observed in the shallow aquifer boundary well CCLMF-1 indicates that the cobalt plume is contracting, and that natural attenuation is effective in reducing cobalt concentrations in groundwater.

The only remaining monitoring well with a statistically significant level of cobalt is POZ-4. This well is located on the northeastern boundary of the CCR unit. While the concentrations increased from 43.2 µg/L to 122 µg/L over the course of the 2025 sampling events, these concentrations are considerably lower than the historical range. Additionally, it is not unusual to observe a temporary spike during the summer

sampling events. These seasonal fluctuations do not necessarily suggest continuing releases from the Class 2 Landfill. This well will be monitored closely during ongoing corrective action sampling activities in 2026.

In 2025, the MNA Demonstration was finalized and it concluded through extensive geochemical and related studies that MNA is a viable corrective action for groundwater impacts associated with the CGS Class 2 landfill (Appendix C). Multiple lines of evidence indicate that landfill conditions meet the EPA's requirements for MNA, specifically area of impact is stable or shrinking, mechanisms for attenuation are identified, the attenuating mechanisms are stable, there is sufficient aquifer capacity for attenuation, and the time to achieve GWPS is reasonable compared to other corrective action alternatives. The slope of trend lines through groundwater data and reactive transport modeling were used to estimate time to achieve the applicable GWPS. The estimated time to achieve GWPS for cobalt (6 ug/L) at POZ-4 is approximately 8 years.

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

In 2025, average turnaround time remained approximately 60 days from sample submission to receipt of validated data.

TABLES

Table 2
Cross Generating Station

2025 Synoptic Water Levels for Groundwater Monitoring Wells

Well Name	1st Event - 1/13/2025		2nd Event - 4/22/2025		3rd Event - 6/2/2025		4th Event - 11/3/2025		
	TOC 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	8.35	74.89	8.04	75.2	7.53	75.71	7.53	75.71
CBW-1	85.80	10.79	75.01	10.14	75.66	9.89	75.91	9.48	76.32
CAP-1	82.70	7.55	75.15	7.16	75.54	6.95	75.75	6.49	76.21
CAP-2	89.70	17.04	72.66	16.54	73.16	16.43	73.27	15.98	73.72
CAP-3	91.49	16.75	74.74	16.12	75.37	16.05	75.44	15.6	75.89
CAP-4	91.77	17.16	74.61	16.52	75.25	16.41	75.36	15.9	75.87
CAP-5	91.78	17.36	74.42	17.06	74.72	16.78	75.00	15.78	76
CAP-6	91.82	17.72	74.10	17.58	74.24	17.29	74.53	16.31	75.51
CAP-7	91.64	16.84	74.80	17.31	74.33	16.33	75.31	15.87	75.77
CAP-8	91.61	17.84	73.77	17.72	73.89	17.4	74.21	16.75	74.86
CAP-9	91.59	16.99	74.60	16.84	74.75	14.79	76.80	14.89	76.7
CAP-10	95.68	21.89	73.79	21.66	74.02	21.39	74.29	20.98	74.7
CAP-11	95.55	20.14	75.41	19.61	75.94	18.66	76.89	19.02	76.53
CAP-12	98.33	23.80	74.53	23.46	74.87	23.24	75.09	22.94	75.39
CAP-13	80.77	5.86	74.91	6.51	74.26	5.47	75.30	4.89	75.88
CAP-14	80.77	6.32	74.45	6.61	74.16	5.91	74.86	5.05	75.72
CCMLF-1	80.86	6.36	74.50	5.84	75.02	6.05	74.81	5.29	75.572
CCMLF-1D	80.65	6.18	74.47	5.93	74.72	5.84	74.81	5.12	75.533
CCMLF-2	84.08	10.57	73.51	9.84	74.24	10.01	74.07	8.39	75.69
POZ-3	82.61	6.87	75.74	6.86	75.75	6.47	76.14	5.84	76.77
POZ-4	82.73	7.39	75.34	7.29	75.44	6.89	75.84	5.71	77.02
POZ-5D	82.49	7.57	74.92	7.44	75.05	7.08	75.41	5.91	76.58
POZ-6	83.84	8.66	75.18	8.71	75.13	8.09	75.75	6.81	77.03
POZ-7	82.02	6.59	75.43	6.65	75.37	6.42	75.60	5.61	76.41
POZ-8	83.13	8.20	74.93	8.03	75.10	7.67	75.46	6.56	76.57
CLF1B-1	83.76	8.54	75.22	8.16	75.60	7.95	75.81	7.39	76.37
CLF1B-2	82.04	6.87	75.17	6.61	75.43	6.36	75.68	5.75	76.29
CLF1B-3	82.75	7.84	74.91	7.5	75.25	7.16	75.59	6.49	76.26
CLF1B-4	82.74	7.69	75.05	7.73	75.01	7.28	75.46	6.35	76.39
CLF1B-5	81.09	6.16	74.93	6.34	74.75	5.81	75.28	4.7	76.39
CLF1B-5D	80.93	6.37	74.56	6.52	74.41	5.96	74.97	4.99	75.94
CCMAP-1	80.21	6.71	73.50	6.85	73.36	5.83	74.38	5.02	75.19
CCMAP-2	81.24	7.86	73.38	7.39	73.85	7.16	74.08	6.89	74.35
CCMAP-3	81.91	8.07	73.84	7.96	73.95	7.63	74.28	6.95	74.96
CCMAP-4	81.83	7.29	74.54	6.99	74.84	6.74	75.09	5.65	76.18
CCMAP-5	83.71	8.80	74.91	8.60	75.11	8.23	75.48	7.38	76.33
CCMAP-6	84.41	10.46	73.95	10.74	73.67	10.16	74.25	8.94	75.47
CCMAP-7	81.57	8.09	73.48	7.6	73.97	7.45	74.12	7.24	74.33
CCMAP-8	82.89	9.07	73.82	9.17	73.72	8.71	74.18	7.39	75.5
CCMAP-9	82.51	8.47	74.04	5.63	76.88	8.15	74.36	7.08	75.43
CCMAP-10	81.80	8.10	73.70	8.34	73.46	7.77	74.03	6.51	75.29
CCMAP-11	80.29	7.19	73.10	7.41	72.88	6.59	73.70	4.76	75.53
CCMAP-12	80.58	6.64	73.94	6.73	73.85	6.28	74.30	5.62	74.96
CCMAP-13	80.11	6.38	73.73	6.29	73.82	5.67	74.44	5.31	74.8
CCMAP-14	78.64	5.10	73.54	4.79	73.85	4.51	74.13	4.41	74.23
CGYP-1	91.89	17.09	74.80	17.04	74.85	16.71	75.18	16.42	75.47
CGYP-2	84.88	9.77	75.11	9.94	74.94	9.31	75.57	9.03	75.85
CGYP-3	83.95	8.31	75.64	8.84	75.11	7.84	76.11	7.51	76.44
CGYP-4	83.49	7.79	75.70	7.83	75.66	7.11	76.38	7.00	76.49
CGYP-5	84.12	7.82	76.30	7.52	76.60	7.2	76.92	7.5	76.62
CGYP-6	83.93	8.94	74.99	8.85	75.08	8.48	75.45	8.25	75.68
CGYP-7	85.37	10.49	74.88	10.43	74.94	10.05	75.32	9.73	75.64
CGSPZ-1	83.31	8.36	74.95	8.22	75.09	7.71	75.60	7.71	75.6
CGSPZ-2	82.56	7.56	75.00	7.74	74.82	7.4	75.16	7.24	75.32
CGSPZ-3	82.85	8.59	74.26	8.8	74.05	8.03	74.82	5.84	77.01
CGSPZ-4	81.28	6.67	74.61	6.65	74.63	6.43	74.85	5.93	75.35
CGSPZ-5	80.56	7.18	73.38	7.11	73.45	6.52	74.04	5.91	74.65
CCMGP-1	84.30	7.21	77.09	9.42	74.88	9.09	75.21	8.74	75.56
CCMGP-2	96.73	22.03	74.70	21.96	74.77	21.68	75.05	21.2	75.53
CCMGP-3	84.44	9.96	74.48	9.99	74.45	9.66	74.78	9.22	75.22
CCMGP-4	84.82	9.74	75.08	9.67	75.15	9.35	75.47	9	75.82
CCMGP-5	79.91	5.81	74.10	5.76	74.15	5.4	74.51	5.14	74.77
CGS-PSE-1	-	-	75.27	-	74.95	-	74.98	-	75.27
CGS-PSE-2	-	-	76.86	-	75.80	-	75.16	-	76.86
CGS-PSE-3	-	-	76.93	-	NA	-	75.87	-	76.93
CGS-PSE-4	-	-	75.79	-	NA	-	75.48	-	75.79
CGS-PSE-5	-	-	77.67	-	77.13	-	77.70	-	77.67
CGS-PSE-6	-	-	74.53	-	74.54	-	74.30	-	74.53
CGS-PSE-7	-	-	84.36	-	85.02	-	87.65	-	84.36
CGYPSW-1-WSE	-	-	75.29	-	75.05	-	75.04	-	75.29
CGYPSW-2-WSE	-	-	75.34	-	75.19	-	75.15	-	75.34
CGYPSW-3-WSE	-	-	75.49	-	75.57	-	75.36	-	75.49
CGYPSW-4-WSE	-	-	75.89	-	75.86	-	75.69	-	75.89
CGYPSW-6-WSE	-	-	75.11	-	75.10	-	74.93	-	75.11
CGYPSW-7-WSE	-	-	75.14	-	74.91	-	74.84	-	75.14
CGYPSW-8-WSE	-	-	75.22	-	74.94	-	75.13	-	75.22
GMPSW-WET-1SWE	-	-	74.45	-	74.47	-	74.36	-	74.45
GMPSW-WET-2SWE	-	-	75.08	-	74.52	-	75.00	-	75.08
GMPSW-CPD-1SWE	-	-	78.24	-	77.76	-	77.74	-	78.24
STAFF GAUGE	-	-	75.35	-	75.65	-	75.69	-	75.86
STAFF GAUGE	-	-	NA	-	75.78	-	75.40	-	75.08

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 the 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

GIS FILE PATH: I:\97130\Groundwater\GIS Groundwater\map files\CGS_CCR_WELL_LOCATIONS.mxd — USER: ALDECOTE — LAST SAVED: 10/24/2023 11:26:02 AM

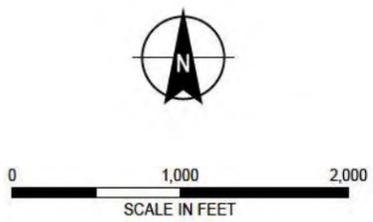


LEGEND

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

NOTES:

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

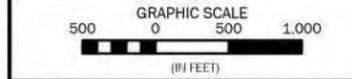


SANTEE COOPER
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA

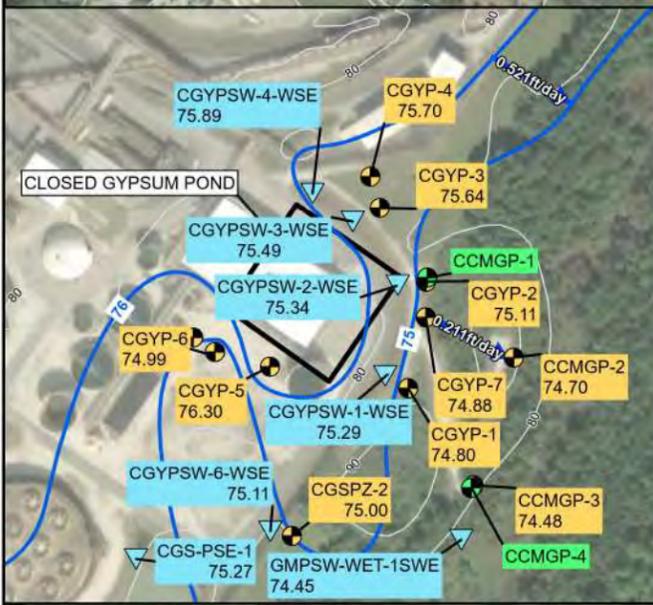
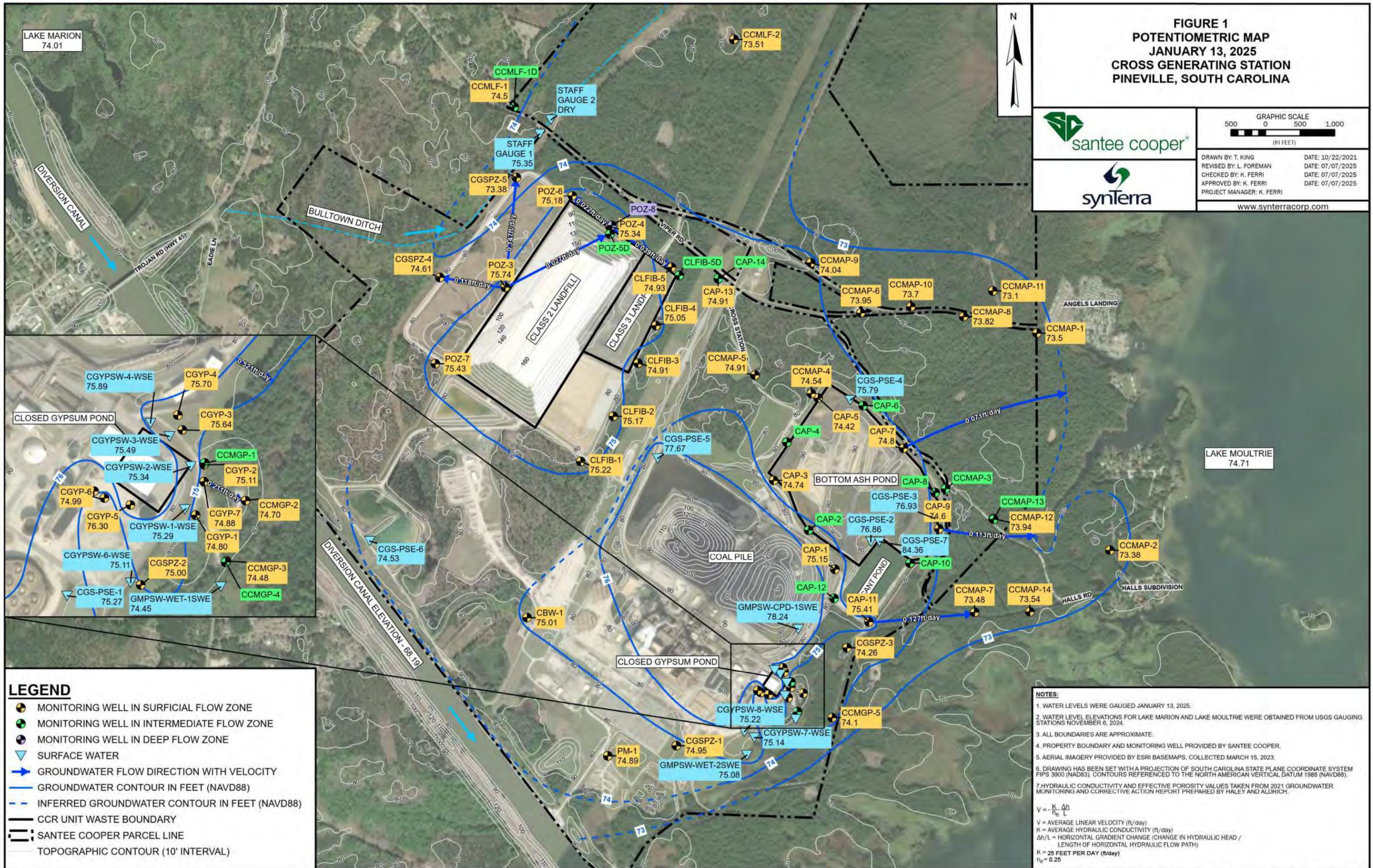
**LOCATION OF CLASS 2 LANDFILL
GROUNDWATER MONITORING WELLS
FOR CCR COMPLIANCE**

JANUARY 2026 FIGURE 1

**FIGURE 1
POTENTIOMETRIC MAP
JANUARY 13, 2025
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA**



DRAWN BY: T. KING DATE: 10/22/2021
 REVISED BY: L. FOREMAN DATE: 07/07/2025
 CHECKED BY: K. FERRI DATE: 07/07/2025
 APPROVED BY: K. FERRI DATE: 07/07/2025
 PROJECT MANAGER: K. FERRI
 www.synterracorp.com



LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN INTERMEDIATE FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- 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 (10' INTERVAL)

NOTES:

1. WATER LEVELS WERE GAUGED JANUARY 13, 2025.
2. WATER LEVEL ELEVATIONS FOR LAKE MARION AND LAKE MOULTRIE WERE OBTAINED FROM USGS GAUGING STATIONS NOVEMBER 8, 2024.
3. ALL BOUNDARIES ARE APPROXIMATE.
4. PROPERTY BOUNDARY AND MONITORING WELL PROVIDED BY SANTEE COOPER.
5. AERIAL IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED MARCH 15, 2023.
6. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83). CONTOURS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
7. HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

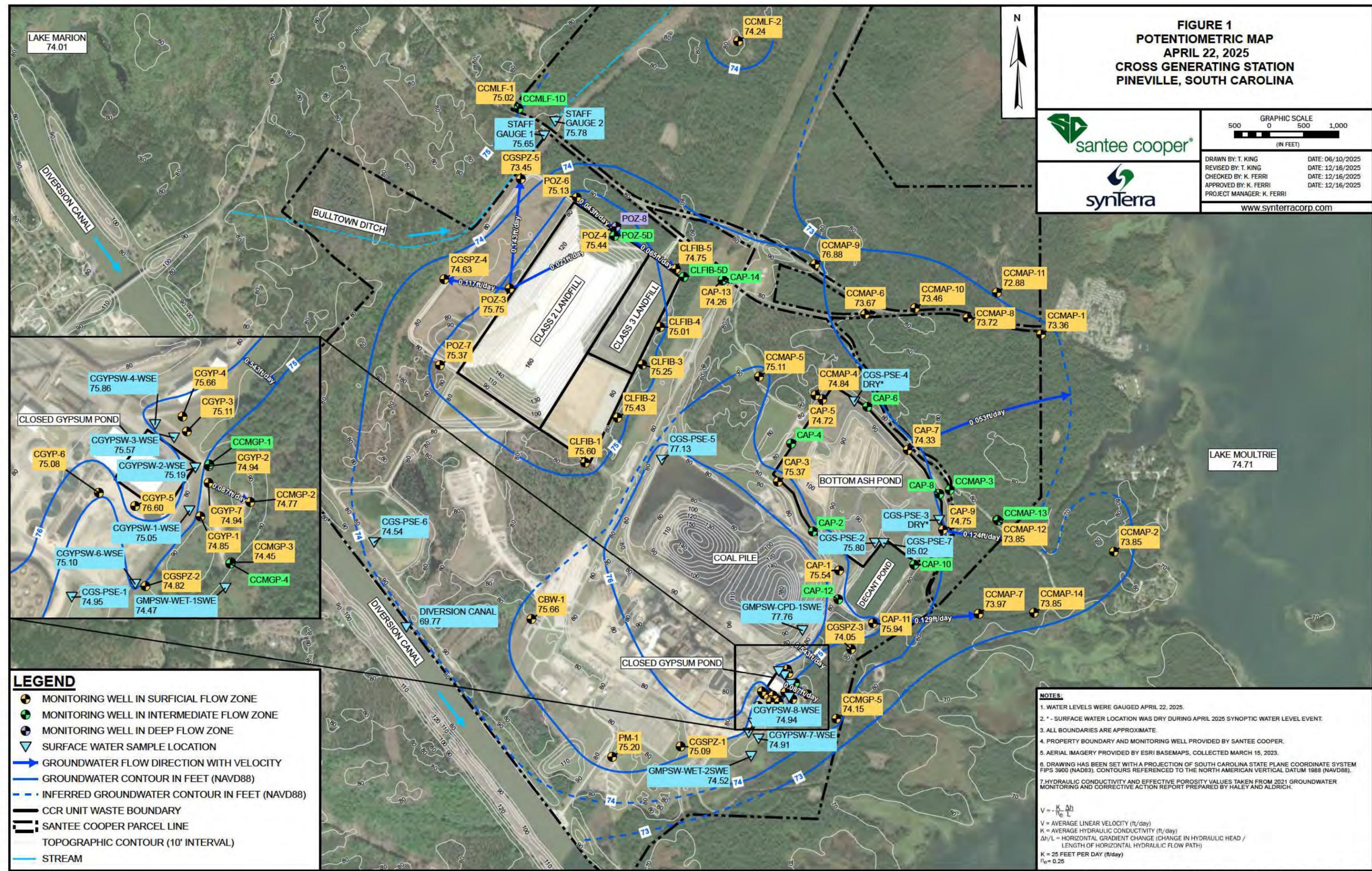
$$V = \frac{K \Delta h}{\rho_g L}$$

V = AVERAGE LINEAR VELOCITY (ft/day)
 K = AVERAGE HYDRAULIC CONDUCTIVITY (ft/day)
 Δh/L = HORIZONTAL GRADIENT CHANGE (CHANGE IN HYDRAULIC HEAD / LENGTH OF HORIZONTAL HYDRAULIC FLOW PATH)
 K = 25 FEET PER DAY (ft/day)
 ρ_g = 0.25

**FIGURE 1
POTENTIOMETRIC MAP
APRIL 22, 2025
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA**



GRAPHIC SCALE 500 0 500 1,000 (IN FEET)	
DRAWN BY: T. KING	DATE: 06/10/2025
REVISED BY: T. KING	DATE: 12/16/2025
CHECKED BY: K. FERRI	DATE: 12/16/2025
APPROVED BY: K. FERRI	DATE: 12/16/2025
PROJECT MANAGER: K. FERRI	
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LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN INTERMEDIATE FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- SURFACE WATER SAMPLE LOCATION
- 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 (10' INTERVAL)
- STREAM

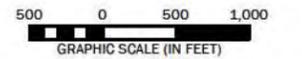
NOTES:

1. WATER LEVELS WERE GAUGED APRIL 22, 2025.
2. * - SURFACE WATER LOCATION WAS DRY DURING APRIL 2025 SYNOPTIC WATER LEVEL EVENT.
3. ALL BOUNDARIES ARE APPROXIMATE.
4. PROPERTY BOUNDARY AND MONITORING WELL PROVIDED BY SANTEE COOPER.
5. AERIAL IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED MARCH 15, 2023.
6. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83). CONTOURS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
7. HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

$$V = \frac{K \Delta h}{\eta_e L}$$

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 = 25 FEET PER DAY (ft/day)
 $\eta_e = 0.25$

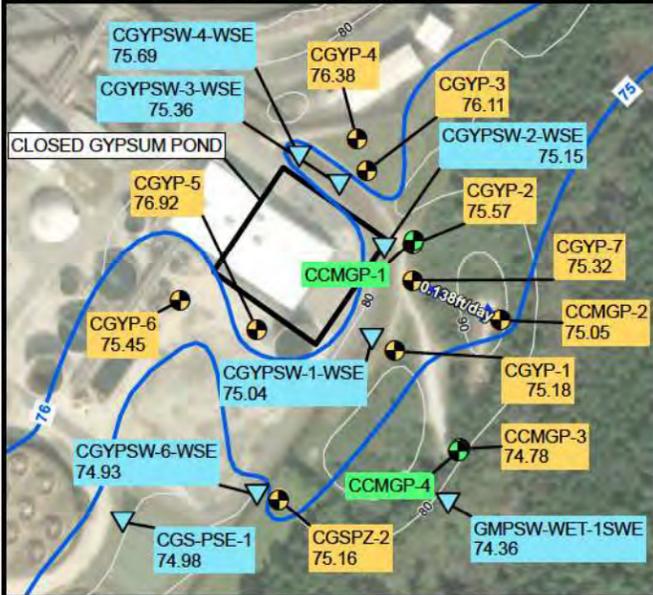
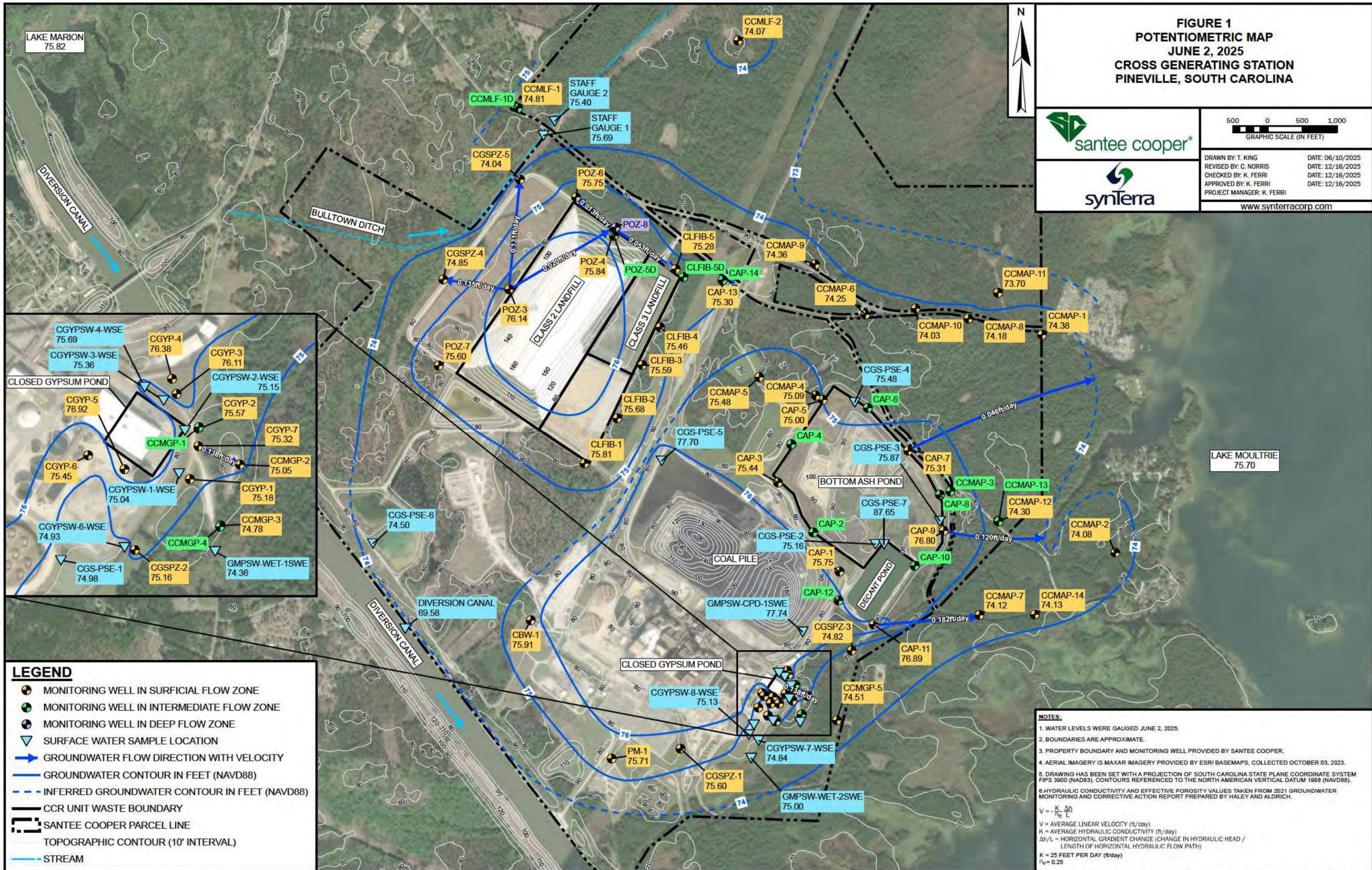
**FIGURE 1
POTENTIOMETRIC MAP
JUNE 2, 2025
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA**



DRAWN BY: T. KING
 REVISOR: C. NORRIS
 CHECKED BY: K. FERRI
 APPROVED BY: K. FERRI
 PROJECT MANAGER: K. FERRI

DATE: 06/10/2025
 DATE: 12/16/2025
 DATE: 12/16/2025
 DATE: 12/16/2025

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LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN INTERMEDIATE FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- SURFACE WATER SAMPLE LOCATION
- 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 (10' INTERVAL)
- STREAM

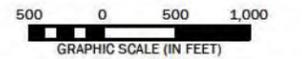
NOTES:

1. WATER LEVELS WERE GAUGED JUNE 2, 2025.
2. BOUNDARIES ARE APPROXIMATE.
3. PROPERTY BOUNDARY AND MONITORING WELL PROVIDED BY SANTEE COOPER.
4. AERIAL IMAGERY IS MAXAR IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED OCTOBER 03, 2023.
5. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83), CONTOURS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
6. HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.

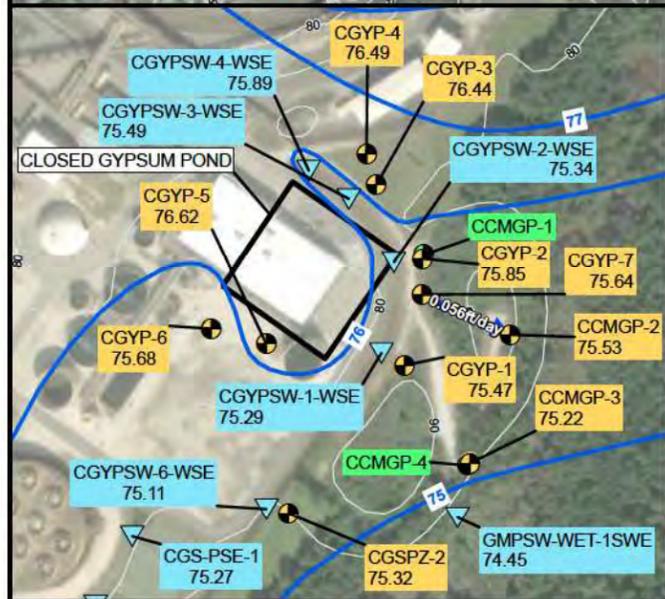
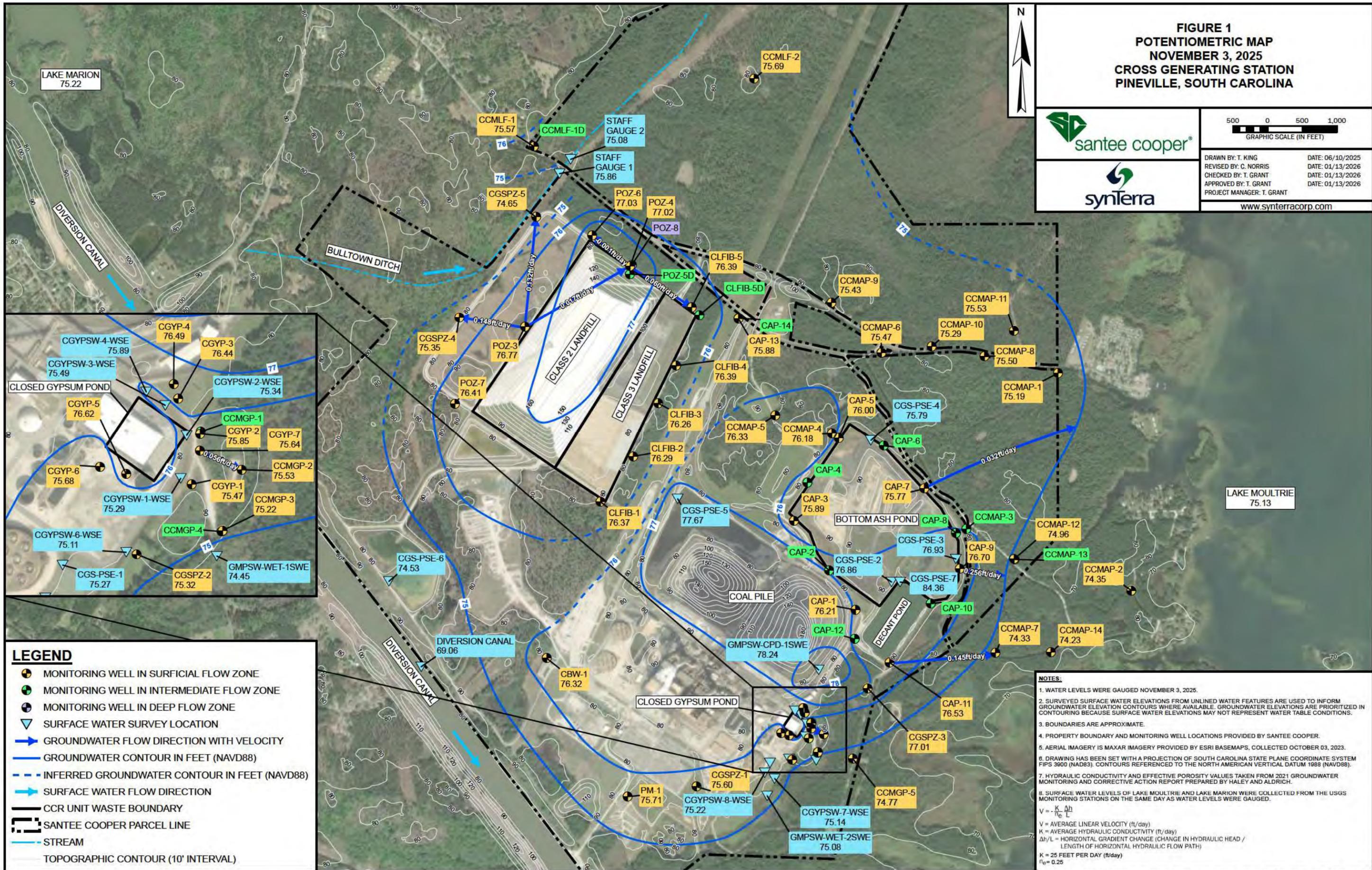
$V = \frac{K \Delta h}{\eta_e L}$

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 = 25 FEET PER DAY (ft/day)
 $\eta_e = 0.25$

**FIGURE 1
POTENTIOMETRIC MAP
NOVEMBER 3, 2025
CROSS GENERATING STATION
PINEVILLE, SOUTH CAROLINA**



DRAWN BY: T. KING DATE: 06/10/2025
 REVISED BY: C. NORRIS DATE: 01/13/2026
 CHECKED BY: T. GRANT DATE: 01/13/2026
 APPROVED BY: T. GRANT DATE: 01/13/2026
 PROJECT MANAGER: T. GRANT
 www.synterracorp.com



LEGEND

- MONITORING WELL IN SURFICIAL FLOW ZONE
- MONITORING WELL IN INTERMEDIATE FLOW ZONE
- MONITORING WELL IN DEEP FLOW ZONE
- SURFACE WATER SURVEY LOCATION
- GROUNDWATER FLOW DIRECTION WITH VELOCITY
- GROUNDWATER CONTOUR IN FEET (NAVD88)
- INFERRED GROUNDWATER CONTOUR IN FEET (NAVD88)
- SURFACE WATER FLOW DIRECTION
- CCR UNIT WASTE BOUNDARY
- SANTEE COOPER PARCEL LINE
- STREAM
- TOPOGRAPHIC CONTOUR (10' INTERVAL)

NOTES:

1. WATER LEVELS WERE GAUGED NOVEMBER 3, 2025.
 2. SURVEYED SURFACE WATER ELEVATIONS FROM UNLINED WATER FEATURES ARE USED TO INFORM GROUNDWATER ELEVATION CONTOURS WHERE AVAILABLE. GROUNDWATER ELEVATIONS ARE PRIORITIZED IN CONTOURING BECAUSE SURFACE WATER ELEVATIONS MAY NOT REPRESENT WATER TABLE CONDITIONS.
 3. BOUNDARIES ARE APPROXIMATE.
 4. PROPERTY BOUNDARY AND MONITORING WELL LOCATIONS PROVIDED BY SANTEE COOPER.
 5. AERIAL IMAGERY IS MAXAR IMAGERY PROVIDED BY ESRI BASEMAPS, COLLECTED OCTOBER 03, 2023.
 6. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3600 (NAD83). CONTOURS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
 7. HYDRAULIC CONDUCTIVITY AND EFFECTIVE POROSITY VALUES TAKEN FROM 2021 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT PREPARED BY HALEY AND ALDRICH.
 8. SURFACE WATER LEVELS OF LAKE MOULTRIE AND LAKE MARION WERE COLLECTED FROM THE USGS MONITORING STATIONS ON THE SAME DAY AS WATER LEVELS WERE GAUGED.
- $$V = \frac{K \Delta h}{n_p L}$$
- 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 = 25 FEET PER DAY (ft/day)
 $n_p = 0.25$

Appendix A – Statistical Analyses



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

TECHNICAL MEMORANDUM

July 1, 2025

File No. 132892-102-002-02

SUBJECT: Statistical Evaluation of the January 2025 Corrective Action Groundwater Monitoring Data
Cross Generating Station
Class 2 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the January 2025 corrective action groundwater monitoring event for the Cross Generating Station (CGS) Class 2 Landfill. Data for this groundwater sampling event was validated April 11, 2025, by Santee Cooper and provided to Haley & Aldrich, Inc. (Haley & Aldrich).

BACKGROUND

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

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 the background wells. During previous groundwater sampling events, cobalt was the only Appendix IV constituent detected at an SSL above the GWPS.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the coal combustion residual unit (40 CFR §257.93(f) (1-4)) represents an 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 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 the 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, or site background concentration. Compliance well data from the most recent

groundwater sampling event were compared to the corresponding GWPS to determine if an 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 95 percent target confidence level. The upper endpoint of a tolerance interval is termed the upper tolerance limit (UTL). Depending on the assumed distribution of background, parametric or non-parametric procedures were used to develop the UTL. Parametric procedures use assumed distributions of the sample background data to develop 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 sampling event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate the presence of an 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 wells (CBW-1 and PM-1) analytical results from previous sampling 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 the statistical evaluation of analytical results collected through January 2025 and updated in the Statistical Output (Attachment A). The background dataset will be updated in Table 1 again after four additional data points are collected (second semiannual event of 2027) in accordance with the Unified Guidance.

TREND ANALYSIS

Mann-Kendall trend analyses were performed on both the overall dataset, and on the eight most recent samples. Trends were only evaluated for constituent/well datasets of sufficient sample size. Recent trend analysis results are included in Table 1, and both overall and recent trends are included in Attachment A, Table A-4. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

Of the 20 well/constituent trends analyzed for recent data at downgradient compliance wells, 47 percent are stable, and 53 percent are variable with no statistically significant trend. POZ-6 had a probably increasing trend for barium in recent data but is well below the GWPS of 2 milligrams per liter.

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, cobalt remains the only Appendix IV constituent present at an SSL above the GWPS at POZ-4. Mann-Kendall analysis indicates that cobalt concentrations at POZ-4 have been stable since 2015, and recent data do not follow a statistically significant trend.

All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results generally reflect the predicted cobalt groundwater fate and transport modeling results. Even though there is variability in the cobalt data, concentrations at downgradient well POZ-7 are stable and no statistically significant trends were identified at POZ-3 or POZ-6.

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

Enclosures:

Table 1 – January 2025 Corrective Action Monitoring Data (CGS Class 2 Landfill)

Attachment A – Statistical Output, January 2025

https://haleyaldrich.sharepoint.com/sites/SanteeCooper2/Shared Documents/0132892.Santee Cooper CCR Consulting Service/0_Cross Generating Station/Statistical Analysis/2025-05/Class 2_Federal/client final/2025_0701_HAI_CGS_Class II LF_Assessment Monitoring Stats_F.docx

TABLE

TABLE 1
JANUARY 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^[a]	Assumed Data Distribution	Inter-well Analysis																				
													Sample Date	January 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^[b]	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>												
CCR Appendix IV: Antimony, Total (mg/L)																																	
CBW-1	1/23	96%	0.005 - 0.025	0.00591	0.005	0.00581	0.0059	71%	0	1	Not Evaluated	Non-Parametric	1/14/2025	0.0059	Y	NA	NA	0.006	0.025	NA	NA												
PM-1	1/23	96%	0.005 - 0.025	0.00611	0.005	0.00956	0.0056	69%	0	2	Not Evaluated		1/14/2025	0.0056	Y							NA	NA	NA	NA								
POZ-3	0/11	100%	0.005-0.05	0.00909	0.005	0.0275	NA	149%	0	1	Not Evaluated	NA	1/28/2025	0.005	N	0.025	No	0.006	0.025	NA	No												
POZ-4	1/21	95%	0.005 - 0.025	0.00599	0.005	0.0058	0.0058	73%	0	1	Not Evaluated	NA	1/28/2025	0.0058	Y		No			NA	No												
POZ-6	1/21	95%	0.005 - 0.025	0.00597	0.005	0.0053	0.0053	73%	0	1	Not Evaluated	NA	1/28/2025	0.0053	Y		No			NA	No												
POZ-7	0/21	100%	0.005 - 0.025	0.00595	0.005	0.005	NA	73%	0	1	Not Evaluated	NA	1/29/2025	0.005	N		No			NA	No												
CCR Appendix IV: Arsenic, Total (mg/L)																																	
CBW-1	3/25	88%	0.003 - 0.005	0.00528	0.005	0.00643	0.016	45%	1	0	Not Evaluated	Non-Parametric	1/14/2025	0.005	N	NA	NA	0.01	0.016	NA	NA												
PM-1	3/25	88%	0.003 - 0.01	0.00496	0.005	0.005	0.0042	24%	0	0	Not Evaluated		1/14/2025	0.005	N							NA	NA	NA	NA								
POZ-3	0/17	100%	0.003 - 0.005	0.00453	0.005	0.005	NA	19%	0	0	Not Evaluated	NA	1/28/2025	0.005	N	0.016	No	0.01	0.016	NA	No												
POZ-4	1/24	96%	0.003 - 0.005	0.00459	0.005	0.005	0.0031	18%	0	0	Not Evaluated	NA	1/28/2025	0.005	N		No			NA	No												
POZ-6	1/24	96%	0.003 - 0.005	0.00462	0.005	0.005	0.0039	17%	0	0	Not Evaluated	NA	1/28/2025	0.005	N		No			NA	No												
POZ-7	0/24	100%	0.003 - 0.005	0.00458	0.005	0.005	NA	18%	0	0	Not Evaluated	NA	1/29/2025	0.005	N		No			NA	No												
CCR Appendix IV: Barium, Total (mg/L)																																	
CBW-1	25/25	0%	NA	0.0426	0.0425	0.0472	0.061	12%	0	0	Stable	Non-Parametric	1/14/2025	0.0383	Y	NA	NA	2	2	NA	NA												
PM-1	25/25	0%	NA	0.0817	0.0803	0.0975	0.103	9%	0	0	Stable		1/14/2025	0.084	Y							NA	NA	NA	NA								
POZ-3	17/17	0%	NA	0.1093	0.105	0.1508	0.166	18%	0	0	No Trend	NA	1/28/2025	0.106	Y	0.103	Yes	2	2	NA	No												
POZ-4	24/24	0%	NA	0.115	0.101	0.184	0.255	39%	0	0	Stable	NA	1/28/2025	0.0777	Y		No			NA	No												
POZ-6	24/24	0%	NA	0.0592	0.0538	0.0876	0.100	29%	0	0	Probably Increasing	NA	1/28/2025	0.0787	Y		No			NA	No												
POZ-7	24/24	0%	NA	0.214	0.228	0.303	0.389	37%	0	0	Stable	NA	1/29/2025	0.103	Y		No			NA	No												
CCR Appendix IV: Beryllium, Total (mg/L)																																	
CBW-1	1/24	96%	0.0005 - 0.0005	0.00051	0.0005	0.0005	0.00063	5%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.0005	N	NA	NA	0.004	0.005	NA	NA												
PM-1	0/25	100%	0.0005 - 0.005	0.00068	0.0005	0.0005	NA	132%	0	1	Not Evaluated		1/14/2025	0.0005	N							NA	NA	NA	NA								
POZ-3	0/11	100%	0.0005 - 0.0005	0.00050	0.0005	0.0005	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.0005	N	0.005	No	0.004	0.005	NA	No												
POZ-4	11/23	52%	0.0005 - 0.0005	0.00063	0.0005	0.00109	0.00139	38%	0	0	Stable	NA	1/28/2025	0.0005	N		No			NA	No												
POZ-6	0/23	100%	0.0005 - 0.0005	0.00050	0.0005	0.0005	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.0005	N		No			NA	No												
POZ-7	13/23	43%	0.0005 - 0.0005	0.00062	0.00053	0.000884	0.000935	24%	0	0	Stable	NA	1/29/2025	0.0005	N		No			NA	No												

TABLE 1
JANUARY 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^[a]	Assumed Data Distribution	Inter-well Analysis									
													Sample Date	January 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^[b]	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>	
CCR Appendix IV: Cadmium, Total (mg/L)																						
CBW-1	0/24	100%	0.0005 - 0.004	0.00065	0.0005	0.0005	NA	111%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.0005	N	NA	NA	0.005	0.005	NA	NA	
PM-1	0/24	100%	0.0005 - 0.005	0.00083	0.0005	0.0035	NA	137%	0	0	Not Evaluated		1/14/2025	0.0005	N					NA	NA	
POZ-3	0/17	100%	0.0005 - 0.004	0.00071	0.0005	0.0012	NA	120%	0	0	Not Evaluated	NA	1/28/2025	0.0005	N	0.005	0.005	0.005	0.005	NA	No	
POZ-4	2/24	92%	0.0005 - 0.004	0.00066	0.0005	0.00078	0.00081	108%	0	0	Not Evaluated	NA	1/28/2025	0.0005	N					No	NA	No
POZ-6	0/24	100%	0.0005 - 0.004	0.00065	0.0005	0.0005	NA	111%	0	0	Not Evaluated	NA	1/28/2025	0.0005	N					No	NA	No
POZ-7	1/24	96%	0.0005 - 0.004	0.00065	0.0005	0.000585	0.0006	110%	0	0	Not Evaluated	NA	1/29/2025	0.0005	N					No	NA	No
CCR Appendix IV: Chromium, Total (mg/L)																						
CBW-1	1/24	96%	0.005 - 0.005	0.0054	0.005	0.005	0.014	34%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.005	N	NA	NA	0.1	0.1	NA	NA	
PM-1	0/23	100%	0.005 - 0.005	0.0050	0.005	0.005	NA	0%	0	0	Not Evaluated		1/14/2025	0.005	N					NA	NA	
POZ-3	0/17	100%	0.005 - 0.005	0.0050	0.005	0.005	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.005	N	0.014	0.1	0.1	0.1	NA	No	
POZ-4	0/24	100%	0.005 - 0.005	0.0050	0.005	0.005	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.005	N					No	NA	No
POZ-6	0/24	100%	0.005 - 0.005	0.0050	0.005	0.005	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.005	N					No	NA	No
POZ-7	1/24	96%	0.005 - 0.005	0.0050	0.005	0.005	0.0059	4%	0	0	Not Evaluated	NA	1/29/2025	0.005	N					No	NA	No
CCR Appendix IV: Cobalt, Total (mg/L)																						
CBW-1	24/25	4%	0.001 - 0.001	0.00099	0.00084	0.00127	0.0034	53%	0	0	Increasing	Non-Parametric	1/14/2025	0.00083	Y	NA	NA	0.006	0.006	NA	NA	
PM-1	24/25	4%	0.005 - 0.005	0.00123	0.001	0.00183	0.00189	68%	0	0	Stable		1/14/2025	0.0016	Y					NA	NA	
POZ-3	15/15	0%	NA	0.00142	0.001	0.00279	0.003	56%	0	0	No Trend	NA	1/28/2025	0.0010	Y	0.005	0.006	0.006	0.006	NA	No	
POZ-4	27/27	0%	NA	0.0867	0.065	0.1977	0.21	71%	26	0	No Trend	Non-Parametric	1/28/2025	0.0432	Y					Yes	0.0464	Yes
POZ-6	24/24	0%	NA	0.00305	0.00312	0.00493	0.0082	51%	1	0	No Trend	NA	1/28/2025	0.0036	Y					No	NA	No
POZ-7	17/24	29%	0.0005 - 0.0005	0.0010	0.000955	0.00231	0.0028	58%	0	0	Stable	NA	1/29/2025	0.00076	Y					No	NA	No
CCR Appendix IV: Fluoride, Total (mg/L)																						
CBW-1	24/25	4%	0.1 - 0.1	0.203	0.2	0.288	0.3	26%	0	0	Stable	Non-Parametric	1/14/2025	0.134	Y	NA	NA	4	4	NA	NA	
PM-1	0/25	100%	0.1 - 0.1	0.100	0.1	0.1	NA	0%	0	0	Not Evaluated		1/14/2025	0.1	N					NA	NA	
POZ-3	7/10	30%	0.1 - 0.1	0.123	0.105	0.183	0.21	29%	0	0	No Trend	NA	1/28/2025	0.15	Y	0.3	4	4	4	NA	No	
POZ-4	9/24	63%	0.1 - 0.1	0.111	0.1	0.1685	0.17	21%	0	0	Stable	NA	1/28/2025	0.17	Y					No	NA	No
POZ-6	5/24	79%	0.1 - 0.1	0.110	0.1	0.15	0.16	19%	0	0	Not Evaluated	NA	1/28/2025	0.1	N					No	NA	No
POZ-7	7/24	71%	0.1 - 0.1	0.111	0.1	0.13	0.27	32%	0	0	Not Evaluated	NA	1/29/2025	0.1	N					No	NA	No

TABLE 1
JANUARY 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^[a]	Assumed Data Distribution	Inter-well Analysis								
													Sample Date	January 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^[b]	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>
CCR Appendix IV: Lead, Total (mg/L)																					
CBW-1	24/25	4%	0.01 - 0.01	0.00343	0.0028	0.00875	0.011	63%	0	0	Decreasing	Non-Parametric	1/14/2025	0.002	Y	NA	NA	0.015	0.015	NA	NA
PM-1	0/25	100%	0.001 - 0.01	0.00196	0.001	0.0085	NA	127%	0	0	Not Evaluated		1/14/2025	0.001	N						
POZ-3	0/17	100%	0.001 - 0.01	0.00188	0.001	0.004	NA	116%	0	0	Not Evaluated	NA	1/28/2025	0.001	N	0.011	No	0.015	0.015	NA	No
POZ-4	0/24	100%	0.001 - 0.01	0.00169	0.001	0.0025	NA	111%	0	0	Not Evaluated	NA	1/28/2025	0.001	N					NA	No
POZ-6	0/24	100%	0.001 - 0.01	0.00169	0.001	0.0025	NA	111%	0	0	Not Evaluated	NA	1/28/2025	0.001	N					NA	No
POZ-7	0/24	100%	0.001 - 0.01	0.00169	0.001	0.0025	NA	111%	0	0	Not Evaluated	NA	1/29/2025	0.001	N					NA	No
CCR Appendix IV: Lithium, Total (mg/L)																					
CBW-1	1/25	96%	0.005 - 0.02	0.0086	0.01	0.01	0.00066	42%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.005	N	NA	NA	0.04	0.04	NA	NA
PM-1	4/25	84%	0.005 - 0.01	0.0084	0.01	0.01	0.00544	29%	0	0	Stable		1/14/2025	0.00505	Y						
POZ-3	1/11	90%	0.005 - 0.05	0.0096	0.005	0.03	0.00607	140%	0	1	Not Evaluated	NA	1/28/2025	0.005	N	0.02	No	0.04	0.04	NA	No
POZ-4	16/21	24%	0.01 - 0.01	0.0139	0.0119	0.0226	0.0246	33%	0	0	No Trend	NA	1/28/2025	0.0125	Y					NA	No
POZ-6	7/21	67%	0.01 - 0.01	0.0106	0.01	0.0134	0.0201	22%	0	0	No Trend	NA	1/28/2025	0.0134	Y					NA	No
POZ-7	4/21	81%	0.005 - 0.01	0.0092	0.01	0.011	0.02	37%	0	0	Stable	NA	1/29/2025	0.005	N					NA	No
CCR Appendix IV: Mercury, Total (mg/L)																					
CBW-1	0/25	100%	0.0002 - 0.001	0.00024	0.0002	0.00036	NA	68%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.0002	N	NA	NA	0.002	0.002	NA	NA
PM-1	0/25	100%	0.0002 - 0.001	0.00025	0.0002	0.00052	NA	71%	0	0	Not Evaluated		1/14/2025	0.0002	N						
POZ-3	0/10	100%	0.0002 - 0.0003	0.00021	0.0002	0.000255	NA	15%	0	0	Not Evaluated	NA	1/28/2025	0.0002	N	0.001	No	0.002	0.002	NA	No
POZ-4	0/21	100%	0.0002 - 0.001	0.00025	0.0002	0.0004	NA	72%	0	0	Not Evaluated	NA	1/28/2025	0.0002	N					NA	No
POZ-6	0/21	100%	0.0002 - 0.001	0.00024	0.0002	0.0002	NA	73%	0	0	Not Evaluated	NA	1/28/2025	0.0002	N					NA	No
POZ-7	2/21	90%	0.0002 - 0.001	0.00025	0.0002	0.000378	0.000378	71%	0	0	Not Evaluated	NA	1/29/2025	0.0002	N					NA	No
CCR Appendix IV: Molybdenum, Total (mg/L)																					
CBW-1	0/23	100%	0.005 - 0.02	0.00891	0.01	0.01	NA	38%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.005	N	NA	NA	0.1	0.1	NA	NA
PM-1	0/23	100%	0.005 - 0.01	0.00848	0.01	0.01	NA	28%	0	0	Not Evaluated		1/14/2025	0.005	N						
POZ-3	0/11	100%	0.005 - 0.04	0.00864	0.005	0.025	NA	122%	0	0	Not Evaluated	NA	1/28/2025	0.005	N	0.02	No	0.1	0.1	NA	No
POZ-4	0/21	100%	0.005 - 0.01	0.00833	0.01	0.01	NA	29%	0	0	Not Evaluated	NA	1/28/2025	0.005	N					NA	No
POZ-6	0/21	100%	0.005 - 0.01	0.00833	0.01	0.01	NA	29%	0	0	Not Evaluated	NA	1/28/2025	0.005	N					NA	No
POZ-7	0/21	100%	0.005 - 0.01	0.00833	0.01	0.01	NA	29%	0	0	Not Evaluated	NA	1/29/2025	0.005	N					NA	No

TABLE 1
JANUARY 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^[a]	Assumed Data Distribution	Inter-well Analysis									
													Sample Date	January 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^[b]	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>	
CCR Appendix IV: Radium 226 & Radium 228, Total (pCi/L)																						
CBW-1	17/24	29%	4 - 4	3.09	3.41	5.28	6.34	53%	4	0	Stable	Non-Parametric	1/14/2025	1.12	Y	NA	NA	5	16.3	NA	NA	
PM-1	18/24	25%	4 - 4	3.61	3.57	6.71	16.3	87%	2	0	Stable		1/14/2025	0.694	Y					NA	NA	
POZ-3	9/9	0%	4 - 4	1.68	1.53	2.81	3.039	52%	0	0	Stable	NA	1/28/2025	0.995	Y	16.3	5	16.3	No	No		
POZ-4	16/23	30%	4 - 4	3.23	4.00	4.94	6.29	45%	1	0	No Trend	NA	1/28/2025	1.83	Y				No	No		
POZ-6	15/23	35%	4 - 4	2.69	2.64	4.55	4.78	55%	0	0	No Trend	NA	1/28/2025	1.79	Y				No	No		
POZ-7	20/23	13%	4 - 4	3.24	4.00	4.88	5.39	45%	1	0	Stable	NA	1/29/2025	1.73	Y				No	No		
CCR Appendix IV: Selenium, Total (mg/L)																						
CBW-1	0/25	100%	0.0025 - 0.05	0.01232	0.01	0.02	NA	69%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.01	N	NA	NA	0.05	0.05	NA	NA	
PM-1	0/25	100%	0.0025 - 0.02	0.01070	0.01	0.02	NA	37%	0	0	Not Evaluated		1/14/2025	0.01	N					NA	NA	
POZ-3	0/17	100%	0.0025 - 0.02	0.00985	0.01	0.016	NA	39%	0	0	Not Evaluated	NA	1/28/2025	0.01	N	0.05	0.05	0.05	No	No		
POZ-4	0/24	100%	0.0025 - 0.02	0.01052	0.01	0.02	NA	40%	0	0	Not Evaluated	NA	1/28/2025	0.01	N				No	No		
POZ-6	0/24	100%	0.0025 - 0.02	0.01052	0.01	0.02	NA	40%	0	0	Not Evaluated	NA	1/28/2025	0.01	N				No	No		
POZ-7	0/24	100%	0.0025 - 0.02	0.01052	0.01	0.02	NA	40%	0	0	Not Evaluated	NA	1/29/2025	0.01	N				No	No		
CCR Appendix IV: Thallium, Total (mg/L)																						
CBW-1	0/23	100%	0.001 - 0.001	0.00100	0.001	0.001	NA	0%	0	0	Not Evaluated	Non-Parametric	1/14/2025	0.001	N	NA	NA	0.002	0.01	NA	NA	
PM-1	0/23	100%	0.001 - 0.01	0.00139	0.001	0.001	NA	135%	0	1	Not Evaluated		1/14/2025	0.001	N					NA	NA	
POZ-3	0/11	100%	0.001 - 0.001	0.00100	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.001	N	0.01	0.002	0.01	No	No		
POZ-4	0/21	100%	0.001 - 0.001	0.00100	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.001	N				No	No		
POZ-6	0/21	100%	0.001 - 0.001	0.00100	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	1/28/2025	0.001	N				No	No		
POZ-7	0/21	100%	0.001 - 0.001	0.00100	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	1/29/2025	0.001	N				No	No		

NOTES:
 [a] Mann-Kendall Trends calculated from the 8 most recent samples at a 95% confidence limits and trend classifications are determined based on guidance from the Monitoring and Remediation Optimization System (Aziz, 2003). Recent trend date ranges vary by well/constituent and are included in Attachment A, Table A-4. 'Probably increasing' and 'probably decreasing' trends indicate that while no statistically significant trend was identified at the indicated confidence level, data suggest emerging trends at a lower confidence level. Data sets that do not meet test requirements, such as having a detection rate of at least 25%, are labeled as 'Not Evaluated'.
 [b] Interwell Tolerance Limits are calculated from data collected from ipooled upgradient well data (CBW-1 and PM-1) through January 2025. No statistical outlier data points were removed from background datasets.
 MCL/RSL: Maximum contaminant level/Regional screening level
 mg/L: milligrams per liter, pCi/L: picocuries per liter
 NA: not applicable

ATTACHMENT A
Statistical Output, January 2025

Table A-1. Descriptive Statistics

Location	Constituent	Units	n	n, non-detects	percent of non-detects	max	min	mean	median	standard deviation	coefficient of variation (%)	reporting limit range	date range
CBW-1 (Background)	Antimony	mg/L	23	22	96	0.025	0.005	0.00591	0.005	0.0042	70.5	0.005 - 0.025	2015-10-19 to 2025-01-14
PM-1 (Background)	Antimony	mg/L	23	22	96	0.025	0.005	0.00611	0.005	0.0042	69.5	0.005 - 0.025	2015-10-19 to 2025-01-14
POZ-3	Antimony	mg/L	11	11	100	0.05	0.005	0.00909	0.005	0.014	149	0.005 - 0.05	2022-06-27 to 2025-01-28
POZ-4	Antimony	mg/L	21	20	95	0.025	0.005	0.00599	0.005	0.0044	72.8	0.005 - 0.025	2015-10-22 to 2025-01-28
POZ-6	Antimony	mg/L	21	20	95	0.025	0.005	0.00597	0.005	0.0044	73.1	0.005 - 0.025	2015-10-22 to 2025-01-28
POZ-7	Antimony	mg/L	21	21	100	0.025	0.005	0.00595	0.005	0.0044	73.3	0.005 - 0.025	2015-10-22 to 2025-01-29
Pooled Background	Antimony	mg/L	46	44	96	0.025	0.005	0.00601	0.005	0.0042	69.2	0.005 - 0.025	2015-10-19 to 2025-01-14
CBW-1 (Background)	Arsenic	mg/L	25	22	88	0.016	0.003	0.00528	0.005	0.0024	44.7	0.003 - 0.005	2015-10-19 to 2025-01-14
PM-1 (Background)	Arsenic	mg/L	25	22	88	0.01	0.003	0.00496	0.005	0.0012	24.2	0.003 - 0.01	2015-10-19 to 2025-01-14
POZ-3	Arsenic	mg/L	17	17	100	0.005	0.003	0.00453	0.005	0.00087	19.3	0.003 - 0.005	2018-02-08 to 2025-01-28
POZ-4	Arsenic	mg/L	24	23	96	0.005	0.003	0.00459	0.005	0.00082	17.9	0.003 - 0.005	2015-10-22 to 2025-01-28
POZ-6	Arsenic	mg/L	24	23	96	0.005	0.003	0.00462	0.005	0.00077	16.7	0.003 - 0.005	2015-10-22 to 2025-01-28
POZ-7	Arsenic	mg/L	24	24	100	0.005	0.003	0.00458	0.005	0.00083	18.1	0.003 - 0.005	2015-10-22 to 2025-01-29
Pooled Background	Arsenic	mg/L	50	44	88	0.016	0.003	0.00512	0.005	0.0019	36.4	0.003 - 0.01	2015-10-19 to 2025-01-14
CBW-1 (Background)	Barium	mg/L	25	0	0	0.061	0.033	0.0426	0.0425	0.005	11.8	NA	2015-10-19 to 2025-01-14
PM-1 (Background)	Barium	mg/L	25	0	0	0.103	0.0703	0.0817	0.0803	0.0077	9.37	NA	2015-10-19 to 2025-01-14
POZ-3	Barium	mg/L	17	0	0	0.166	0.0911	0.109	0.105	0.02	18	NA	2018-02-08 to 2025-01-28
POZ-4	Barium	mg/L	24	0	0	0.255	0.0702	0.115	0.101	0.045	38.9	NA	2015-10-22 to 2025-01-28
POZ-6	Barium	mg/L	24	0	0	0.1	0.0395	0.0592	0.0538	0.017	28.6	NA	2015-10-22 to 2025-01-28
POZ-7	Barium	mg/L	24	0	0	0.389	0.0949	0.214	0.227	0.079	37	NA	2015-10-22 to 2025-01-29
Pooled Background	Barium	mg/L	50	0	0	0.103	0.033	0.0622	0.0656	0.021	33.4	NA	2015-10-19 to 2025-01-14
CBW-1 (Background)	Beryllium	mg/L	24	23	96	0.00063	0.0005	0.000505	0.0005	2.7e-05	5.25	0.0005 - 0.0005	2015-10-19 to 2025-01-14
PM-1 (Background)	Beryllium	mg/L	25	25	100	0.005	0.0005	0.00068	0.0005	0.0009	132	0.0005 - 0.005	2015-10-19 to 2025-01-14
POZ-3	Beryllium	mg/L	11	11	100	0.0005	0.0005	0.0005	0.0005	0	0	0.0005 - 0.0005	2022-06-27 to 2025-01-28
POZ-4	Beryllium	mg/L	23	12	52	0.00139	0.0005	0.000626	0.0005	0.00024	38.4	0.0005 - 0.0005	2015-10-22 to 2025-01-28
POZ-6	Beryllium	mg/L	23	23	100	0.0005	0.0005	0.0005	0.0005	0	0	0.0005 - 0.0005	2015-10-22 to 2025-01-28
POZ-7	Beryllium	mg/L	23	10	43	0.000935	0.0005	0.000623	0.00053	0.00015	24	0.0005 - 0.0005	2015-10-22 to 2025-01-29
Pooled Background	Beryllium	mg/L	49	48	98	0.005	0.0005	0.000594	0.0005	0.00064	108	0.0005 - 0.005	2015-10-19 to 2025-01-14
CBW-1 (Background)	Cadmium	mg/L	24	24	100	0.004	0.0005	0.000646	0.0005	0.00071	111	0.0005 - 0.004	2015-10-19 to 2025-01-14
PM-1 (Background)	Cadmium	mg/L	24	24	100	0.005	0.0005	0.000833	0.0005	0.0011	137	0.0005 - 0.005	2015-10-19 to 2025-01-14
POZ-3	Cadmium	mg/L	17	17	100	0.004	0.0005	0.000706	0.0005	0.00085	120	0.0005 - 0.004	2018-02-08 to 2025-01-28
POZ-4	Cadmium	mg/L	24	22	92	0.004	0.0005	0.000663	0.0005	0.00071	108	0.0005 - 0.004	2015-10-22 to 2025-01-28
POZ-6	Cadmium	mg/L	24	24	100	0.004	0.0005	0.000646	0.0005	0.00071	111	0.0005 - 0.004	2015-10-22 to 2025-01-28
POZ-7	Cadmium	mg/L	24	23	96	0.004	0.0005	0.00065	0.0005	0.00071	110	0.0005 - 0.004	2015-10-22 to 2025-01-29
Pooled Background	Cadmium	mg/L	48	48	100	0.005	0.0005	0.00074	0.0005	0.00095	128	0.0005 - 0.005	2015-10-19 to 2025-01-14
CBW-1 (Background)	Chromium	mg/L	24	23	96	0.014	0.005	0.00538	0.005	0.0018	34.2	0.005 - 0.005	2015-10-19 to 2025-01-14
PM-1 (Background)	Chromium	mg/L	23	23	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2015-10-19 to 2025-01-14
POZ-3	Chromium	mg/L	17	17	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2018-02-08 to 2025-01-28
POZ-4	Chromium	mg/L	24	24	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2015-10-22 to 2025-01-28
POZ-6	Chromium	mg/L	24	24	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2015-10-22 to 2025-01-28
POZ-7	Chromium	mg/L	24	23	96	0.0059	0.005	0.00504	0.005	0.00018	3.65	0.005 - 0.005	2015-10-22 to 2025-01-29
Pooled Background	Chromium	mg/L	47	46	98	0.014	0.005	0.00519	0.005	0.0013	25.3	0.005 - 0.005	2015-10-19 to 2025-01-14
CBW-1 (Background)	Cobalt	mg/L	25	1	4	0.0034	0.00063	0.000991	0.00084	0.00053	53.4	0.001 - 0.001	2015-10-19 to 2025-01-14
PM-1 (Background)	Cobalt	mg/L	25	1	4	0.005	0.00079	0.00123	0.001	0.00083	67.8	0.005 - 0.005	2015-10-19 to 2025-01-14
POZ-3	Cobalt	mg/L	15	0	0	0.003	0.00066	0.00142	0.001	0.00079	55.8	NA	2020-02-26 to 2025-01-28
POZ-4	Cobalt	mg/L	27	0	0	0.21	0.0036	0.0867	0.065	0.061	70.7	NA	2015-10-22 to 2025-01-28
POZ-6	Cobalt	mg/L	24	0	0	0.0082	0.00074	0.00305	0.00312	0.0016	51.3	NA	2015-10-22 to 2025-01-28
POZ-7	Cobalt	mg/L	24	7	29	0.0028	0.0005	0.00104	0.000955	0.0006	57.8	0.0005 - 0.0005	2015-10-22 to 2025-01-29
Pooled Background	Cobalt	mg/L	50	2	4	0.005	0.00063	0.00111	0.00092	0.0007	63.2	0.001 - 0.005	2015-10-19 to 2025-01-14
CBW-1 (Background)	Fluoride	mg/L	25	1	4	0.3	0.1	0.203	0.2	0.053	25.8	0.1 - 0.1	2015-10-19 to 2025-01-14
PM-1 (Background)	Fluoride	mg/L	25	25	100	0.1	0.1	0.1	0.1	0	0	0.1 - 0.1	2015-10-19 to 2025-01-14
POZ-3	Fluoride	mg/L	10	3	30	0.21	0.1	0.123	0.105	0.036	28.9	0.1 - 0.1	2022-11-01 to 2025-01-28
POZ-4	Fluoride	mg/L	24	15	62	0.17	0.1	0.111	0.1	0.023	20.6	0.1 - 0.1	2015-10-22 to 2025-01-28
POZ-6	Fluoride	mg/L	24	19	79	0.16	0.1	0.11	0.1	0.02	18.6	0.1 - 0.1	2015-10-22 to 2025-01-28
POZ-7	Fluoride	mg/L	24	17	71	0.27	0.1	0.111	0.1	0.035	31.6	0.1 - 0.1	2015-10-22 to 2025-01-29
Pooled Background	Fluoride	mg/L	50	26	52	0.3	0.1	0.152	0.1	0.064	42.1	0.1 - 0.1	2015-10-19 to 2025-01-14
CBW-1 (Background)	Lead	mg/L	25	1	4	0.011	0.002	0.00343	0.0028	0.0022	63.2	0.01 - 0.01	2015-10-19 to 2025-01-14

Location	Constituent	Units	n	n, non-detects	percent of non-detects	max	min	mean	median	standard deviation	coefficient of variation (%)	reporting limit range	date range
PM-1 (Background)	Lead	mg/L	25	25	100	0.01	0.001	0.00196	0.001	0.0025	127	0.001 - 0.01	2015-10-19 to 2025-01-14
POZ-3	Lead	mg/L	17	17	100	0.01	0.001	0.00188	0.001	0.0022	116	0.001 - 0.01	2018-02-08 to 2025-01-28
POZ-4	Lead	mg/L	24	24	100	0.01	0.001	0.00169	0.001	0.0019	111	0.001 - 0.01	2015-10-22 to 2025-01-28
POZ-6	Lead	mg/L	24	24	100	0.01	0.001	0.00169	0.001	0.0019	111	0.001 - 0.01	2015-10-22 to 2025-01-28
POZ-7	Lead	mg/L	24	24	100	0.01	0.001	0.00169	0.001	0.0019	111	0.001 - 0.01	2015-10-22 to 2025-01-29
Pooled Background	Lead	mg/L	50	26	52	0.011	0.001	0.0027	0.0025	0.0024	89.9	0.001 - 0.01	2015-10-19 to 2025-01-14
CBW-1 (Background)	Lithium	mg/L	25	24	96	0.02	0.00066	0.00863	0.01	0.0036	42	0.005 - 0.02	2015-10-19 to 2025-01-14
PM-1 (Background)	Lithium	mg/L	25	21	84	0.01	0.0037	0.00838	0.01	0.0024	29	0.005 - 0.01	2015-10-19 to 2025-01-14
POZ-3	Lithium	mg/L	11	10	91	0.05	0.005	0.00964	0.005	0.013	140	0.005 - 0.05	2022-06-27 to 2025-01-28
POZ-4	Lithium	mg/L	21	5	24	0.0246	0.01	0.0139	0.0119	0.0046	33	0.01 - 0.01	2015-10-22 to 2025-01-28
POZ-6	Lithium	mg/L	21	14	67	0.0201	0.00858	0.0106	0.01	0.0024	22.2	0.01 - 0.01	2015-10-22 to 2025-01-28
POZ-7	Lithium	mg/L	21	17	81	0.02	0.0037	0.00919	0.01	0.0034	36.9	0.005 - 0.01	2015-10-22 to 2025-01-29
Pooled Background	Lithium	mg/L	50	45	90	0.02	0.00066	0.0085	0.01	0.0031	35.9	0.005 - 0.02	2015-10-19 to 2025-01-14
CBW-1 (Background)	Mercury	mg/L	25	25	100	0.001	0.0002	0.00024	0.0002	0.00016	68	0.0002 - 0.001	2015-10-19 to 2025-01-14
PM-1 (Background)	Mercury	mg/L	25	25	100	0.001	0.0002	0.000248	0.0002	0.00018	70.9	0.0002 - 0.001	2015-10-19 to 2025-01-14
POZ-3	Mercury	mg/L	10	10	100	0.0003	0.0002	0.00021	0.0002	3.2e-05	15.1	0.0002 - 0.0003	2022-11-01 to 2025-01-28
POZ-4	Mercury	mg/L	21	21	100	0.001	0.0002	0.000248	0.0002	0.00018	71.8	0.0002 - 0.001	2015-10-22 to 2025-01-28
POZ-6	Mercury	mg/L	21	21	100	0.001	0.0002	0.000238	0.0002	0.00017	73.3	0.0002 - 0.001	2015-10-22 to 2025-01-28
POZ-7	Mercury	mg/L	21	19	90	0.001	0.0002	0.000249	0.0002	0.00018	70.9	0.0002 - 0.001	2015-10-22 to 2025-01-29
Pooled Background	Mercury	mg/L	50	50	100	0.001	0.0002	0.000244	0.0002	0.00017	68.9	0.0002 - 0.001	2015-10-19 to 2025-01-14
CBW-1 (Background)	Molybdenum	mg/L	23	23	100	0.02	0.005	0.00891	0.01	0.0034	37.7	0.005 - 0.02	2015-10-19 to 2025-01-14
PM-1 (Background)	Molybdenum	mg/L	23	23	100	0.01	0.005	0.00848	0.01	0.0024	27.7	0.005 - 0.01	2015-10-19 to 2025-01-14
POZ-3	Molybdenum	mg/L	11	11	100	0.04	0.005	0.00864	0.005	0.011	122	0.005 - 0.04	2022-06-27 to 2025-01-28
POZ-4	Molybdenum	mg/L	21	21	100	0.01	0.005	0.00833	0.01	0.0024	29	0.005 - 0.01	2015-10-22 to 2025-01-28
POZ-6	Molybdenum	mg/L	21	21	100	0.01	0.005	0.00833	0.01	0.0024	29	0.005 - 0.01	2015-10-22 to 2025-01-28
POZ-7	Molybdenum	mg/L	21	21	100	0.01	0.005	0.00833	0.01	0.0024	29	0.005 - 0.01	2015-10-22 to 2025-01-29
Pooled Background	Molybdenum	mg/L	46	46	100	0.02	0.005	0.0087	0.01	0.0029	33.1	0.005 - 0.02	2015-10-19 to 2025-01-14
CBW-1 (Background)	Radium-226 & 228	pCi/L	24	7	29	6.34	0.346	3.09	3.41	1.6	53.3	4 - 4	2015-10-19 to 2025-01-14
PM-1 (Background)	Radium-226 & 228	pCi/L	24	6	25	16.3	0.538	3.61	3.57	3.1	86.6	4 - 4	2015-10-19 to 2025-01-14
POZ-3	Radium-226 & 228	pCi/L	9	0	0	3.04	0.205	1.68	1.53	0.87	51.6	NA	2022-11-01 to 2025-01-28
POZ-4	Radium-226 & 228	pCi/L	23	7	30	6.29	0.244	3.23	4	1.5	45.2	4 - 4	2015-10-22 to 2025-01-28
POZ-6	Radium-226 & 228	pCi/L	23	8	35	4.78	0.447	2.69	2.64	1.5	55.4	4 - 4	2015-10-22 to 2025-01-28
POZ-7	Radium-226 & 228	pCi/L	23	3	13	5.39	1.08	3.24	4	1.5	44.9	4 - 4	2015-10-22 to 2025-01-29
Pooled Background	Radium-226 & 228	pCi/L	48	13	27	16.3	0.346	3.35	3.57	2.5	74.2	4 - 4	2015-10-19 to 2025-01-14
CBW-1 (Background)	Selenium	mg/L	25	25	100	0.05	0.0025	0.0123	0.01	0.0085	69.3	0.0025 - 0.05	2015-10-19 to 2025-01-14
PM-1 (Background)	Selenium	mg/L	25	25	100	0.02	0.0025	0.0107	0.01	0.0039	36.6	0.0025 - 0.02	2015-10-19 to 2025-01-14
POZ-3	Selenium	mg/L	17	17	100	0.02	0.0025	0.00985	0.01	0.0038	38.6	0.0025 - 0.02	2018-02-08 to 2025-01-28
POZ-4	Selenium	mg/L	24	24	100	0.02	0.0025	0.0105	0.01	0.0042	39.6	0.0025 - 0.02	2015-10-22 to 2025-01-28
POZ-6	Selenium	mg/L	24	24	100	0.02	0.0025	0.0105	0.01	0.0042	39.6	0.0025 - 0.02	2015-10-22 to 2025-01-28
POZ-7	Selenium	mg/L	24	24	100	0.02	0.0025	0.0105	0.01	0.0042	39.6	0.0025 - 0.02	2015-10-22 to 2025-01-29
Pooled Background	Selenium	mg/L	50	50	100	0.05	0.0025	0.0115	0.01	0.0066	57.6	0.0025 - 0.05	2015-10-19 to 2025-01-14
CBW-1 (Background)	Thallium	mg/L	23	23	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-19 to 2025-01-14
PM-1 (Background)	Thallium	mg/L	23	23	100	0.01	0.001	0.00139	0.001	0.0019	135	0.001 - 0.01	2015-10-19 to 2025-01-14
POZ-3	Thallium	mg/L	11	11	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2022-06-27 to 2025-01-28
POZ-4	Thallium	mg/L	21	21	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-22 to 2025-01-28
POZ-6	Thallium	mg/L	21	21	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-22 to 2025-01-28
POZ-7	Thallium	mg/L	21	21	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-22 to 2025-01-29
Pooled Background	Thallium	mg/L	46	46	100	0.01	0.001	0.0012	0.001	0.0013	111	0.001 - 0.01	2015-10-19 to 2025-01-14

Table A-2. Results of Shapiro-Wilk Test for Normality

Shapiro-Wilk Test for Normality (R programming, package = stats, version 4.3.3, function = shapiro.test, non-detects substituted by 0.5*reporting limit)						
Location	Constituent	W statistic	p-value	Sample Count (n)	Non-Detect Count (n)	Data Normality (significance level = 0.05)
CBW-1 (Background)	Antimony	0.303	1.8e-09	23	22	Not normal
PM-1 (Background)	Antimony	0.359	5e-09	23	22	Not normal
POZ-3	Antimony	NA	NA	11	11	Not Evaluated - All Non-Detect Results
POZ-4	Antimony	0.319	6.4e-09	21	20	Not normal
POZ-6	Antimony	0.309	5.3e-09	21	20	Not normal
POZ-7	Antimony	NA	NA	21	21	Not Evaluated - All Non-Detect Results
Pooled Background	Antimony	0.326	3.1e-13	46	44	Not normal
CBW-1 (Background)	Arsenic	0.408	5.2e-09	25	22	Not normal
PM-1 (Background)	Arsenic	0.581	2.6e-07	25	22	Not normal
POZ-3	Arsenic	NA	NA	17	17	Not Evaluated - All Non-Detect Results
POZ-4	Arsenic	0.579	3.6e-07	24	23	Not normal
POZ-6	Arsenic	0.607	7.4e-07	24	23	Not normal
POZ-7	Arsenic	NA	NA	24	24	Not Evaluated - All Non-Detect Results
Pooled Background	Arsenic	0.357	1.8e-13	50	44	Not normal
CBW-1 (Background)	Barium	0.818	0.00047	25	0	Not normal
PM-1 (Background)	Barium	0.887	0.0096	25	0	Not normal
POZ-3	Barium	0.761	0.00063	17	0	Not normal
POZ-4	Barium	0.845	0.0018	24	0	Not normal
POZ-6	Barium	0.876	0.0069	24	0	Not normal
POZ-7	Barium	0.939	0.15	24	0	Normal
Pooled Background	Barium	0.854	2e-05	50	0	Not normal
CBW-1 (Background)	Beryllium	0.209	2.2e-10	24	23	Not normal
PM-1 (Background)	Beryllium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-3	Beryllium	NA	NA	11	11	Not Evaluated - All Non-Detect Results
POZ-4	Beryllium	0.772	0.00014	23	12	Not normal
POZ-6	Beryllium	NA	NA	23	23	Not Evaluated - All Non-Detect Results
POZ-7	Beryllium	0.827	0.0011	23	10	Not normal
Pooled Background	Beryllium	0.159	3.1e-15	49	48	Not normal
CBW-1 (Background)	Cadmium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Cadmium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-3	Cadmium	NA	NA	17	17	Not Evaluated - All Non-Detect Results
POZ-4	Cadmium	0.343	2.3e-09	24	22	Not normal
POZ-6	Cadmium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-7	Cadmium	0.266	5.7e-10	24	23	Not normal
Pooled Background	Cadmium	NA	NA	48	48	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Chromium	0.209	2.2e-10	24	23	Not normal
PM-1 (Background)	Chromium	NA	NA	23	23	Not Evaluated - All Non-Detect Results
POZ-3	Chromium	NA	NA	17	17	Not Evaluated - All Non-Detect Results
POZ-4	Chromium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-6	Chromium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-7	Chromium	0.209	2.2e-10	24	23	Not normal
Pooled Background	Chromium	0.131	3.6e-15	47	46	Not normal
CBW-1 (Background)	Cobalt	0.517	5.5e-08	25	1	Not normal
PM-1 (Background)	Cobalt	0.716	1.2e-05	25	1	Not normal
POZ-3	Cobalt	0.788	0.0026	15	0	Not normal
POZ-4	Cobalt	0.913	0.026	27	0	Not normal
POZ-6	Cobalt	0.875	0.0067	24	0	Not normal
POZ-7	Cobalt	0.872	0.0057	24	7	Not normal
Pooled Background	Cobalt	0.654	1.3e-09	50	2	Not normal
CBW-1 (Background)	Fluoride	0.968	0.59	25	1	Normal
PM-1 (Background)	Fluoride	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-3	Fluoride	0.915	0.32	10	3	Normal
POZ-4	Fluoride	0.710	1.4e-05	24	15	Not normal
POZ-6	Fluoride	0.523	9.5e-08	24	19	Not normal
POZ-7	Fluoride	0.573	3.1e-07	24	17	Not normal
Pooled Background	Fluoride	0.791	5.3e-07	50	26	Not normal
CBW-1 (Background)	Lead	0.488	2.9e-08	25	1	Not normal
PM-1 (Background)	Lead	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-3	Lead	NA	NA	17	17	Not Evaluated - All Non-Detect Results
POZ-4	Lead	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-6	Lead	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-7	Lead	NA	NA	24	24	Not Evaluated - All Non-Detect Results
Pooled Background	Lead	0.752	8.1e-08	50	26	Not normal

Shapiro-Wilk Test for Normality (R programming, package = stats, version 4.3.3, function = shapiro.test, non-detects substituted by 0.5*reporting limit)

Location	Constituent	W statistic	p-value	Sample Count (n)	Non-Detect Count (n)	Data Normality (significance level = 0.05)
CBW-1 (Background)	Lithium	0.738	2.5e-05	25	24	Not normal
PM-1 (Background)	Lithium	0.570	2e-07	25	21	Not normal
POZ-3	Lithium	0.456	4.6e-07	11	10	Not normal
POZ-4	Lithium	0.912	0.06	21	5	Normal
POZ-6	Lithium	0.657	8.3e-06	21	14	Not normal
POZ-7	Lithium	0.592	1.6e-06	21	17	Not normal
Pooled Background	Lithium	0.677	3.2e-09	50	45	Not normal
CBW-1 (Background)	Mercury	NA	NA	25	25	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Mercury	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-3	Mercury	NA	NA	10	10	Not Evaluated - All Non-Detect Results
POZ-4	Mercury	NA	NA	21	21	Not Evaluated - All Non-Detect Results
POZ-6	Mercury	NA	NA	21	21	Not Evaluated - All Non-Detect Results
POZ-7	Mercury	0.433	5.2e-08	21	19	Not normal
Pooled Background	Mercury	NA	NA	50	50	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Molybdenum	NA	NA	23	23	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Molybdenum	NA	NA	23	23	Not Evaluated - All Non-Detect Results
POZ-3	Molybdenum	NA	NA	11	11	Not Evaluated - All Non-Detect Results
POZ-4	Molybdenum	NA	NA	21	21	Not Evaluated - All Non-Detect Results
POZ-6	Molybdenum	NA	NA	21	21	Not Evaluated - All Non-Detect Results
POZ-7	Molybdenum	NA	NA	21	21	Not Evaluated - All Non-Detect Results
Pooled Background	Molybdenum	NA	NA	46	46	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Radium-226 & 228	0.837	0.0013	24	7	Not normal
PM-1 (Background)	Radium-226 & 228	0.612	8.4e-07	24	6	Not normal
POZ-3	Radium-226 & 228	0.983	0.98	9	0	Normal
POZ-4	Radium-226 & 228	0.877	0.0089	23	7	Not normal
POZ-6	Radium-226 & 228	0.827	0.0011	23	8	Not normal
POZ-7	Radium-226 & 228	0.880	0.01	23	3	Not normal
Pooled Background	Radium-226 & 228	0.646	1.7e-09	48	13	Not normal
CBW-1 (Background)	Selenium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Selenium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-3	Selenium	NA	NA	17	17	Not Evaluated - All Non-Detect Results
POZ-4	Selenium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-6	Selenium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-7	Selenium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
Pooled Background	Selenium	NA	NA	50	50	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Thallium	NA	NA	23	23	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Thallium	NA	NA	23	23	Not Evaluated - All Non-Detect Results
POZ-3	Thallium	NA	NA	11	11	Not Evaluated - All Non-Detect Results
POZ-4	Thallium	NA	NA	21	21	Not Evaluated - All Non-Detect Results
POZ-6	Thallium	NA	NA	21	21	Not Evaluated - All Non-Detect Results
POZ-7	Thallium	NA	NA	21	21	Not Evaluated - All Non-Detect Results
Pooled Background	Thallium	NA	NA	46	46	Not Evaluated - All Non-Detect Results

Table A-3. Results of Rosner/Dixon Test for Outliers

Rosner or Dixon Test for Outliers (R programming, package = outliers, version 0.15, function = dixon.test or rosnerTest, non-detects substituted by reporting limit)

Location	Constituent	n	n, non-detects	Outlier Test	statistic	p-value (Dixon)	critical value (Rosner)	n of statistical outliers (significance level = 0.05, Rosner)	statistical outlier (significance level = 0.05, Dixon)	outlier removed
CBW-1	Antimony	23	22	Dixon	1	0	NA	NA	Yes	NA
PM-1	Antimony	23	22	Dixon	0.97	0	NA	NA	Yes	NA
POZ-3	Antimony	11	11	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Antimony	21	20	Dixon	1	0	NA	NA	Yes	NA
POZ-6	Antimony	21	20	Dixon	1	0	NA	NA	Yes	NA
POZ-7	Antimony	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
Pooled Background	Antimony	46	44	Rosner	4.563, 6.355, 6.337	NA	3.094, 3.085, 3.076	3	NA	NA
CBW-1	Arsenic	25	22	Dixon	0.8177	0	NA	NA	Yes	NA
PM-1	Arsenic	25	22	Dixon	0.7692	0	NA	NA	Yes	NA
POZ-3	Arsenic	17	17	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Arsenic	24	23	Dixon	0	0	NA	NA	Yes	NA
POZ-6	Arsenic	24	23	Dixon	0	0	NA	NA	Yes	NA
POZ-7	Arsenic	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
Pooled Background	Arsenic	50	44	Rosner	5.84, 5.035, 2.744	NA	3.128, 3.12, 3.112	2	NA	NA
CBW-1	Barium	25	0	Dixon	0.618	0	NA	NA	Yes	NA
PM-1	Barium	25	0	Dixon	0.5596	0	NA	NA	Yes	NA
POZ-3	Barium	17	0	Dixon	0.625	0.002857	NA	NA	Yes	NA
POZ-4	Barium	24	0	Dixon	0.5251	0.009578	NA	NA	Yes	NA
POZ-6	Barium	24	0	Dixon	0.2938	0.4724	NA	NA	No	NA
POZ-7	Barium	24	0	Dixon	0.3007	0.4408	NA	NA	No	NA
Pooled Background	Barium	50	0	Rosner	1.965, 1.92, 1.41	NA	3.128, 3.12, 3.112	0	NA	NA
CBW-1	Beryllium	24	23	Dixon	1	0	NA	NA	Yes	NA
PM-1	Beryllium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Beryllium	11	11	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Beryllium	23	12	Dixon	0.4382	0.07542	NA	NA	No	NA
POZ-6	Beryllium	23	23	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Beryllium	23	10	Dixon	0.2414	0.7857	NA	NA	No	NA
Pooled Background	Beryllium	49	48	Rosner	6.854, 6.784, NA	NA	3.12, 3.112, 3.103	2	NA	NA
CBW-1	Cadmium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
PM-1	Cadmium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Cadmium	17	17	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Cadmium	24	22	Dixon	0.9714	0	NA	NA	Yes	NA
POZ-6	Cadmium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Cadmium	24	23	Dixon	1	0	NA	NA	Yes	NA
Pooled Background	Cadmium	48	48	Rosner	All results are non-detect	NA	NA	NA	NA	NA
CBW-1	Chromium	24	23	Dixon	1	0	NA	NA	Yes	NA
PM-1	Chromium	23	23	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Chromium	17	17	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Chromium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-6	Chromium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Chromium	24	23	Dixon	1	0	NA	NA	Yes	NA
Pooled Background	Chromium	47	46	Rosner	6.71, NA, NA	NA	3.103, 3.094, 3.085	1	NA	NA
CBW-1	Cobalt	25	1	Dixon	0.8296	0	NA	NA	Yes	NA
PM-1	Cobalt	25	1	Dixon	0.8193	0	NA	NA	Yes	NA
POZ-3	Cobalt	15	0	Dixon	0.2342	0.801	NA	NA	No	NA
POZ-4	Cobalt	27	0	Rosner	2.01, 2.025, 2.247	NA	2.859, 2.841, 2.822	0	NA	NA
POZ-6	Cobalt	24	0	Dixon	0.5132	0.01346	NA	NA	Yes	NA
POZ-7	Cobalt	24	7	Dixon	0.4348	0.06858	NA	NA	No	NA
Pooled Background	Cobalt	50	2	Rosner	5.543, 5.568, 3.619	NA	3.128, 3.12, 3.112	3	NA	NA
CBW-1	Fluoride	25	1	Dixon	0.1889	0.9497	NA	NA	No	NA
PM-1	Fluoride	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Fluoride	10	3	Dixon	0.5455	0.04307	NA	NA	Yes	NA
POZ-4	Fluoride	24	15	Dixon	0.1429	0.6056	NA	NA	No	NA
POZ-6	Fluoride	24	19	Dixon	0.1667	0.764	NA	NA	No	NA
POZ-7	Fluoride	24	17	Dixon	0.8235	0	NA	NA	Yes	NA
Pooled Background	Fluoride	50	26	Rosner	2.323, 2.326, 2.324	NA	3.128, 3.12, 3.112	0	NA	NA
CBW-1	Lead	25	1	Dixon	0.843	0	NA	NA	Yes	NA
PM-1	Lead	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Lead	17	17	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Lead	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-6	Lead	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Lead	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
Pooled Background	Lead	50	26	Rosner	3.423, 3.507, 4.123	NA	3.128, 3.12, 3.112	3	NA	NA
CBW-1	Lithium	25	24	Dixon	0.6667	0	NA	NA	Yes	NA
PM-1	Lithium	25	21	Dixon	0.2063	0.9308	NA	NA	No	NA
POZ-3	Lithium	11	10	Dixon	0.9762	0	NA	NA	Yes	NA
POZ-4	Lithium	21	5	Dixon	0.2466	0.8334	NA	NA	No	NA

Rosner or Dixon Test for Outliers (R programming, package = outliers, version 0.15, function = dixon.test or rosnerTest, non-detects substituted by reporting limit)

Location	Constituent	n	n, non-detects	Outlier Test	statistic	p-value (Dixon)	critical value (Rosner)	n of statistical outliers (significance level = 0.05, Rosner)	statistical outlier (significance level = 0.05, Dixon)	outlier removed
POZ-6	Lithium	21	14	Dixon	0.7766	0	NA	NA	Yes	NA
POZ-7	Lithium	21	17	Dixon	0.6667	0	NA	NA	Yes	NA
Pooled Background	Lithium	50	45	Rosner	3.763, 2.934, 1.996	NA	3.128, 3.12, 3.112	1	NA	NA
CBW-1	Mercury	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
PM-1	Mercury	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Mercury	10	10	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Mercury	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-6	Mercury	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Mercury	21	19	Dixon	0.9375	0	NA	NA	Yes	NA
Pooled Background	Mercury	50	50	Rosner	All results are non-detect	NA	NA	NA	NA	NA
CBW-1	Molybdenum	23	23	Dixon	All results are non-detect	NA	NA	NA	NA	NA
PM-1	Molybdenum	23	23	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Molybdenum	11	11	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Molybdenum	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-6	Molybdenum	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Molybdenum	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
Pooled Background	Molybdenum	46	46	Rosner	All results are non-detect	NA	NA	NA	NA	NA
CBW-1	Radium-226 & 228	24	7	Dixon	0.2356	0.7784	NA	NA	No	NA
PM-1	Radium-226 & 228	24	6	Dixon	0.7504	0	NA	NA	Yes	NA
POZ-3	Radium-226 & 228	9	0	Dixon	0.3502	0.405	NA	NA	No	NA
POZ-4	Radium-226 & 228	23	7	Dixon	0.3028	0.4578	NA	NA	No	NA
POZ-6	Radium-226 & 228	23	8	Dixon	0.1454	0.5964	NA	NA	No	NA
POZ-7	Radium-226 & 228	23	3	Dixon	0.005277	0	NA	NA	Yes	NA
Pooled Background	Radium-226 & 228	48	13	Rosner	5.219, 2.507, 2.233	NA	3.112, 3.103, 3.094	1	NA	NA
CBW-1	Selenium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
PM-1	Selenium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Selenium	17	17	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Selenium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-6	Selenium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Selenium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	NA
Pooled Background	Selenium	50	50	Rosner	All results are non-detect	NA	NA	NA	NA	NA
CBW-1	Thallium	23	23	Dixon	All results are non-detect	NA	NA	NA	NA	NA
PM-1	Thallium	23	23	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-3	Thallium	11	11	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-4	Thallium	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-6	Thallium	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
POZ-7	Thallium	21	21	Dixon	All results are non-detect	NA	NA	NA	NA	NA
Pooled Background	Thallium	46	46	Rosner	All results are non-detect	NA	NA	NA	NA	NA

Table A-4. Results of Mann Kendall Test

		Secular Trend Evaluation for All Data										Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)							
Mann Kendall Trends		Mann-Kendall Test (R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)										Mann-Kendall Test (R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							
Location	Constituent	Trends, All Data	Trends, Recent Data	n	n detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	
CBW-1 (Background)	Antimony	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	23	1	0.704	NA	NA	NA	NA	8	1	2020-02-24 to 2025-01-14	0.411	NA	NA	NA	NA	
PM-1 (Background)	Antimony	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	23	1	0.688	NA	NA	NA	NA	8	1	2020-02-24 to 2025-01-14	0.408	NA	NA	NA	NA	
POZ-3	Antimony	Not Evaluated - No detected results.	Not Evaluated - No detected results.	11	0	1.49	NA	NA	NA	NA	8	0	2022-06-27 to 2025-01-28	0	NA	NA	NA	NA	
POZ-4	Antimony	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	21	1	0.722	NA	NA	NA	NA	8	1	2018-06-28 to 2025-01-28	0.401	NA	NA	NA	NA	
POZ-6	Antimony	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	21	1	0.719	NA	NA	NA	NA	8	1	2018-06-28 to 2025-01-28	0.347	NA	NA	NA	NA	
POZ-7	Antimony	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0.733	NA	NA	NA	NA	8	0	2018-06-27 to 2025-01-29	0	NA	NA	NA	NA	
Pooled Background	Antimony	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	46	2	0.689	NA	NA	NA	NA	8	2	2022-10-25 to 2025-01-14	0.455	0.577	0.1	90	11	
CBW-1 (Background)	Arsenic	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	25	3	0.899	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.244	NA	NA	NA	NA	
PM-1 (Background)	Arsenic	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - Only one detected result.	25	3	0.248	NA	NA	NA	NA	8	1	2020-02-24 to 2025-01-14	0.365	NA	NA	NA	NA	
POZ-3	Arsenic	Not Evaluated - No detected results.	Not Evaluated - No detected results.	17	0	0.193	NA	NA	NA	NA	8	0	2022-01-26 to 2025-01-28	0.149	NA	NA	NA	NA	
POZ-4	Arsenic	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	24	1	0.174	NA	NA	NA	NA	8	0	2020-02-25 to 2025-01-28	0.244	NA	NA	NA	NA	
POZ-6	Arsenic	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	24	1	0.208	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-28	0.244	NA	NA	NA	NA	
POZ-7	Arsenic	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0.181	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-29	0.244	NA	NA	NA	NA	
Pooled Background	Arsenic	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	50	6	0.706	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA	
CBW-1 (Background)	Barium	Decreasing	Stable	25	25	0.118	-0.383	0.00824	99.2	-114	8	8	2020-02-24 to 2025-01-14	0.103	-0.0714	0.902	9.8	-2	
PM-1 (Background)	Barium	Stable	Stable	25	25	0.0937	-0.127	0.387	61.3	-38	8	8	2020-02-24 to 2025-01-14	0.0452	0	1	0	0	
POZ-3	Barium	Decreasing	No Trend	17	17	0.18	-0.463	0.0116	98.8	-62	8	8	2022-01-26 to 2025-01-28	0.0546	0.255	0.454	54.6	7	
POZ-4	Barium	No Trend	Stable	24	24	0.389	0.189	0.206	79.4	52	8	8	2020-02-25 to 2025-01-28	0.235	-0.143	0.711	28.9	-4	
POZ-6	Barium	Decreasing	Stable	24	24	0.286	0.261	0.0783	92.7	77	8	8	2020-02-26 to 2025-01-28	0.201	0.471	0.0635	63.7	16	
POZ-7	Barium	Decreasing	Stable	24	24	0.37	-0.474	0.00135	99.9	-130	8	8	2020-02-26 to 2025-01-29	0.399	-0.0714	0.902	9.8	-2	
Pooled Background	Barium	Stable	No Trend	50	50	0.334	-0.107	0.277	72.3	-131	8	8	2022-10-25 to 2025-01-14	0.364	0.143	0.711	28.9	4	
CBW-1 (Background)	Beryllium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	24	1	0.292	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0	NA	NA	NA	NA	
PM-1 (Background)	Beryllium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.32	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	1.5	NA	NA	NA	NA	
POZ-3	Beryllium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	11	0	0	NA	NA	NA	NA	8	0	2022-06-27 to 2025-01-28	0	NA	NA	NA	NA	
POZ-4	Beryllium	Decreasing	Stable	23	11	0.665	-0.387	0.0175	98.2	-84	8	2	2020-02-25 to 2025-01-28	0.515	-0.262	0.511	48.9	-5	
POZ-6	Beryllium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	23	0	0	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-28	0	NA	NA	NA	NA	
POZ-7	Beryllium	Decreasing	Stable	23	13	0.501	-0.354	0.0269	97.3	-81	8	3	2020-02-26 to 2025-01-29	0.508	-0.178	0.667	33.3	-4	
Pooled Background	Beryllium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	49	1	1.07	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA	
CBW-1 (Background)	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.11	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	1.32	NA	NA	NA	NA	
PM-1 (Background)	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.37	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	1.25	NA	NA	NA	NA	
POZ-3	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	17	0	1.2	NA	NA	NA	NA	8	0	2022-01-26 to 2025-01-28	0	NA	NA	NA	NA	
POZ-4	Cadmium	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	24	2	1.03	NA	NA	NA	NA	8	0	2020-02-25 to 2025-01-28	1.32	NA	NA	NA	NA	
POZ-6	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.11	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-28	1.32	NA	NA	NA	NA	
POZ-7	Cadmium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	24	1	1.07	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-29	1.32	NA	NA	NA	NA	
Pooled Background	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	48	0	1.28	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA	
CBW-1 (Background)	Chromium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	24	1	0.788	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0	NA	NA	NA	NA	
PM-1 (Background)	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	23	0	0	NA	NA	NA	NA	8	0	2019-02-12 to 2025-01-14	0	NA	NA	NA	NA	
POZ-3	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	17	0	0	NA	NA	NA	NA	8	0	2022-01-26 to 2025-01-28	0	NA	NA	NA	NA	
POZ-4	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0	NA	NA	NA	NA	8	0	2020-02-25 to 2025-01-28	0	NA	NA	NA	NA	
POZ-6	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-28	0	NA	NA	NA	NA	
POZ-7	Chromium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	24	1	0.263	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-29	0	NA	NA	NA	NA	

Note: Mann Kendall Trends are classified based on Aziz (2003) guidance.

Secular Trend Evaluation for All Data											Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)							
Mann Kendall Trends		Mann-Kendall Test (R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)									Mann-Kendall Test (R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							
Location	Constituent	Trends, All Data	Trends, Recent Data	n	n ₁ detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n ₁ detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)
Pooled Background	Chromium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	47	1	0.611	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA
CBW-1 (Background)	Cobalt	Decreasing	Increasing	25	24	0.554	-0.566	0.0000861	100	-169	8	7	2020-02-24 to 2025-01-14	0.168	0.643	0.0354	96.5	18
PM-1 (Background)	Cobalt	Increasing	Stable	25	24	0.354	0.596	0.0000504	100	173	8	7	2020-02-24 to 2025-01-14	0.296	-0.0364	1	0	-1
POZ-3	Cobalt	No Trend	No Trend	15	15	0.558	0.0957	0.656	34.4	10	8	8	2022-01-26 to 2025-01-28	0.551	0.109	0.803	19.7	3
POZ-4	Cobalt	Stable	No Trend	27	27	0.707	-0.0826	0.559	44.1	-29	8	8	2020-02-25 to 2025-01-28	0.57	0.214	0.536	46.4	6
POZ-6	Cobalt	No Trend	No Trend	24	24	0.513	0.0477	0.765	23.5	13	8	8	2020-02-26 to 2025-01-28	0.232	0.214	0.536	46.4	6
POZ-7	Cobalt	Stable	Stable	24	17	0.699	-0.049	0.763	23.7	-13	8	7	2020-02-26 to 2025-01-29	0.402	-0.357	0.266	73.4	-10
Pooled Background	Cobalt	Stable	No Trend	50	48	0.453	-0.0978	0.326	67.4	-118	8	8	2022-10-25 to 2025-01-14	0.306	0.182	0.618	38.2	5
CBW-1 (Background)	Fluoride	Decreasing	Stable	25	24	0.285	-0.69	0.0000024	100	-202	8	7	2020-02-24 to 2025-01-14	0.37	-0.357	0.266	73.4	-10
PM-1 (Background)	Fluoride	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0	NA	NA	NA	NA
POZ-3	Fluoride	No Trend	No Trend	10	7	0.474	0.163	0.584	41.6	7	8	6	2022-11-01 to 2025-01-28	0.469	0.222	0.53	47	6
POZ-4	Fluoride	Stable	Stable	24	9	0.54	-0.0748	0.666	33.4	-16	8	3	2020-02-25 to 2025-01-28	0.571	-0.0891	0.886	11.4	-2
POZ-6	Fluoride	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - Only one detected result.	24	5	0.581	NA	NA	NA	NA	8	1	2020-02-26 to 2025-01-28	0.61	NA	NA	NA	NA
POZ-7	Fluoride	Probably Decreasing	Not Evaluated - Only one detected result.	24	7	0.673	-0.314	0.0619	93.8	-61	8	1	2020-02-26 to 2025-01-29	1	NA	NA	NA	NA
Pooled Background	Fluoride	Decreasing	Stable	50	24	0.687	-0.228	0.032	96.8	-238	8	4	2022-10-25 to 2025-01-14	0.632	-0.242	0.507	49.3	-6
CBW-1 (Background)	Lead	Decreasing	Decreasing	25	24	0.533	-0.563	0.000111	100	-166	8	7	2020-02-24 to 2025-01-14	0.339	-0.857	0.00443	99.6	-24
PM-1 (Background)	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.27	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	1.1	NA	NA	NA	NA
POZ-3	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	17	0	1.16	NA	NA	NA	NA	8	0	2022-01-26 to 2025-01-28	0.447	NA	NA	NA	NA
POZ-4	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.11	NA	NA	NA	NA	8	0	2020-02-25 to 2025-01-28	1.13	NA	NA	NA	NA
POZ-6	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.11	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-28	1.13	NA	NA	NA	NA
POZ-7	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.11	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-29	1.13	NA	NA	NA	NA
Pooled Background	Lead	Stable	Stable	50	24	0.889	-0.123	0.234	76.6	-139	8	4	2022-10-25 to 2025-01-14	0.693	-0.322	0.352	64.8	-8
CBW-1 (Background)	Lithium	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	25	1	0.412	NA	NA	NA	NA	8	1	2020-02-24 to 2025-01-14	0.453	NA	NA	NA	NA
PM-1 (Background)	Lithium	Not Evaluated - Majority of data (>75%) non-detect.	Stable	25	4	0.212	NA	NA	NA	NA	8	4	2020-02-24 to 2025-01-14	0.336	-0.0378	1	0	-1
POZ-3	Lithium	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	11	1	1.32	NA	NA	NA	NA	8	1	2022-06-27 to 2025-01-28	1.37	NA	NA	NA	NA
POZ-4	Lithium	No Trend	No Trend	21	16	0.469	0.21	0.201	79.9	43	8	8	2018-06-28 to 2025-01-28	0.351	0.5	0.108	89.2	14
POZ-6	Lithium	Increasing	No Trend	21	7	0.546	0.652	0.000222	100	103	8	7	2018-06-28 to 2025-01-28	0.398	0.429	0.174	82.6	12
POZ-7	Lithium	Not Evaluated - Majority of data (>75%) non-detect.	Stable	21	4	0.678	NA	NA	NA	NA	8	3	2018-06-27 to 2025-01-29	0.68	-0.0806	0.894	10.6	-2
Pooled Background	Lithium	Not Evaluated - Majority of data (>75%) non-detect.	No Trend	50	5	0.32	NA	NA	NA	NA	8	2	2022-10-25 to 2025-01-14	0.389	0.262	0.511	48.9	5
CBW-1 (Background)	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.68	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.314	NA	NA	NA	NA
PM-1 (Background)	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.709	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.566	NA	NA	NA	NA
POZ-3	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	10	0	0.151	NA	NA	NA	NA	8	0	2022-11-01 to 2025-01-28	0	NA	NA	NA	NA
POZ-4	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0.718	NA	NA	NA	NA	8	0	2018-06-28 to 2025-01-28	0.314	NA	NA	NA	NA
POZ-6	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0.733	NA	NA	NA	NA	8	0	2018-06-28 to 2025-01-28	0	NA	NA	NA	NA
POZ-7	Mercury	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	21	2	0.764	NA	NA	NA	NA	8	0	2018-06-27 to 2025-01-29	0	NA	NA	NA	NA
Pooled Background	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	50	0	0.689	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA
CBW-1 (Background)	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	23	0	0.377	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.314	NA	NA	NA	NA
PM-1 (Background)	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	23	0	0.277	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.314	NA	NA	NA	NA
POZ-3	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	11	0	1.22	NA	NA	NA	NA	8	0	2022-06-27 to 2025-01-28	1.32	NA	NA	NA	NA
POZ-4	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0.29	NA	NA	NA	NA	8	0	2018-06-28 to 2025-01-28	0.314	NA	NA	NA	NA
POZ-6	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0.29	NA	NA	NA	NA	8	0	2018-06-28 to 2025-01-28	0.314	NA	NA	NA	NA
POZ-7	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0.29	NA	NA	NA	NA	8	0	2018-06-27 to 2025-01-29	0.314	NA	NA	NA	NA

Note:
Mann Kendall Trends are classified based on Aziz (2003) guidance.

Secular Trend Evaluation for All Data											Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)							
Mann Kendall Trends		Mann-Kendall Test (R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)									Mann-Kendall Test (R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							
Location	Constituent	Trends, All Data	Trends, Recent Data	n	n ₁ detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n ₁ detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)
Pooled Background	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	46	0	0.331	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA
CBW-1 (Background)	Radium-226 & 228	Stable	Stable	24	17	0.626	-0.192	0.209	79.1	-51	8	8	2020-02-24 to 2025-01-14	0.514	-0.214	0.536	46.4	-6
PM-1 (Background)	Radium-226 & 228	No Trend	Stable	24	18	1.02	-0.205	0.177	82.3	-55	8	8	2020-02-24 to 2025-01-14	0.426	-0.357	0.266	73.4	-10
POZ-3	Radium-226 & 228	Stable	Stable	9	9	0.516	-0.111	0.754	24.6	-4	8	8	2022-11-01 to 2025-01-28	0.554	0	1	0	0
POZ-4	Radium-226 & 228	No Trend	No Trend	23	16	0.544	0.0991	0.537	46.3	24	8	8	2020-02-25 to 2025-01-28	0.433	0.0714	0.902	9.8	2
POZ-6	Radium-226 & 228	Decreasing	No Trend	23	15	0.563	-0.331	0.035	96.5	-79	8	8	2020-02-26 to 2025-01-28	0.633	0.214	0.536	46.4	6
POZ-7	Radium-226 & 228	Stable	Stable	23	20	0.496	-0.243	0.112	88.8	-61	8	8	2020-02-26 to 2025-01-29	0.531	-0.286	0.386	61.4	-8
Pooled Background	Radium-226 & 228	Probably Decreasing	Decreasing	48	35	0.891	-0.169	0.1	90	-184	8	8	2022-10-25 to 2025-01-14	0.64	-0.643	0.0354	96.5	-18
CBW-1 (Background)	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.693	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.994	NA	NA	NA	NA
PM-1 (Background)	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.366	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0.524	NA	NA	NA	NA
POZ-3	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	17	0	0.386	NA	NA	NA	NA	8	0	2022-01-26 to 2025-01-28	0.166	NA	NA	NA	NA
POZ-4	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0.396	NA	NA	NA	NA	8	0	2020-02-25 to 2025-01-28	0.589	NA	NA	NA	NA
POZ-6	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0.396	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-28	0.589	NA	NA	NA	NA
POZ-7	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0.396	NA	NA	NA	NA	8	0	2020-02-26 to 2025-01-29	0.589	NA	NA	NA	NA
Pooled Background	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	50	0	0.576	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA
CBW-1 (Background)	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	23	0	0	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	0	NA	NA	NA	NA
PM-1 (Background)	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	23	0	1.35	NA	NA	NA	NA	8	0	2020-02-24 to 2025-01-14	1.5	NA	NA	NA	NA
POZ-3	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	11	0	0	NA	NA	NA	NA	8	0	2022-06-27 to 2025-01-28	0	NA	NA	NA	NA
POZ-4	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0	NA	NA	NA	NA	8	0	2018-06-28 to 2025-01-28	0	NA	NA	NA	NA
POZ-6	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0	NA	NA	NA	NA	8	0	2018-06-28 to 2025-01-28	0	NA	NA	NA	NA
POZ-7	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	21	0	0	NA	NA	NA	NA	8	0	2018-06-27 to 2025-01-29	0	NA	NA	NA	NA
Pooled Background	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	46	0	1.11	NA	NA	NA	NA	8	0	2022-10-25 to 2025-01-14	0	NA	NA	NA	NA

Note:
Mann Kendall Trends are classified based on Aziz (2003) guidance.

Table A-5. Upper Tolerance Limits (UTLs) & Updated Groundwater Protection Standards (GWPS)

Constituent	Units	n	n _{non-detects}	Interwell Background Data Characterization [a]										Groundwater Protection Standard (GWPS) Determination					UTL Calculation Details			
				max reporting limit	max detected value	mean	median	min sample date	max sample date	standard deviation	coefficient of variation	Mann Kendall trend	data distribution (Shapiro-Francia) [b]	normalizing data transformation (if any)	UTL	UTL Result Detection Status [c]	MCL/RSL	GWPS	GWPS Source	UTL calculation method	UTL calculation details	Minimum Coverage (%)
Antimony	mg/L	46	44	0.025	0.0059	0.00601	0.005	2015-10-19	2025-01-14	0.00416	0.692	No Trend	Not normal (Interwell Background)	NA - Original Data	0.025	No	0.006	0.025	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.7
Arsenic	mg/L	50	44	0.01	0.016	0.00512	0.005	2015-10-19	2025-01-14	0.00186	0.364	Probably Decreasing	Not normal (Interwell Background)	NA - Original Data	0.016	Yes	0.01	0.016	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Barium	mg/L	50	0	NA	0.103	0.0622	0.0656	2015-10-19	2025-01-14	0.0208	0.334	Stable	Not normal (Interwell Background)	NA - Original Data	0.103	Yes	2	2	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Beryllium	mg/L	49	48	0.005	0.00063	0.000594	0.0005	2015-10-19	2025-01-14	0.000643	1.08	No Trend	Not normal (Interwell Background)	NA - Original Data	0.005	No	0.004	0.005	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.1
Cadmium	mg/L	48	48	0.005	NA	0.00074	0.0005	2015-10-19	2025-01-14	0.000945	1.28	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.005	No	0.005	0.005	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.9
Chromium	mg/L	47	46	0.005	0.014	0.00519	0.005	2015-10-19	2025-01-14	0.00131	0.253	Probably Decreasing	Not normal (Interwell Background)	NA - Original Data	0.014	Yes	0.1	0.1	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.8
Cobalt	mg/L	50	2	0.005	0.0034	0.00111	0.00092	2015-10-19	2025-01-14	0.000702	0.632	Stable	Not normal (Interwell Background)	NA - Original Data	0.005	No	0.006	0.006	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Fluoride	mg/L	50	26	0.1	0.3	0.152	0.1	2015-10-19	2025-01-14	0.0638	0.421	Decreasing	Not normal (Interwell Background)	NA - Original Data	0.3	Yes	4	4	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Lead	mg/L	50	26	0.01	0.011	0.0027	0.0025	2015-10-19	2025-01-14	0.00243	0.899	Stable	Not normal (Interwell Background)	NA - Original Data	0.011	Yes	0.015	0.015	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Lithium	mg/L	50	45	0.02	0.00544	0.0085	0.01	2015-10-19	2025-01-14	0.00306	0.359	Decreasing	Not normal (Interwell Background)	NA - Original Data	0.02	No	0.04	0.04	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Mercury	mg/L	50	50	0.001	NA	0.000244	0.0002	2015-10-19	2025-01-14	0.000168	0.689	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.001	No	0.002	0.002	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Molybdenum	mg/L	46	46	0.02	NA	0.0087	0.01	2015-10-19	2025-01-14	0.00287	0.331	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.02	No	0.1	0.1	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.7
Radium-226 & 228	pCi/L	48	13	0	16.3	3.35	3.57	2015-10-19	2025-01-14	2.48	0.742	Decreasing	Not normal (Interwell Background)	NA - Original Data	16.3	Yes	5	16.3	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.9
Selenium	mg/L	50	50	0.05	NA	0.0115	0.01	2015-10-19	2025-01-14	0.00663	0.576	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.05	No	0.05	0.05	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Thallium	mg/L	46	46	0.01	NA	0.0012	0.001	2015-10-19	2025-01-14	0.00133	1.11	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.01	No	0.002	0.01	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.7

Note:
 [a] Interwell background datasets are analyte specific and include data collected from background wells (CBW-1 and PM-1). Interwell background datasets were re-tested for outliers, secular trends, and data normality. No outliers were removed.
 [b] Parametric tolerance limit calculations were performed on normally distributed background data. If background data were not normally distributed, non-parametric tolerance limit calculations were performed.
 [c] In some cases, the maximum value selected as the UTL is a non-detect result with an elevated reporting limit.
 Units = mg/L, milligrams per liter; pCi/L = picocuries per liter.

Table A-6. Confidence Intervals & SSL Identification

Location	Chemical	Units	Confidence Interval (CI) Dataset					CI Calculation [a]				SSL Confirmation		Non-Parametric CI Statistics		
			n	max (Rank n)	min (Rank 1)	median	mean	standard deviation	CI calculation method	degrees of freedom	95% Confidence UCL	95% Confidence LCL	GWPS	LCL > GWPS?	bootstrap iterations	bootstrap median
POZ-4	Cobalt	mg/L	27	0.21	0.0036	0.065	0.0867	0.0613	Bootstrap Calculation of the Confidence Interval Around the Median (Non-Parametric)	26	0.0984	0.0464	0.006	Yes, SSL	10000	0.0779

Note:

Confidence intervals are calculated for analyte/well pairs with GWPS exceedances in the event dataset.

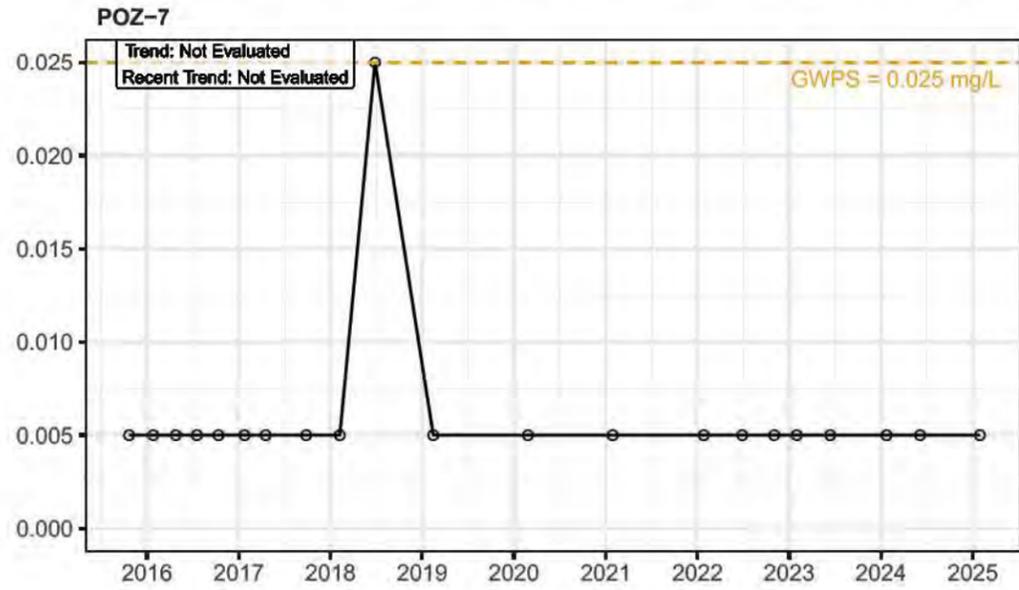
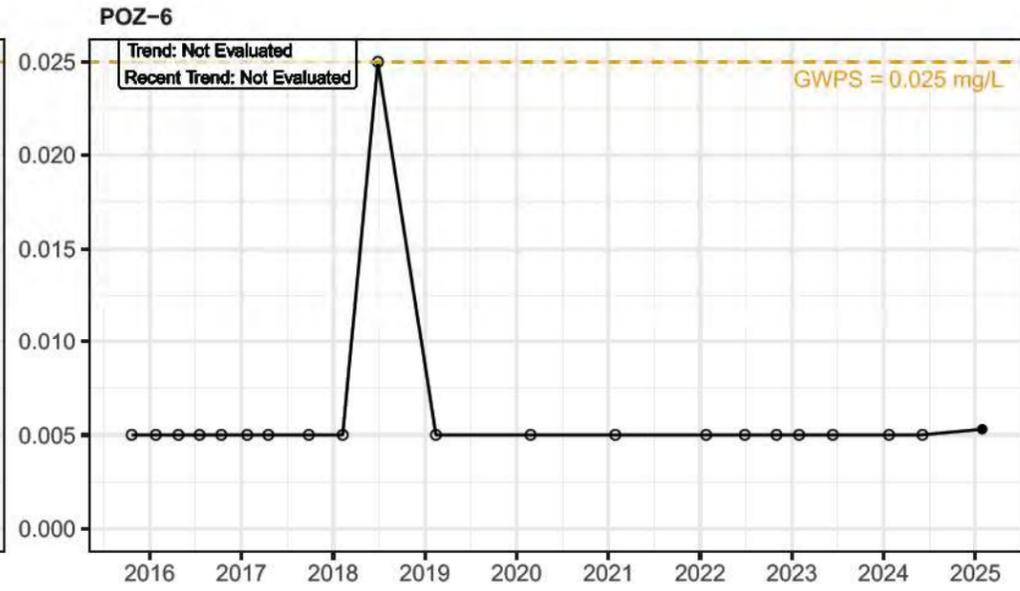
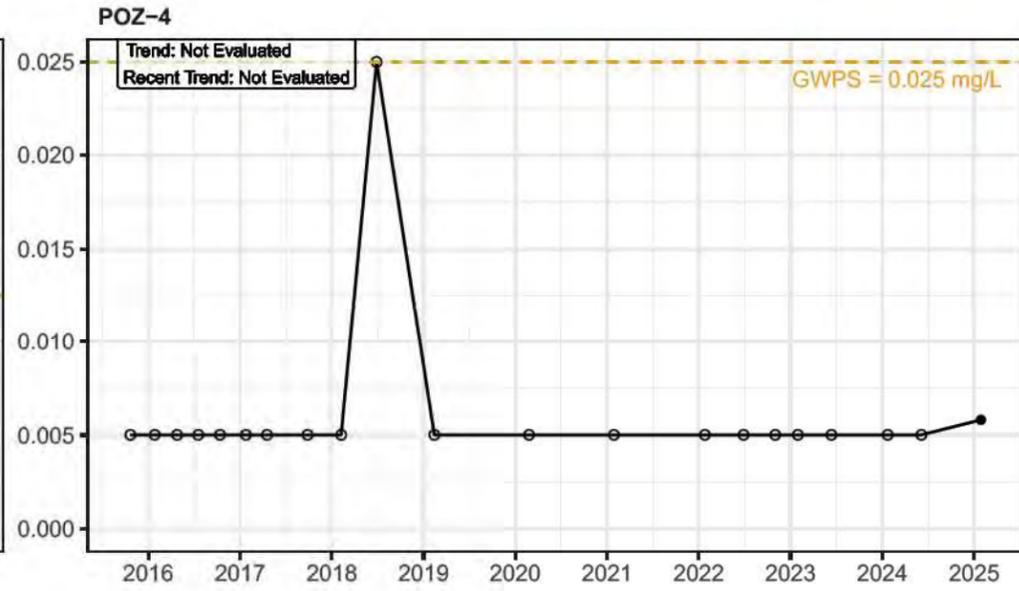
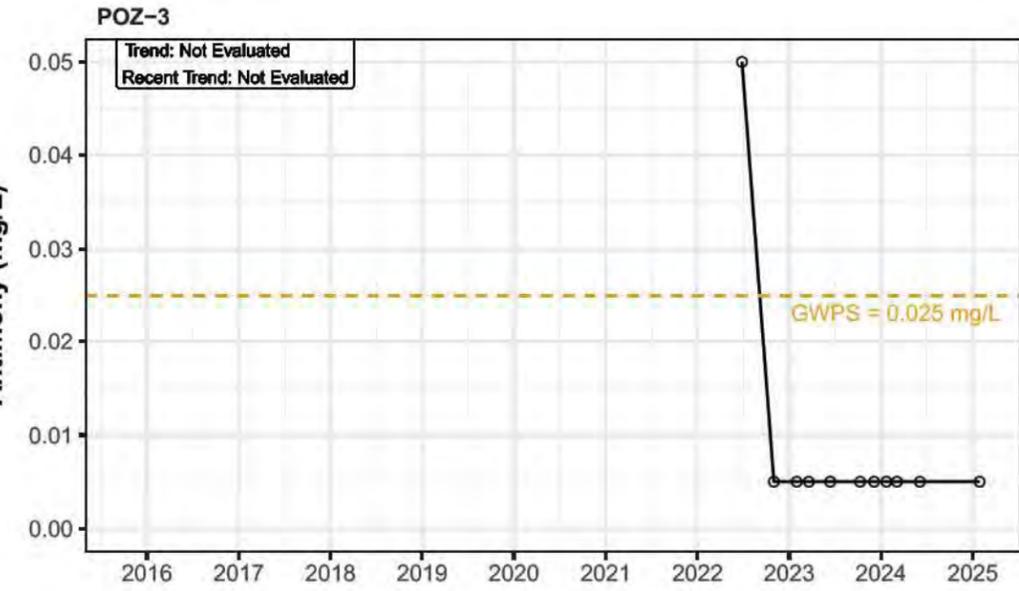
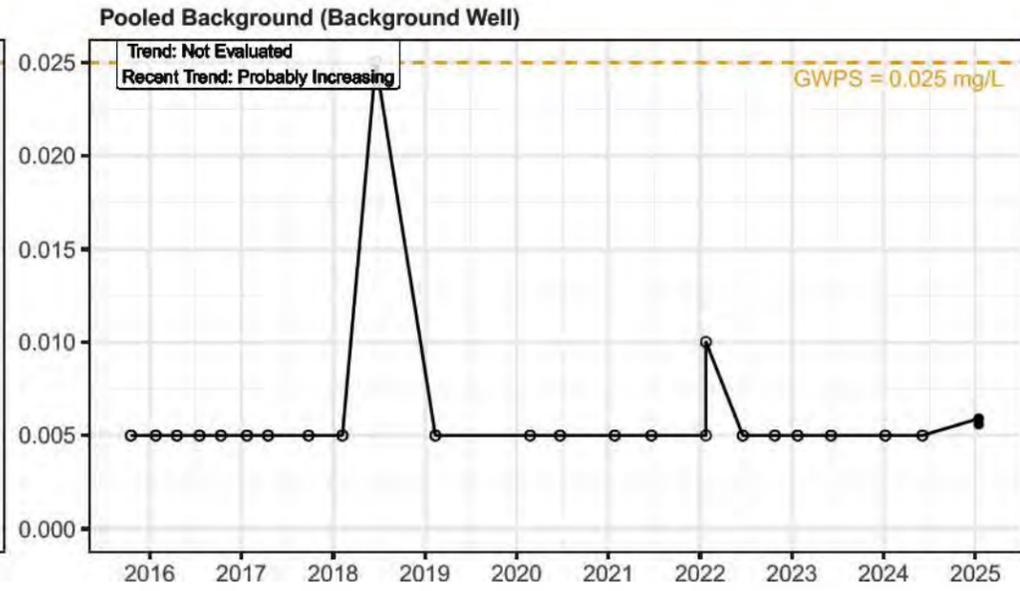
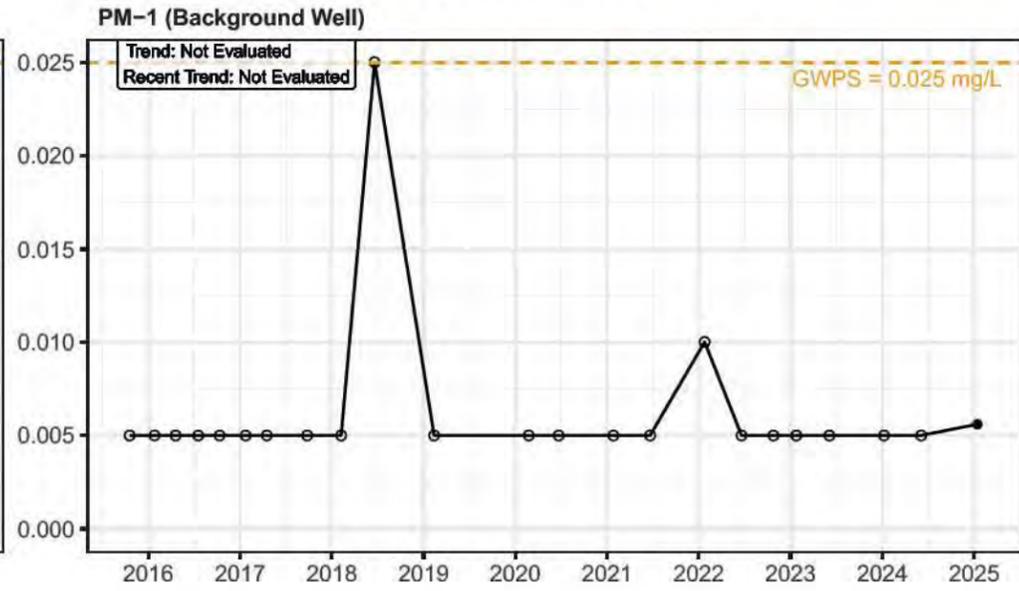
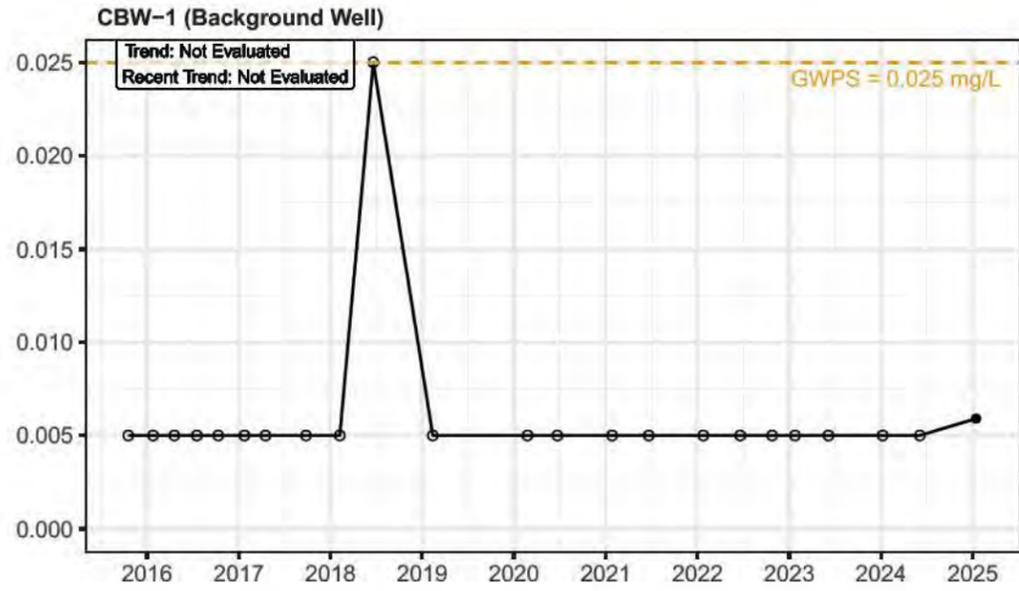
[a] The 95% lower confidence level (LCL) is compared to the Groundwater Protection Standard (GWPS) to confirm a statistically significant level (SSL). The 95% upper confidence level (UCL) is also shown for purposes of comparison.

Table A-7. Groundwater Protection Standard (GWPS) Comparison Table

Location	Constituent	Units	Sample Date	Sample Result	Upper Threshold Limit (UTL)	GWPS	GWPS Exceedance	LCL	SSL Confirmed
POZ-4	Cobalt	mg/L	2025-01-28	0.0432	0.005	0.006	Yes	0.0464	Yes
POZ-3	Antimony	mg/L	2025-01-28	0.005	0.025	0.025	No	NA	No
POZ-4	Antimony	mg/L	2025-01-28	0.0058	0.025	0.025	No	NA	No
POZ-6	Antimony	mg/L	2025-01-28	0.0053	0.025	0.025	No	NA	No
POZ-7	Antimony	mg/L	2025-01-29	0.005	0.025	0.025	No	NA	No
POZ-3	Arsenic	mg/L	2025-01-28	0.005	0.016	0.016	No	NA	No
POZ-4	Arsenic	mg/L	2025-01-28	0.005	0.016	0.016	No	NA	No
POZ-6	Arsenic	mg/L	2025-01-28	0.005	0.016	0.016	No	NA	No
POZ-7	Arsenic	mg/L	2025-01-29	0.005	0.016	0.016	No	NA	No
POZ-3	Barium	mg/L	2025-01-28	0.106	0.103	2	No	NA	No
POZ-4	Barium	mg/L	2025-01-28	0.0777	0.103	2	No	NA	No
POZ-6	Barium	mg/L	2025-01-28	0.0787	0.103	2	No	NA	No
POZ-7	Barium	mg/L	2025-01-29	0.103	0.103	2	No	NA	No
POZ-3	Beryllium	mg/L	2025-01-28	0.0005	0.005	0.005	No	NA	No
POZ-4	Beryllium	mg/L	2025-01-28	0.0005	0.005	0.005	No	NA	No
POZ-6	Beryllium	mg/L	2025-01-28	0.0005	0.005	0.005	No	NA	No
POZ-7	Beryllium	mg/L	2025-01-29	0.0005	0.005	0.005	No	NA	No
POZ-3	Cadmium	mg/L	2025-01-28	0.0005	0.005	0.005	No	NA	No
POZ-4	Cadmium	mg/L	2025-01-28	0.0005	0.005	0.005	No	NA	No
POZ-6	Cadmium	mg/L	2025-01-28	0.0005	0.005	0.005	No	NA	No
POZ-7	Cadmium	mg/L	2025-01-29	0.0005	0.005	0.005	No	NA	No
POZ-3	Chromium	mg/L	2025-01-28	0.005	0.014	0.1	No	NA	No
POZ-4	Chromium	mg/L	2025-01-28	0.005	0.014	0.1	No	NA	No
POZ-6	Chromium	mg/L	2025-01-28	0.005	0.014	0.1	No	NA	No
POZ-7	Chromium	mg/L	2025-01-29	0.005	0.014	0.1	No	NA	No
POZ-3	Cobalt	mg/L	2025-01-28	0.001	0.005	0.006	No	NA	No
POZ-6	Cobalt	mg/L	2025-01-28	0.0036	0.005	0.006	No	NA	No
POZ-7	Cobalt	mg/L	2025-01-29	0.00076	0.005	0.006	No	NA	No
POZ-3	Fluoride	mg/L	2025-01-28	0.15	0.3	4	No	NA	No
POZ-4	Fluoride	mg/L	2025-01-28	0.17	0.3	4	No	NA	No
POZ-6	Fluoride	mg/L	2025-01-28	0.1	0.3	4	No	NA	No
POZ-7	Fluoride	mg/L	2025-01-29	0.1	0.3	4	No	NA	No
POZ-3	Lead	mg/L	2025-01-28	0.001	0.011	0.015	No	NA	No
POZ-4	Lead	mg/L	2025-01-28	0.001	0.011	0.015	No	NA	No
POZ-6	Lead	mg/L	2025-01-28	0.001	0.011	0.015	No	NA	No
POZ-7	Lead	mg/L	2025-01-29	0.001	0.011	0.015	No	NA	No
POZ-3	Lithium	mg/L	2025-01-28	0.005	0.02	0.04	No	NA	No
POZ-4	Lithium	mg/L	2025-01-28	0.0125	0.02	0.04	No	NA	No
POZ-6	Lithium	mg/L	2025-01-28	0.0134	0.02	0.04	No	NA	No
POZ-7	Lithium	mg/L	2025-01-29	0.005	0.02	0.04	No	NA	No
POZ-3	Mercury	mg/L	2025-01-28	0.0002	0.001	0.002	No	NA	No
POZ-4	Mercury	mg/L	2025-01-28	0.0002	0.001	0.002	No	NA	No
POZ-6	Mercury	mg/L	2025-01-28	0.0002	0.001	0.002	No	NA	No
POZ-7	Mercury	mg/L	2025-01-29	0.0002	0.001	0.002	No	NA	No
POZ-3	Molybdenum	mg/L	2025-01-28	0.005	0.02	0.1	No	NA	No
POZ-4	Molybdenum	mg/L	2025-01-28	0.005	0.02	0.1	No	NA	No
POZ-6	Molybdenum	mg/L	2025-01-28	0.005	0.02	0.1	No	NA	No
POZ-7	Molybdenum	mg/L	2025-01-29	0.005	0.02	0.1	No	NA	No
POZ-3	Radium-226 & 228	pCi/L	2025-01-28	0.995	16.3	16.3	No	NA	No
POZ-4	Radium-226 & 228	pCi/L	2025-01-28	1.83	16.3	16.3	No	NA	No
POZ-6	Radium-226 & 228	pCi/L	2025-01-28	1.79	16.3	16.3	No	NA	No
POZ-7	Radium-226 & 228	pCi/L	2025-01-29	1.73	16.3	16.3	No	NA	No
POZ-3	Selenium	mg/L	2025-01-28	0.01	0.05	0.05	No	NA	No
POZ-4	Selenium	mg/L	2025-01-28	0.01	0.05	0.05	No	NA	No
POZ-6	Selenium	mg/L	2025-01-28	0.01	0.05	0.05	No	NA	No
POZ-7	Selenium	mg/L	2025-01-29	0.01	0.05	0.05	No	NA	No
POZ-3	Thallium	mg/L	2025-01-28	0.001	0.01	0.01	No	NA	No
POZ-4	Thallium	mg/L	2025-01-28	0.001	0.01	0.01	No	NA	No
POZ-6	Thallium	mg/L	2025-01-28	0.001	0.01	0.01	No	NA	No
POZ-7	Thallium	mg/L	2025-01-29	0.001	0.01	0.01	No	NA	No

Groundwater Protection Standard (GWPS) is the maximum value between the Upper Threshold Limit (UTL) and the Maximum Contaminant Level/Regional Screening Level (MCL/RSL). The 95% Lower Confidence Limit (LCL) is calculated if the event sample result exceeded the GWPS. If the LCL is greater than the GWPS, a Statistically Significant Level (SSL) is confirmed.

Trend Analysis for Antimony

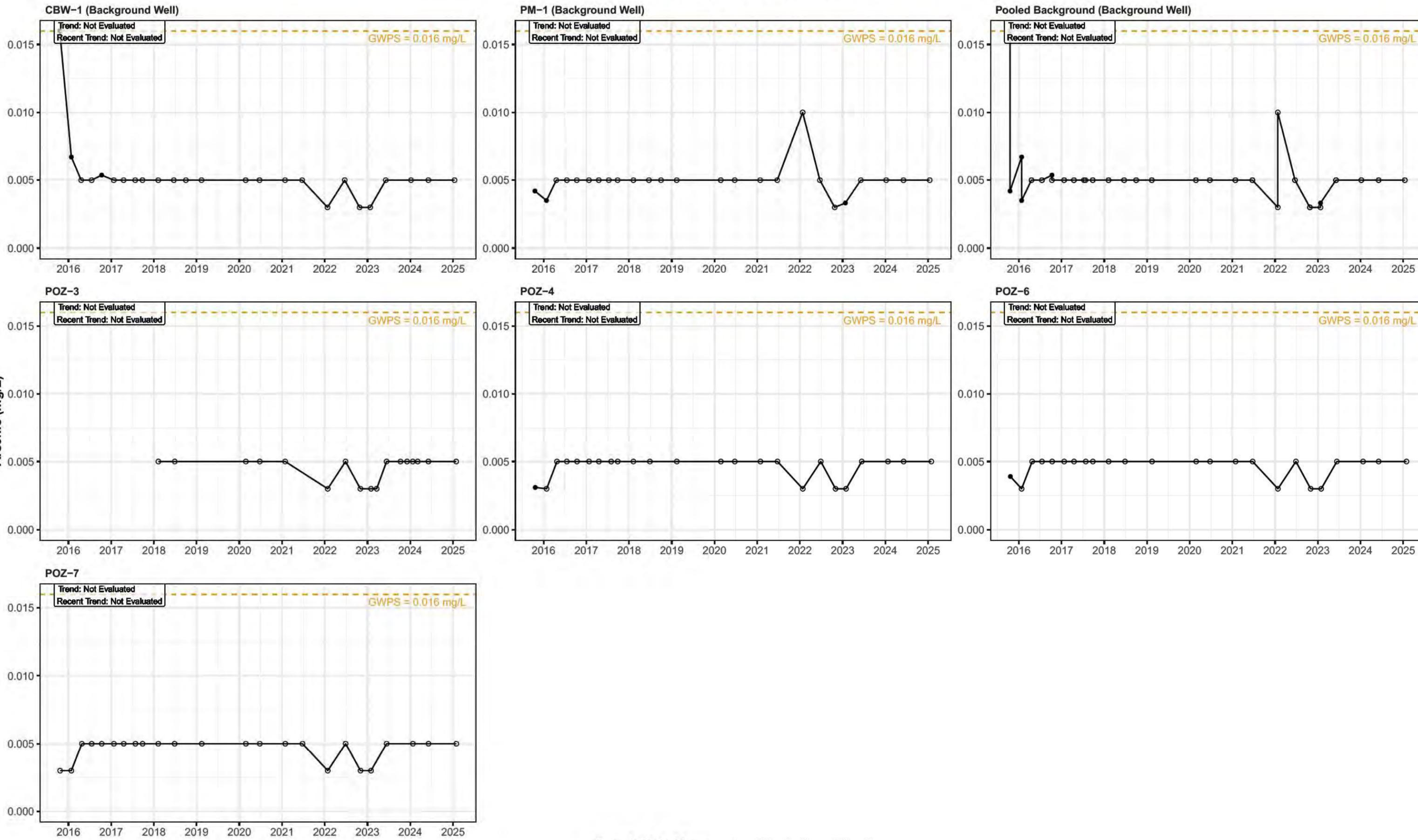


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RS� and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Arsenic



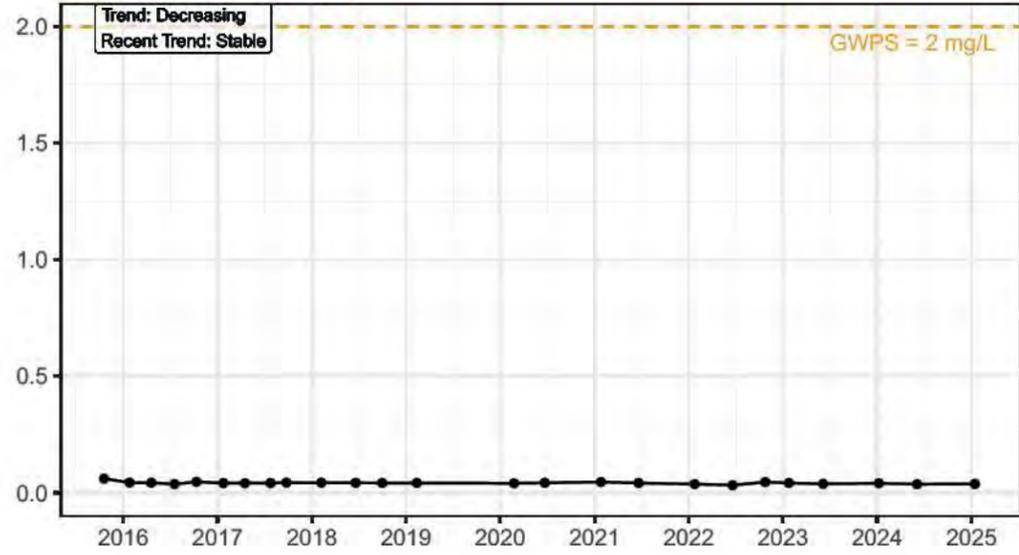
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Detection Status: ● Detect ○ Non-Detect

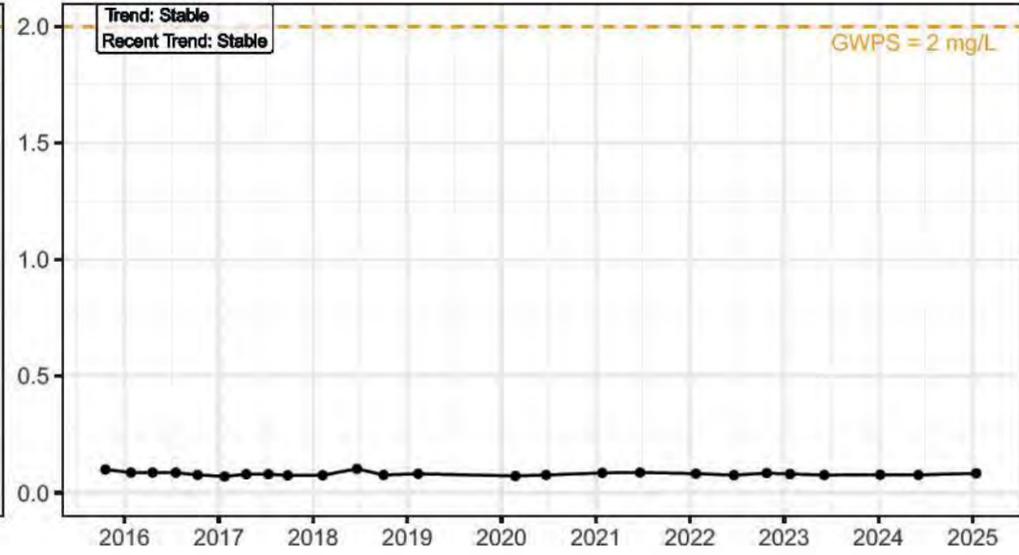
Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Barium

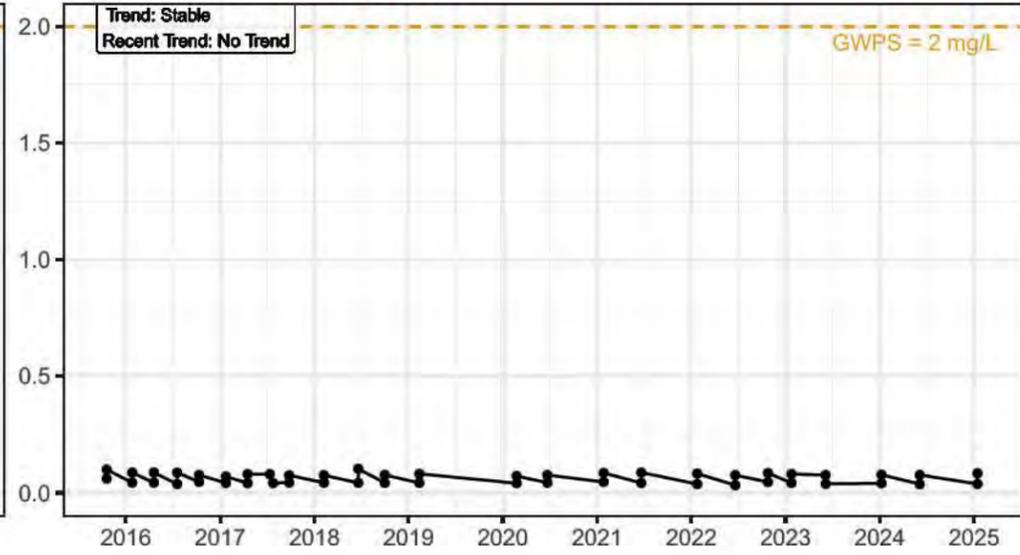
CBW-1 (Background Well)



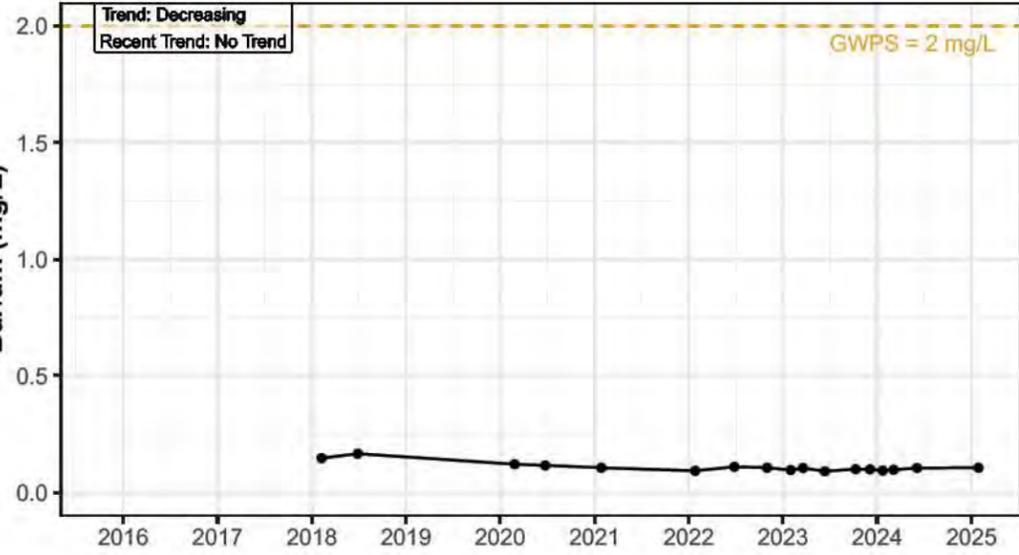
PM-1 (Background Well)



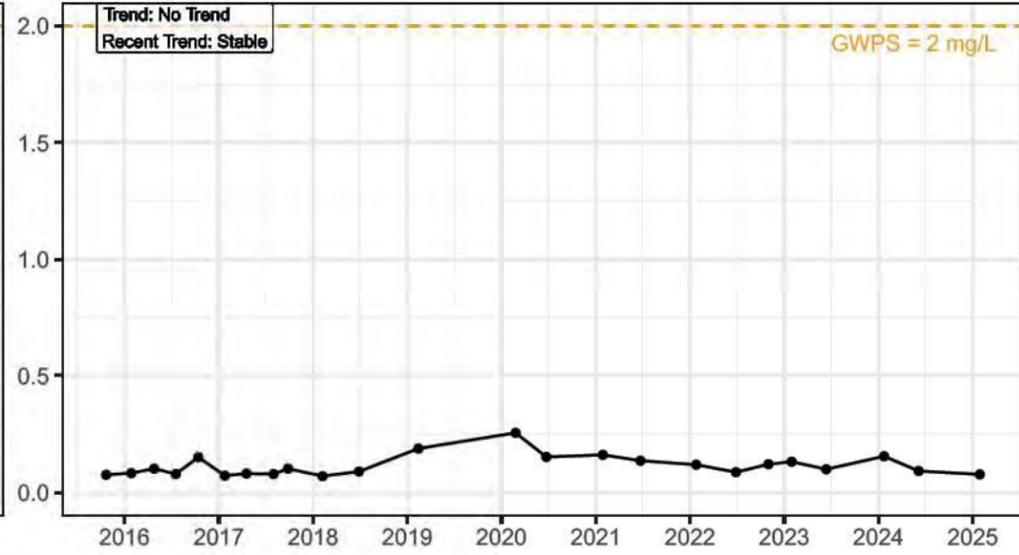
Pooled Background (Background Well)



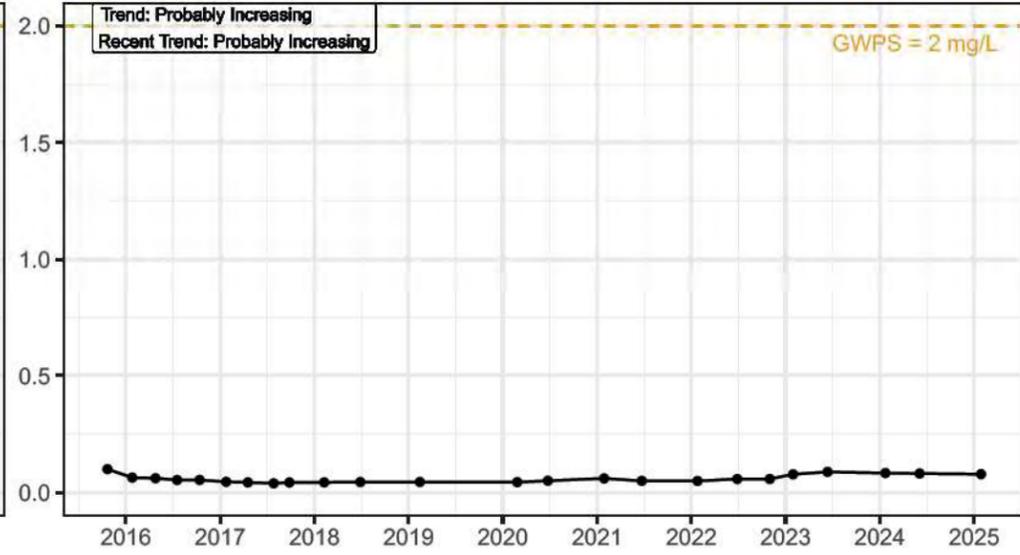
POZ-3



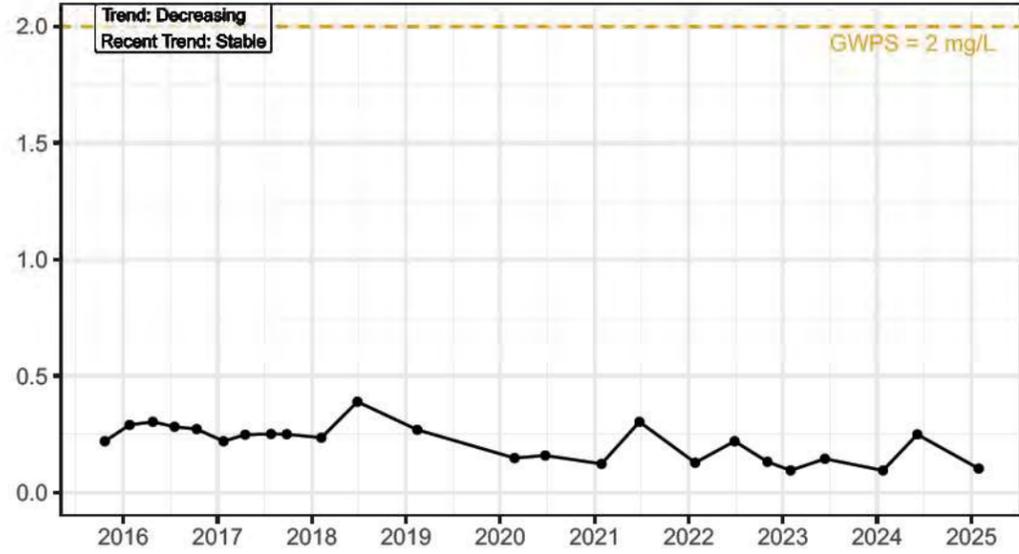
POZ-4



POZ-6



POZ-7

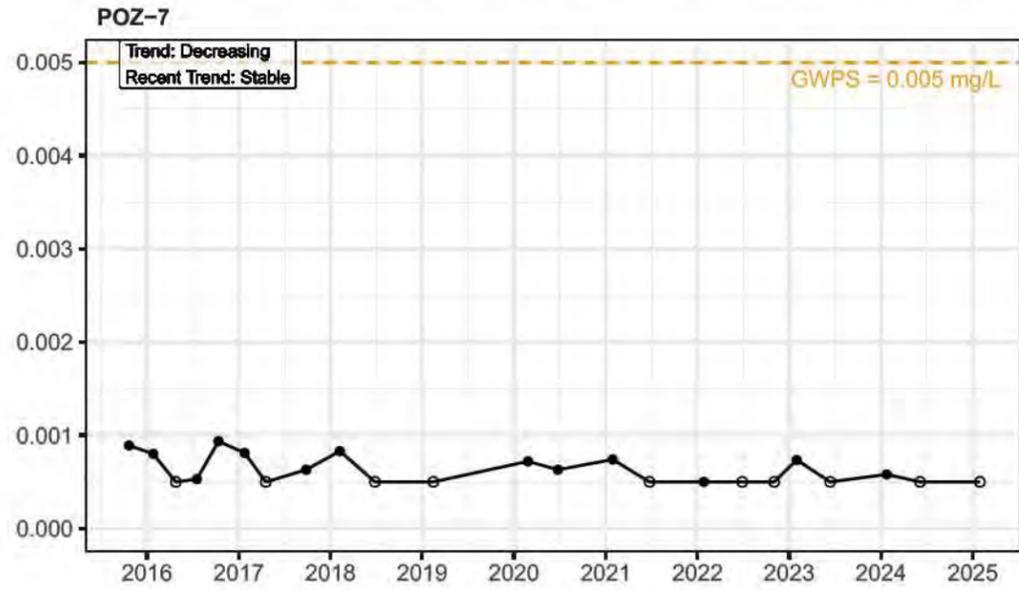
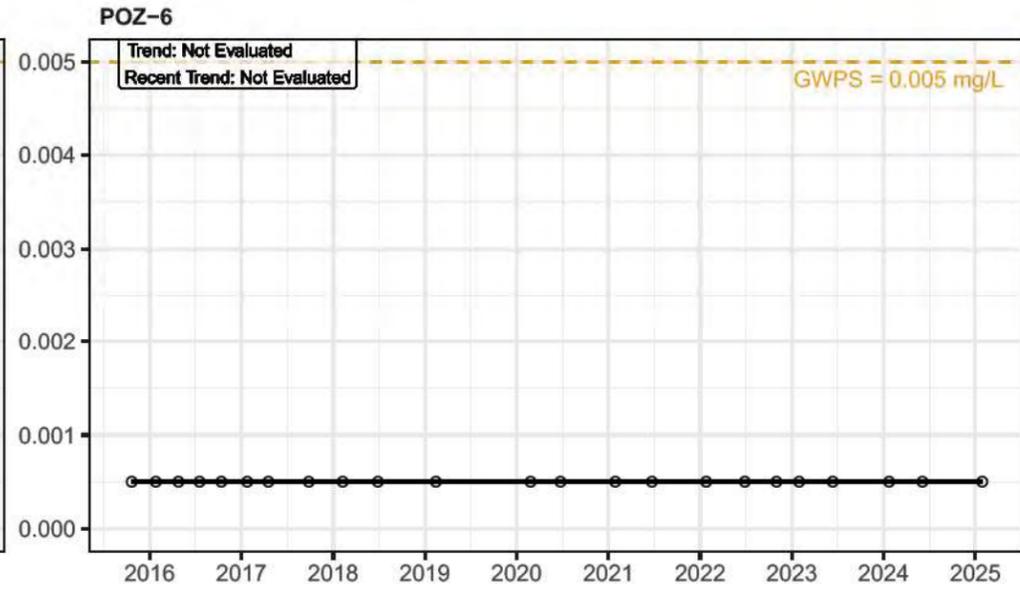
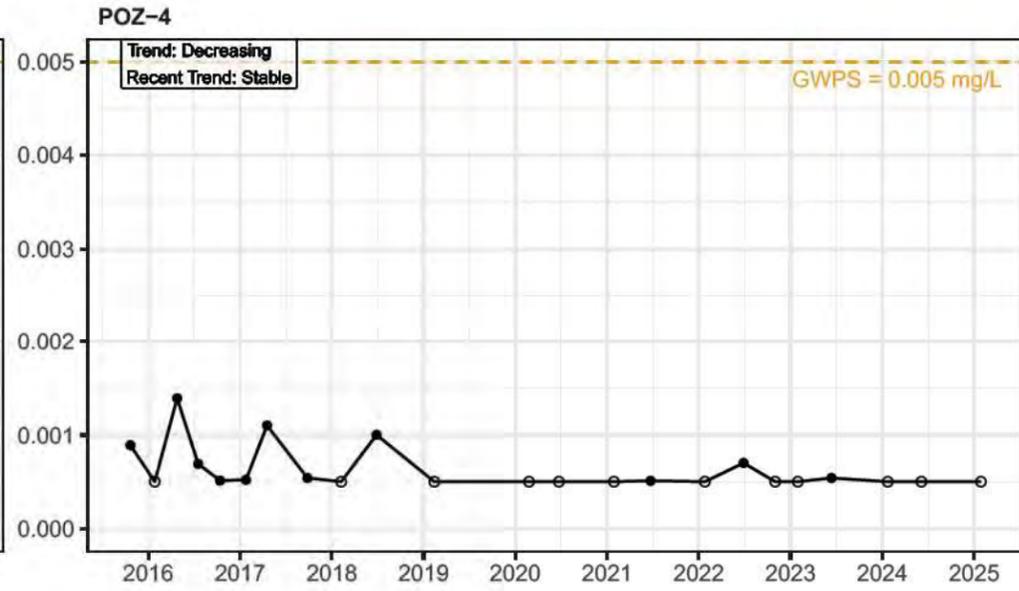
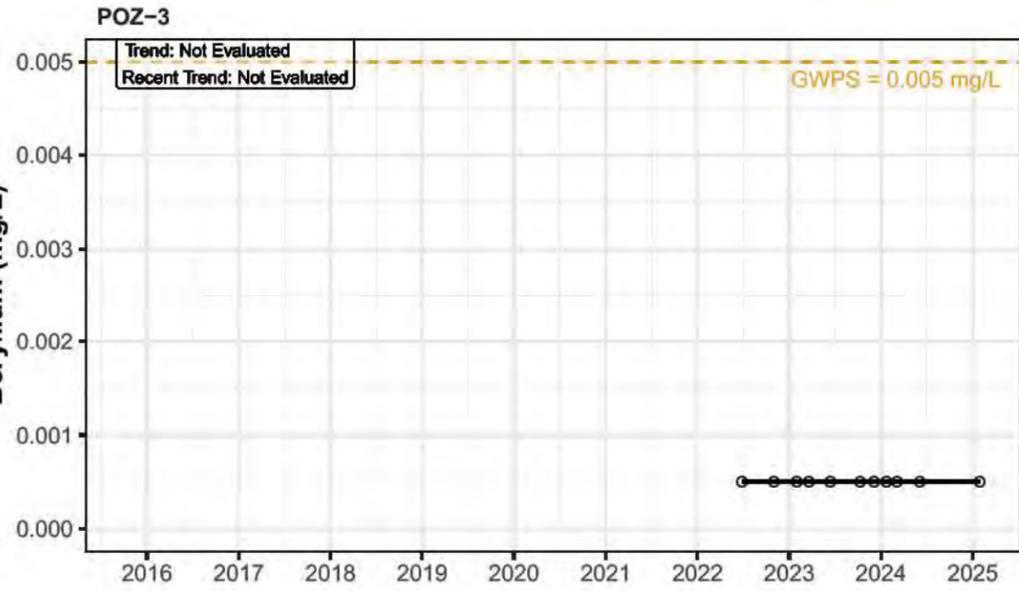
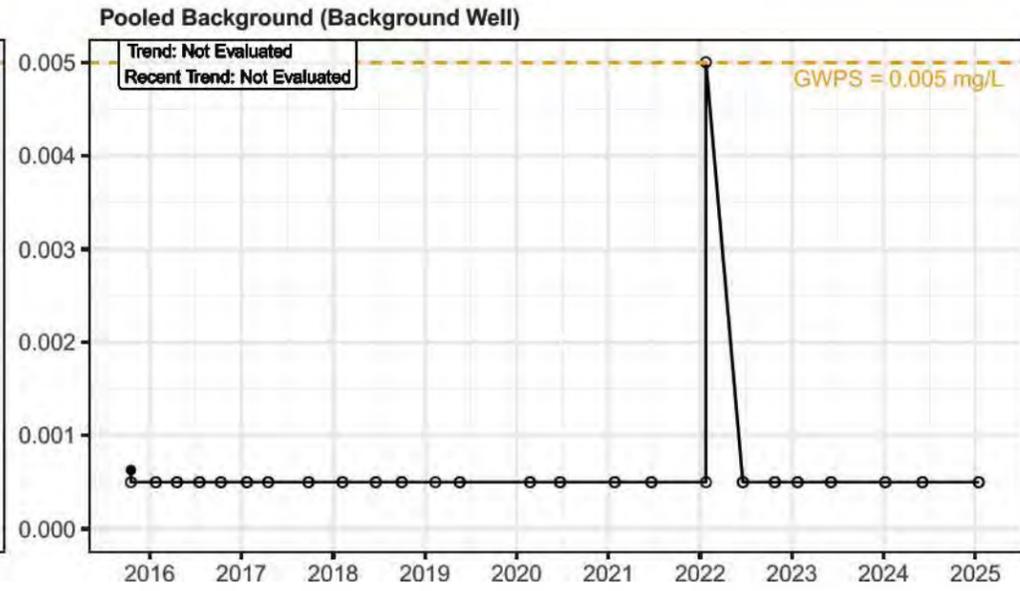
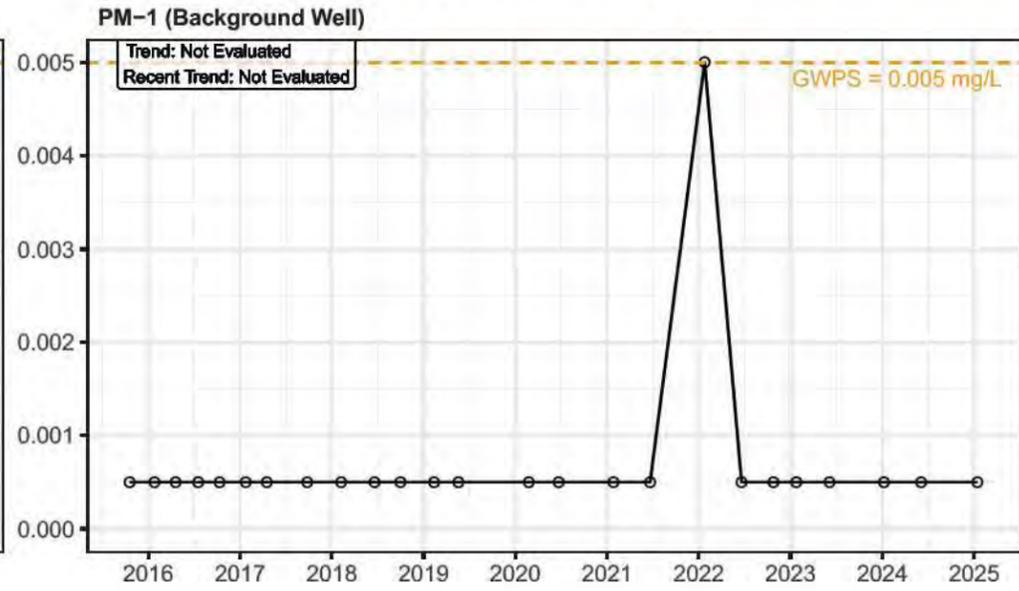
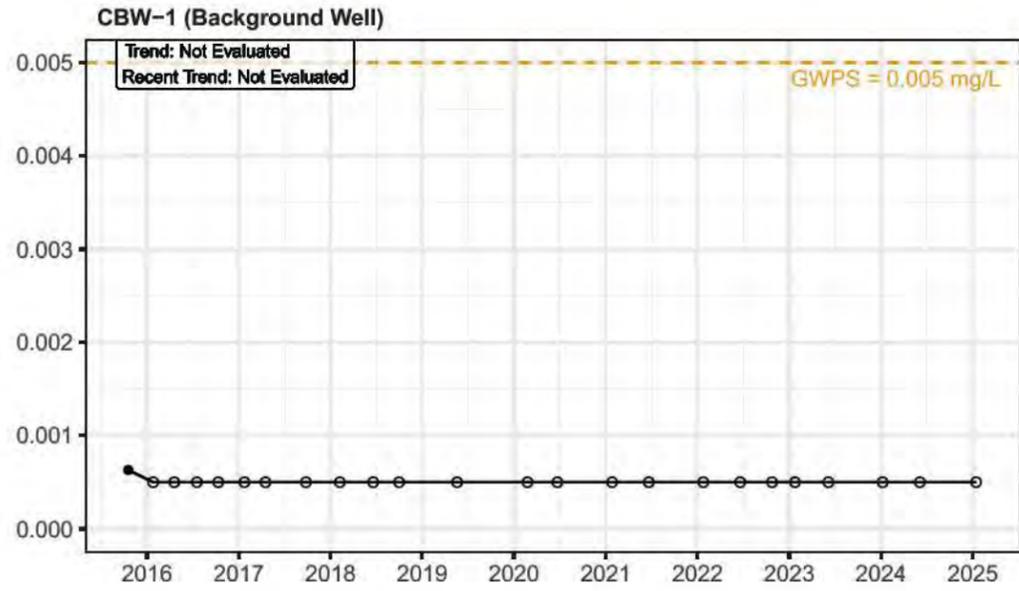


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Beryllium

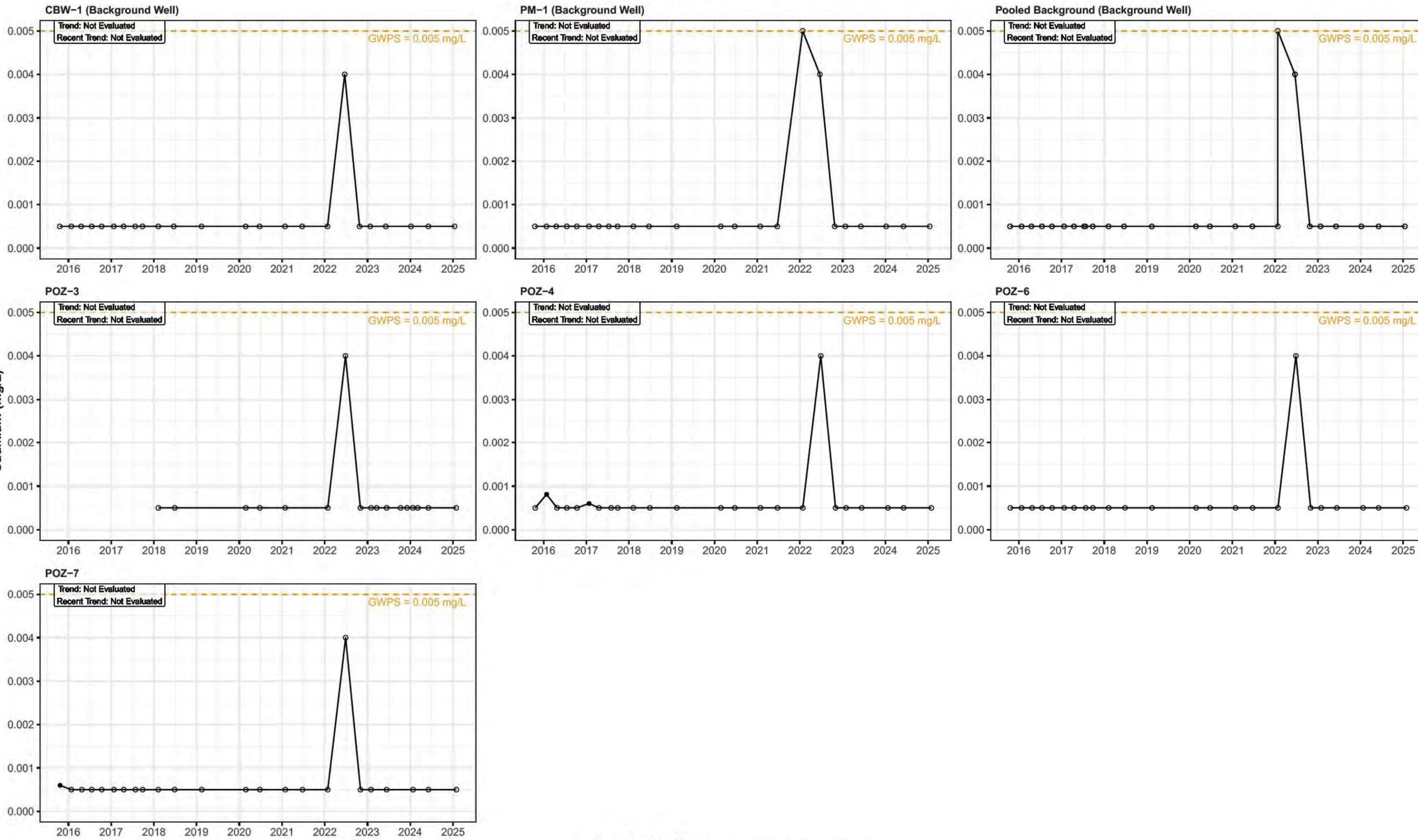


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RS� and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Cadmium

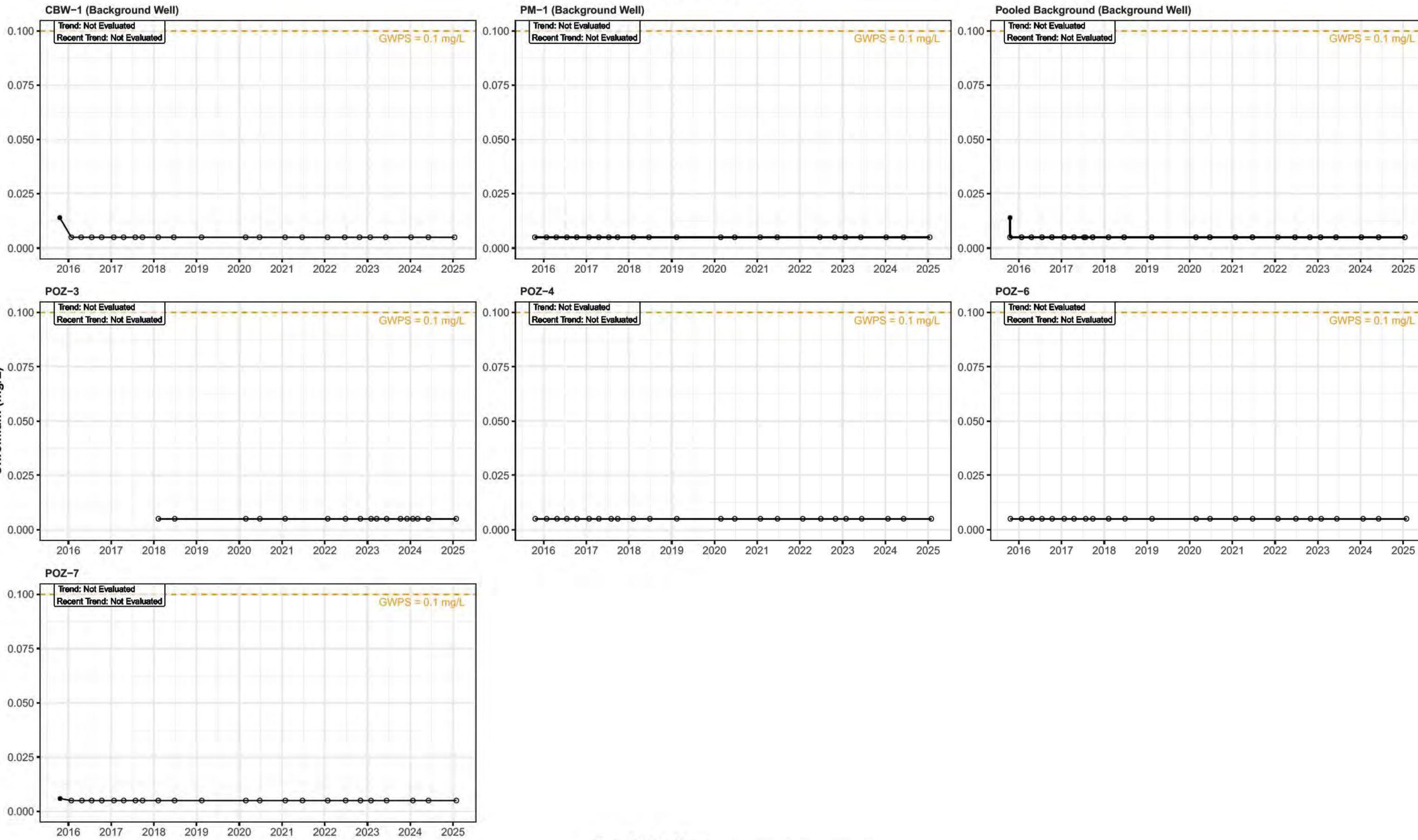


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

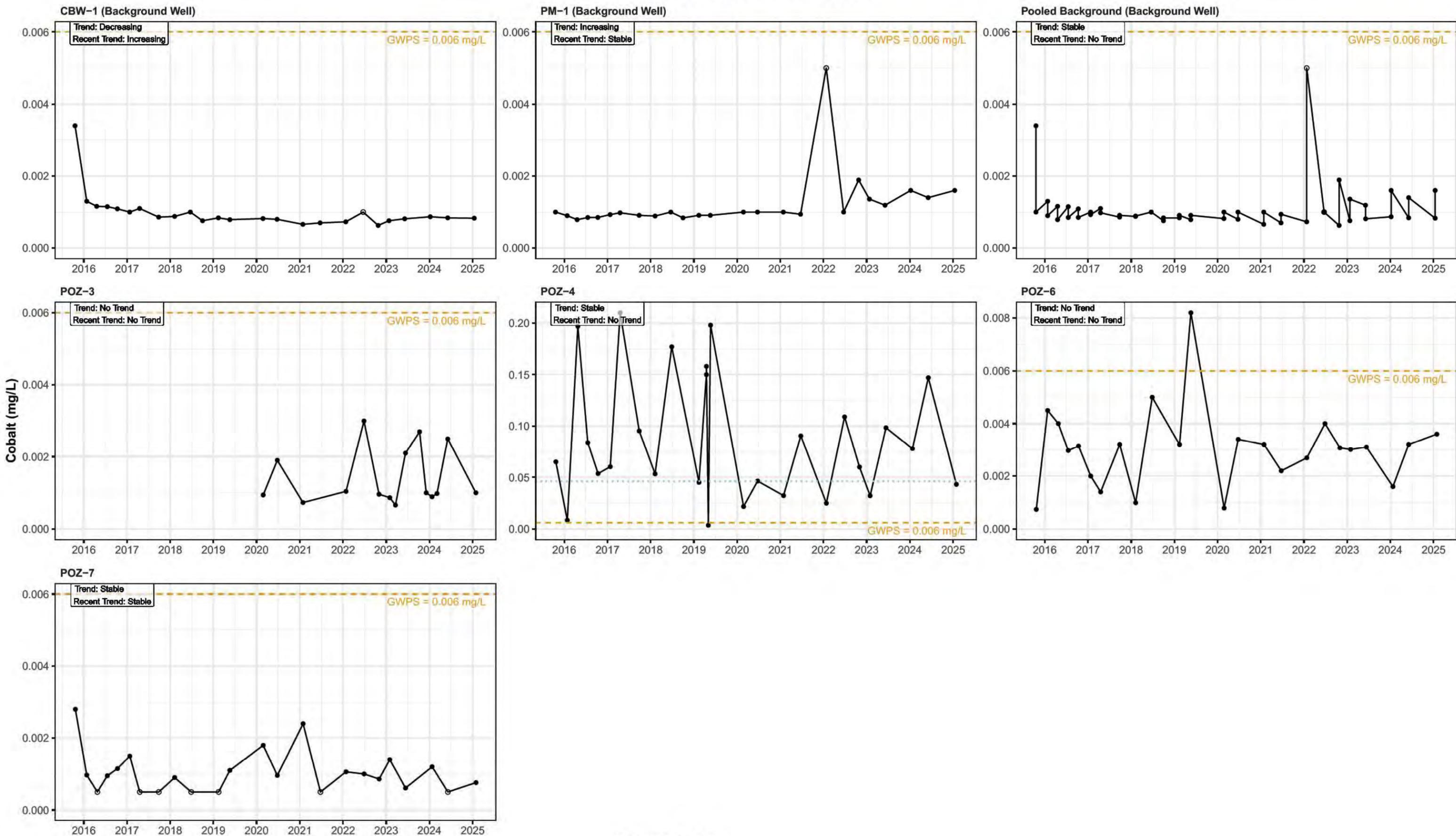
Trend Analysis for Chromium



Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis Plots for Cobalt



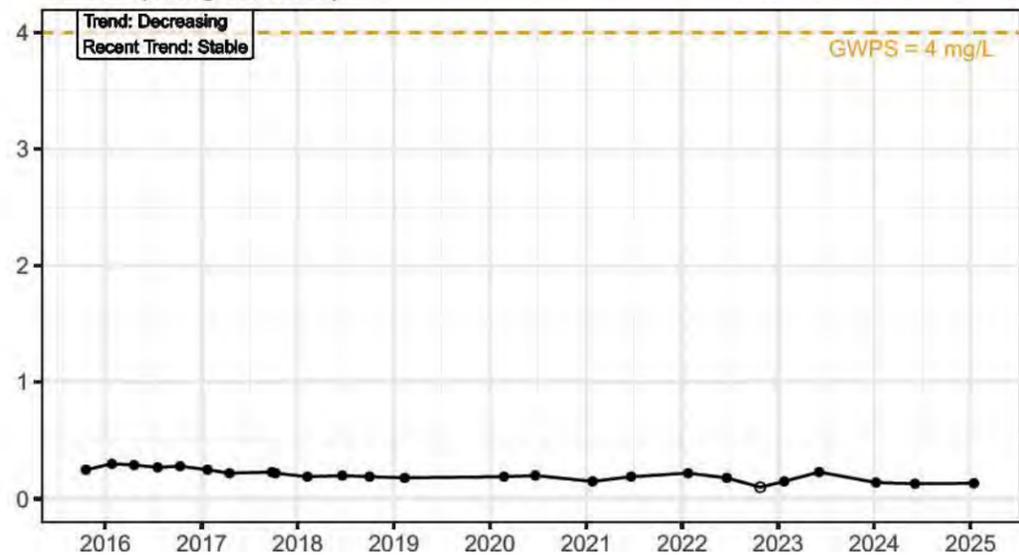
Sample Date (January 1st of the Indicated Year)

--- GWPS
 ---- LCL
 Detection Status:
 ● Detect
 ○ Non-Detect

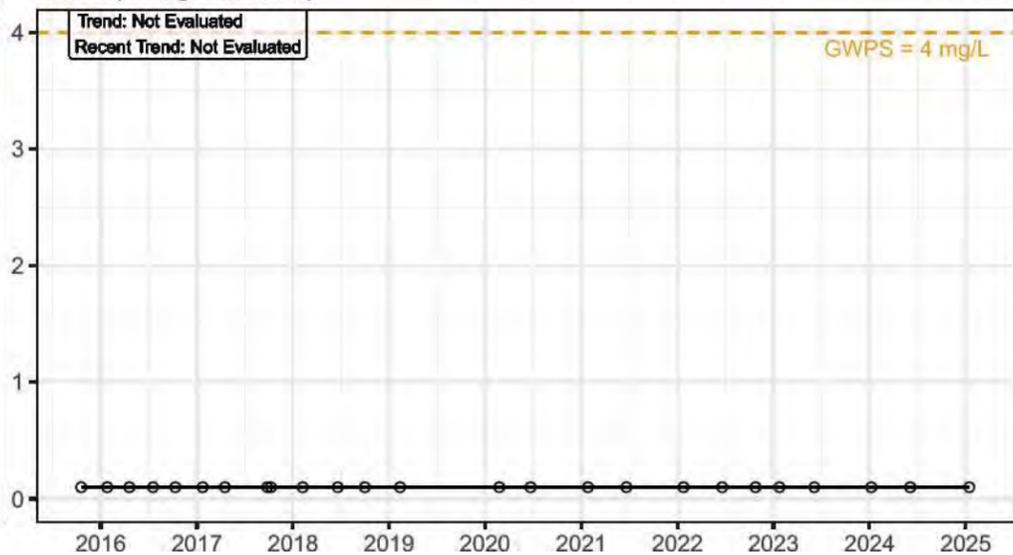
Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSI and UTL). LCL = lower confidence limit. If LCL > GWPS, a statistically significant level (SSL) is concluded.
 *Recent data are considered the 8 most recent data points collected for each well/analyte.
 Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Fluoride

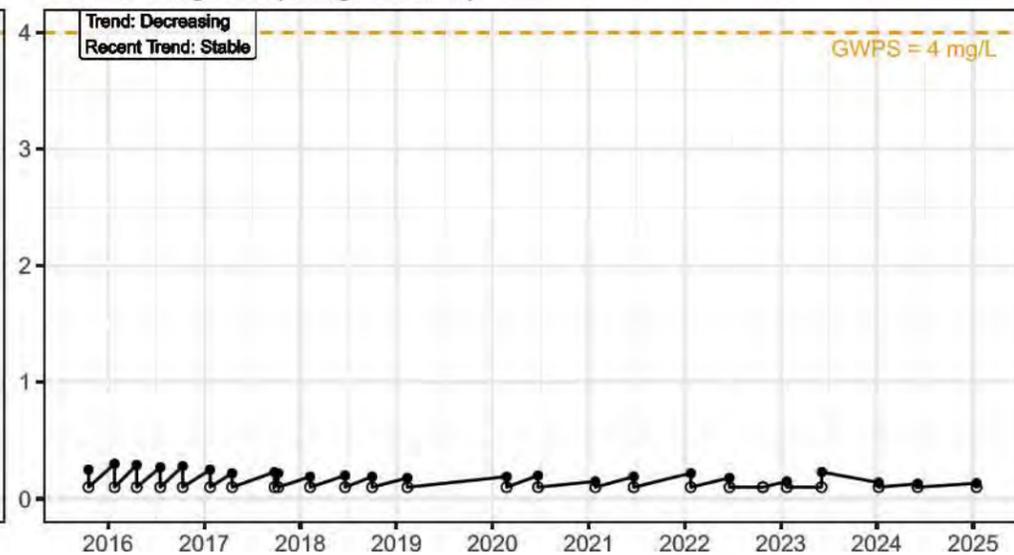
CBW-1 (Background Well)



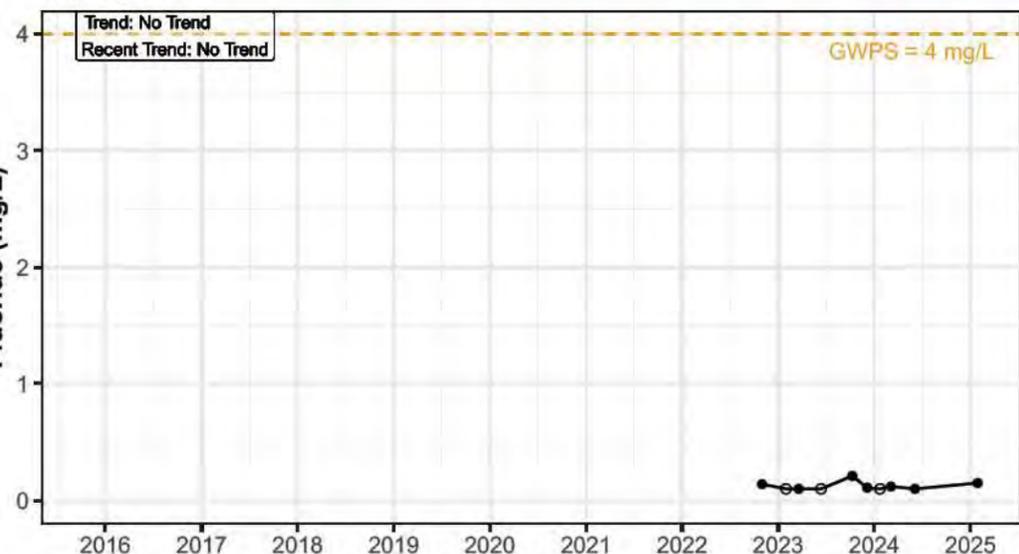
PM-1 (Background Well)



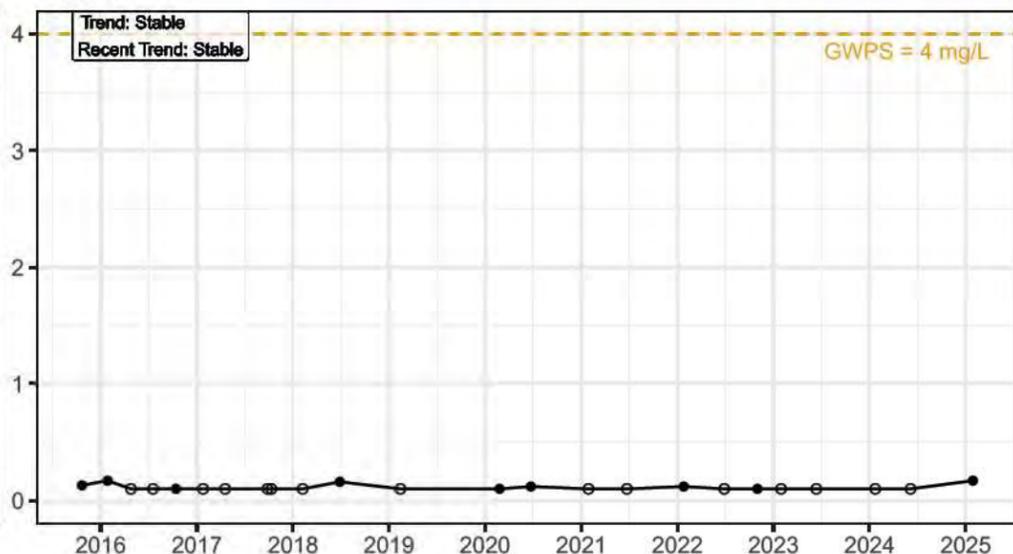
Pooled Background (Background Well)



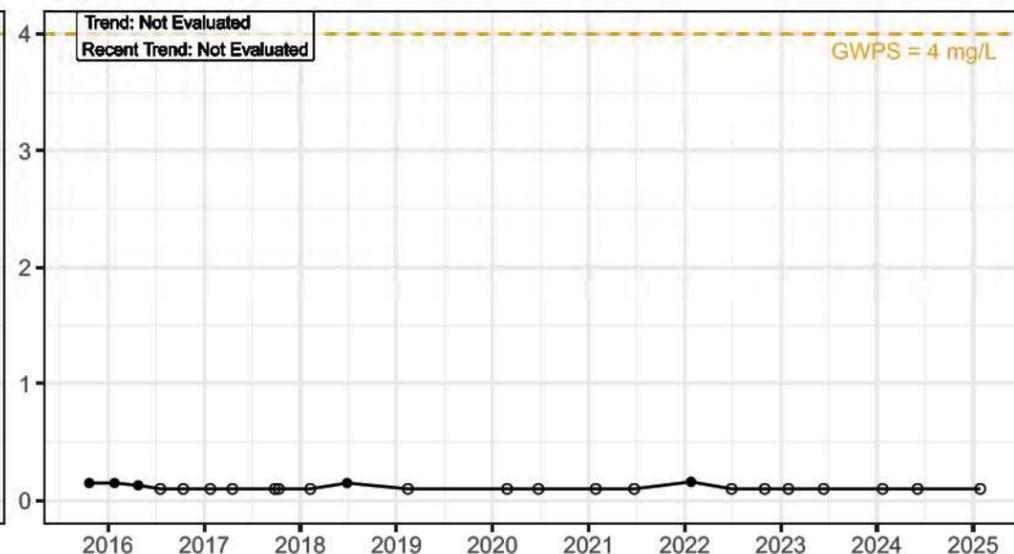
POZ-3



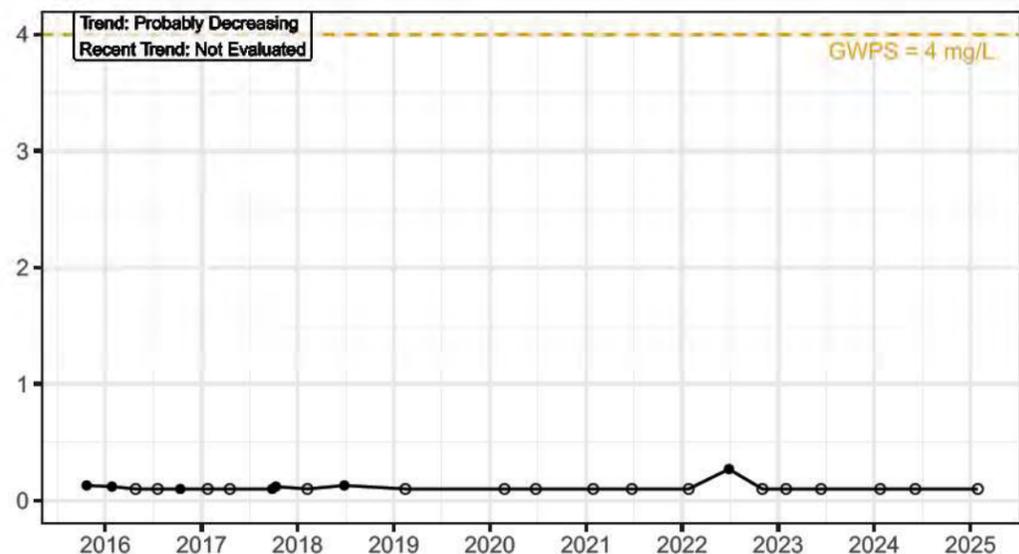
POZ-4



POZ-6



POZ-7

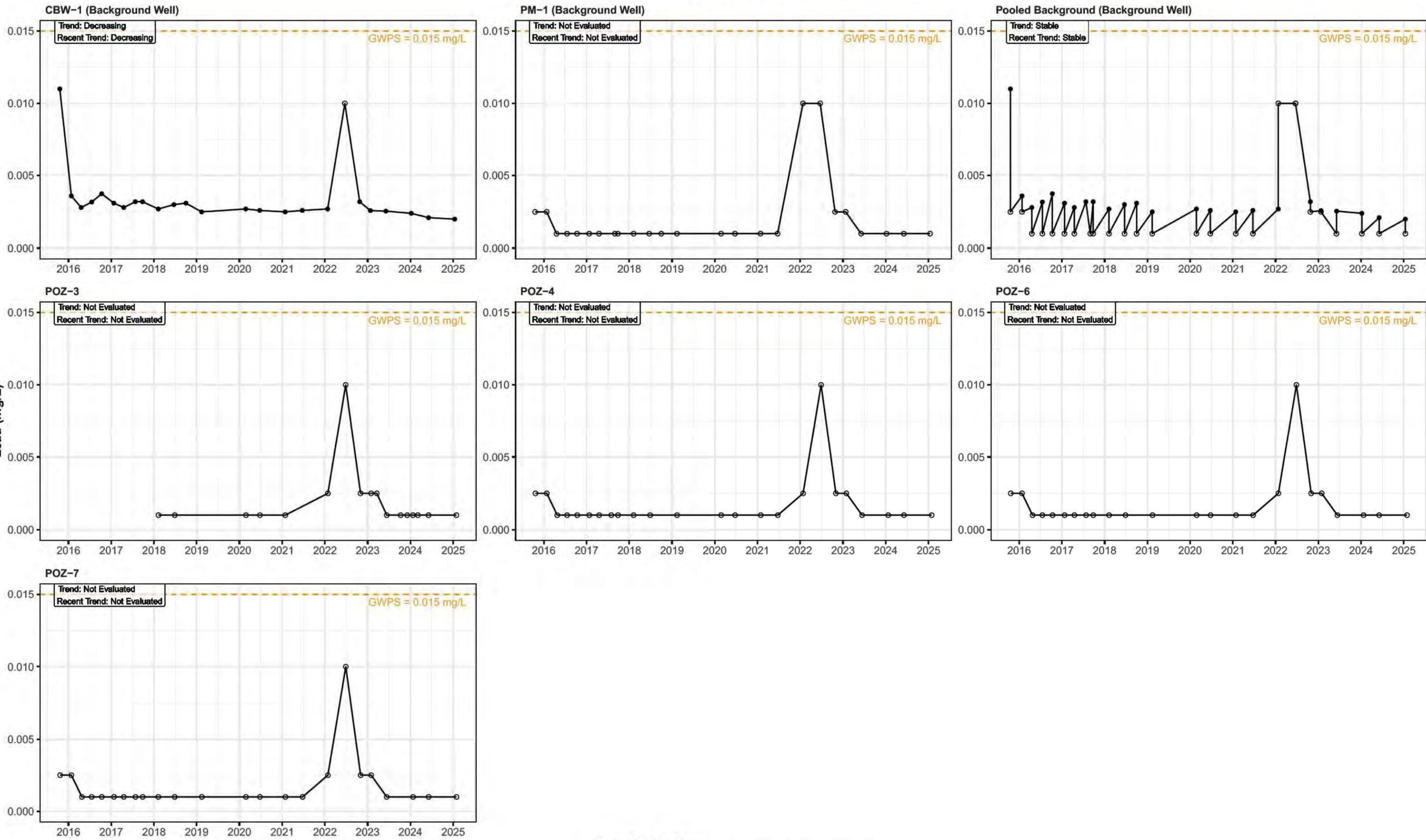


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Lead

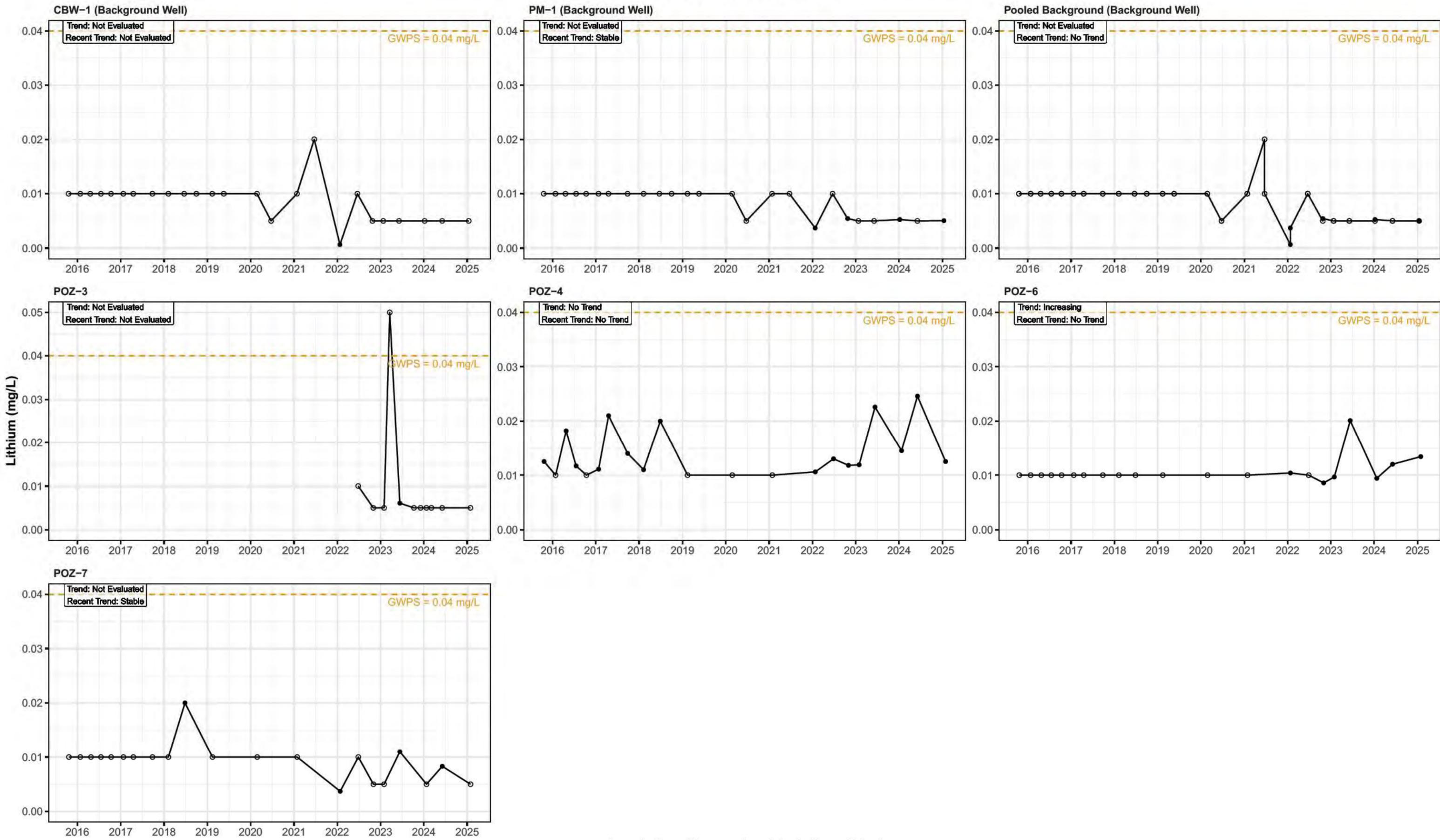


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Lithium

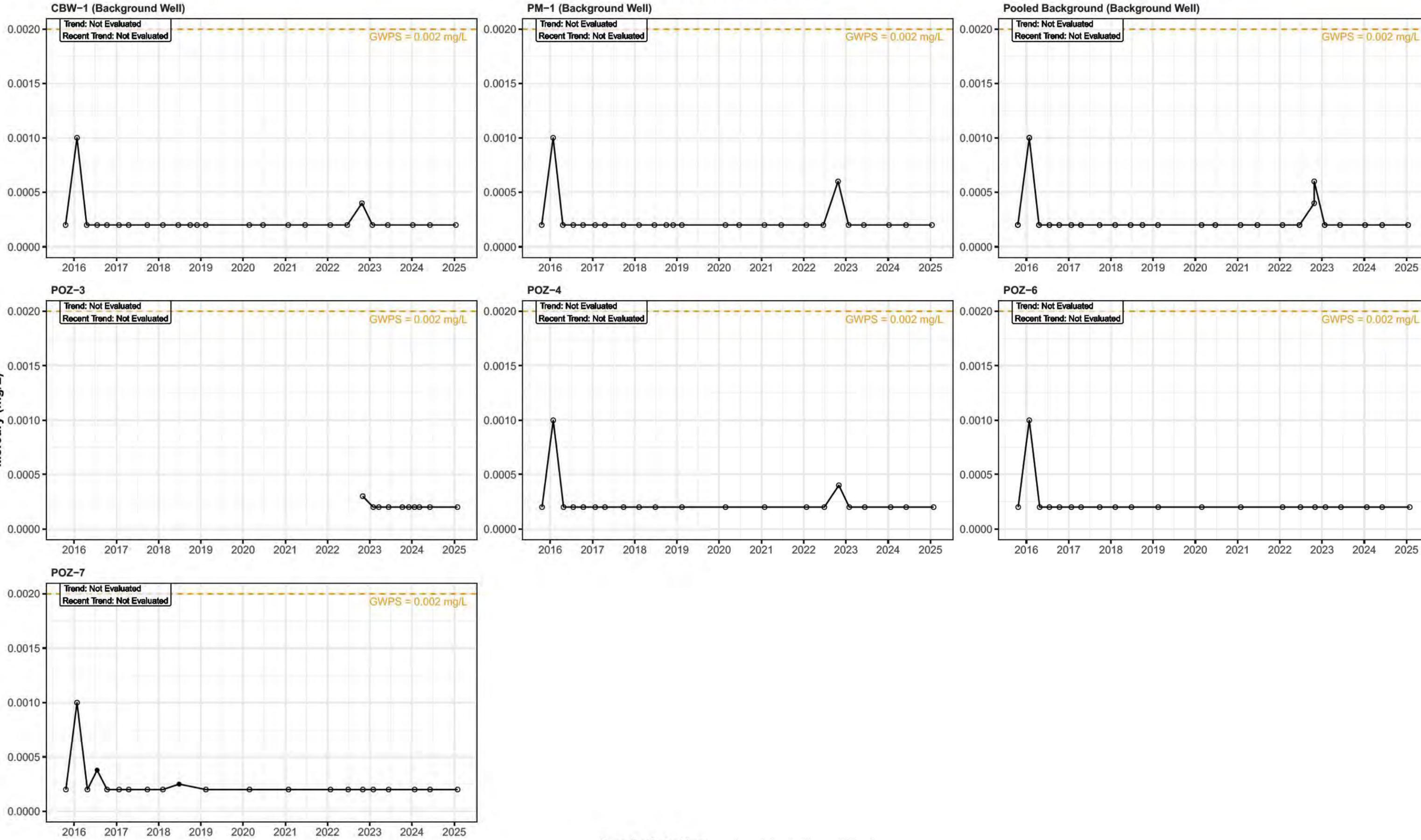


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Mercury

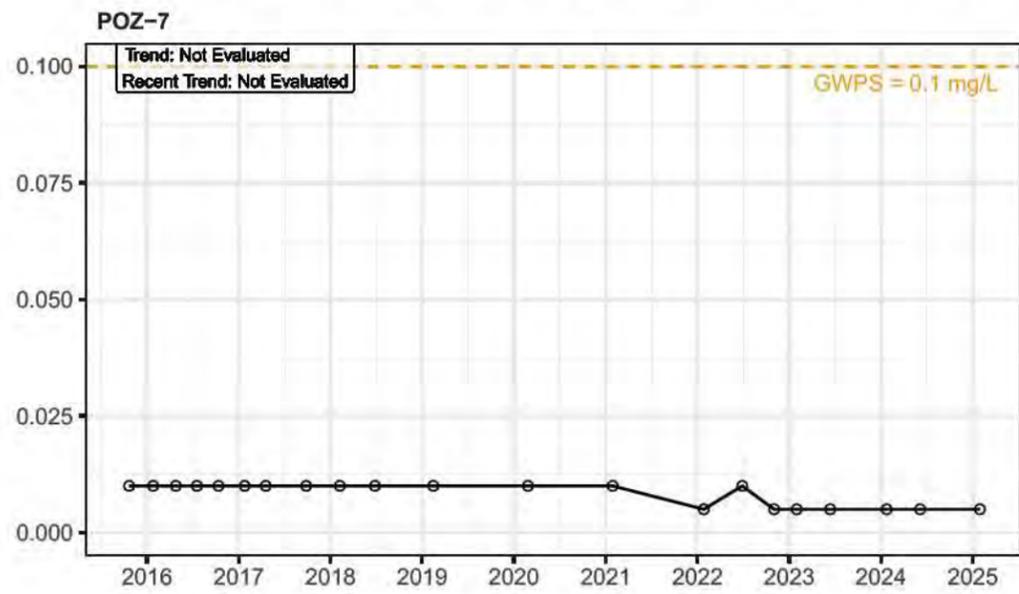
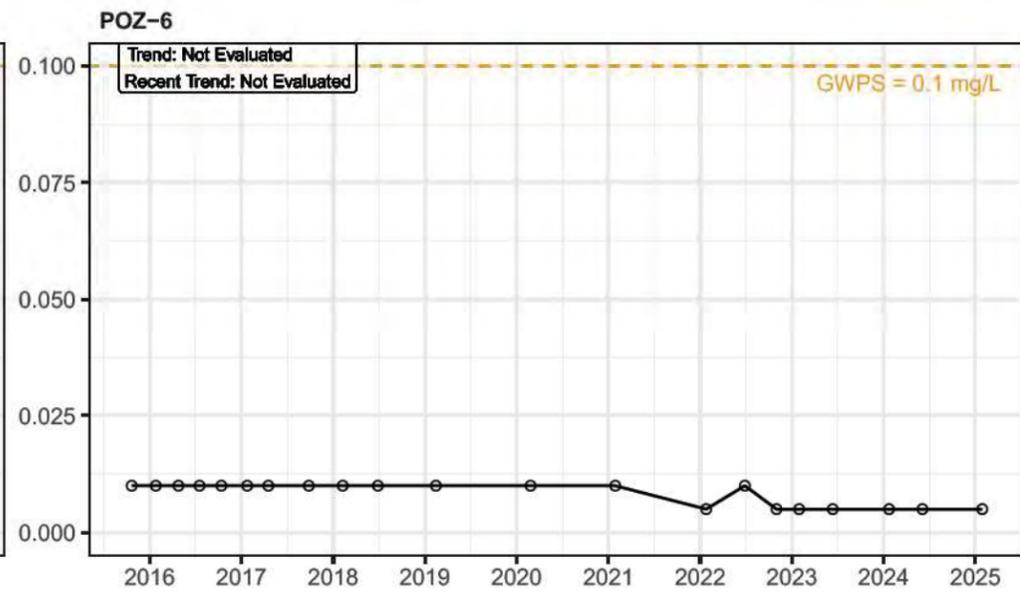
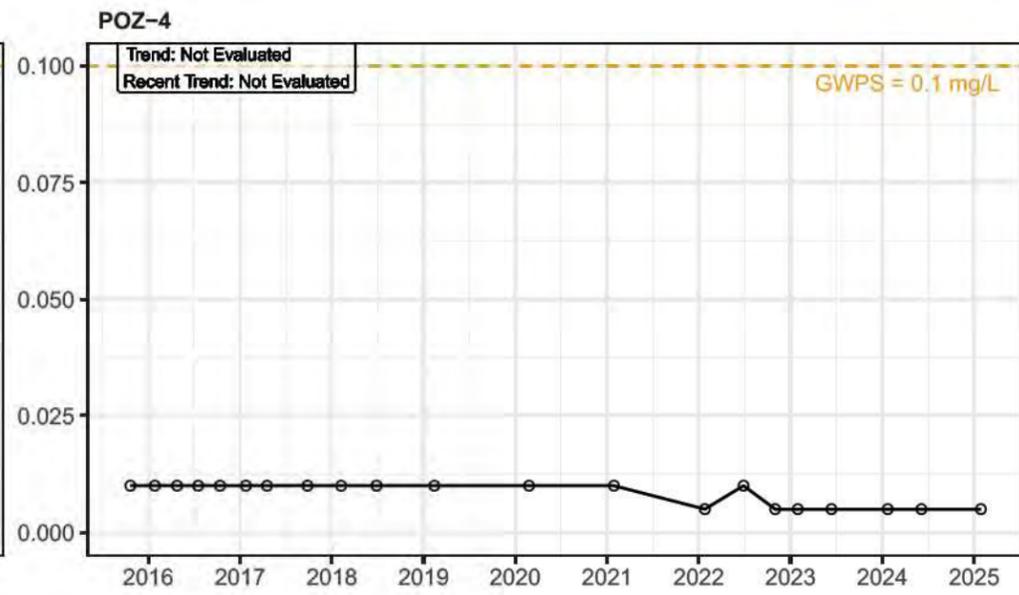
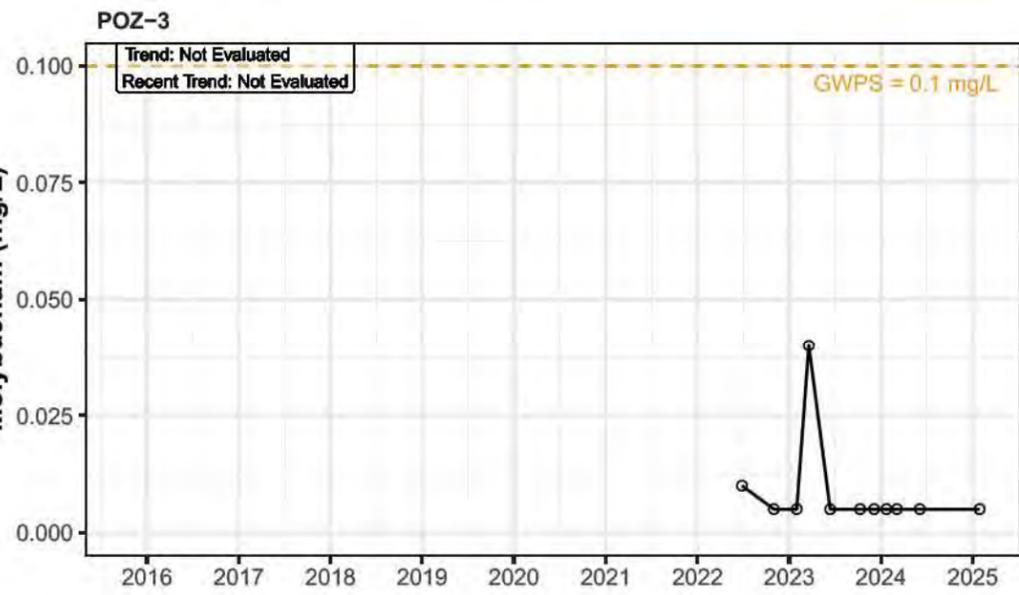
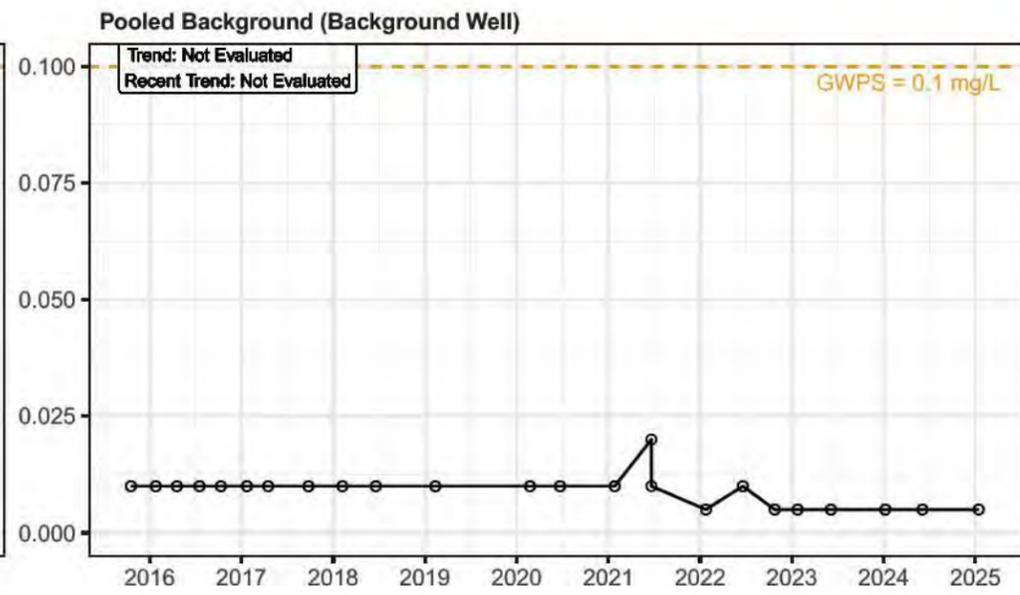
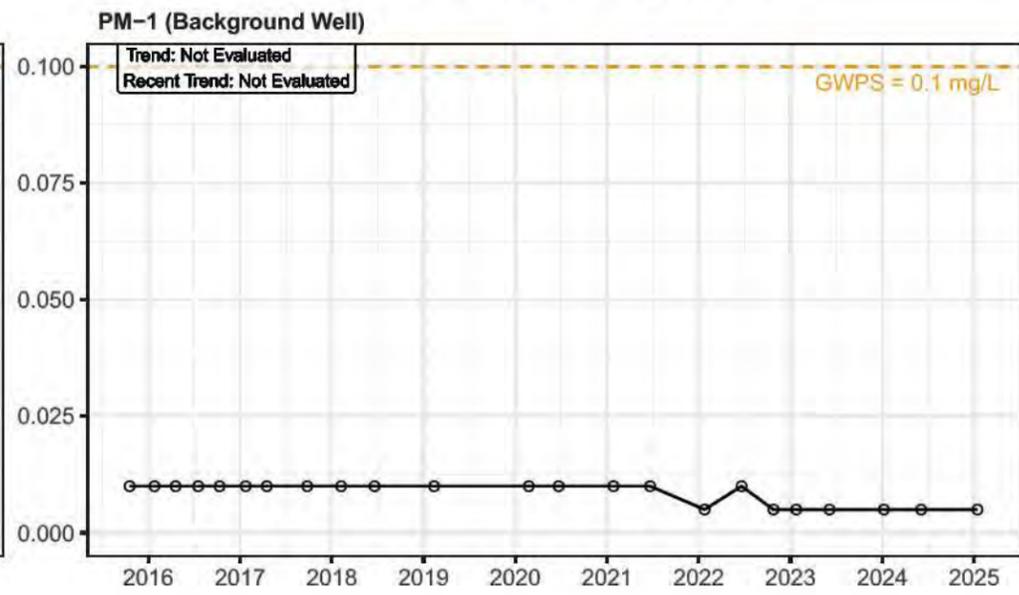
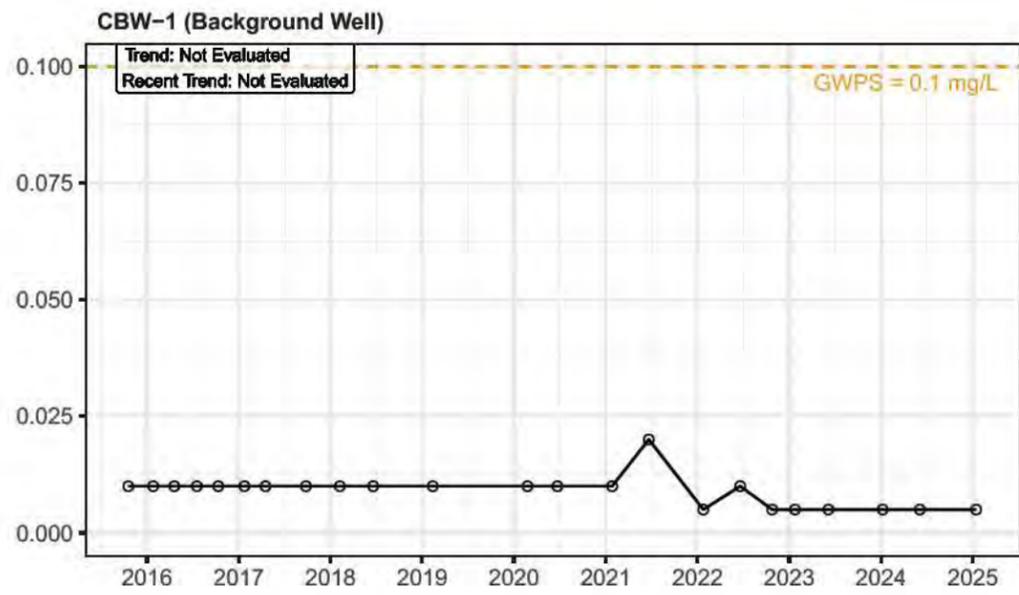


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Molybdenum



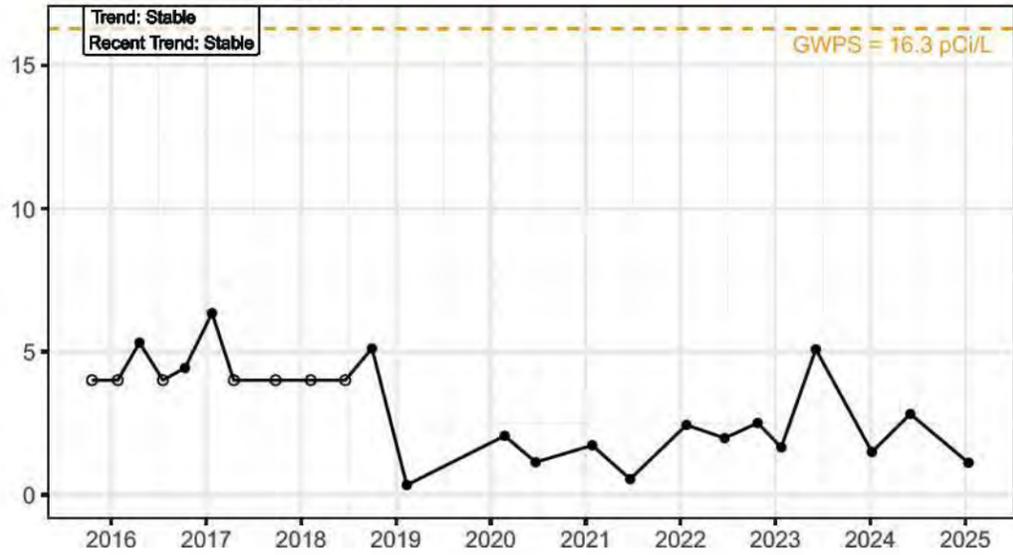
Sample Date (January 1st of the Indicated Year)

Detection Status: ○ Non-Detect

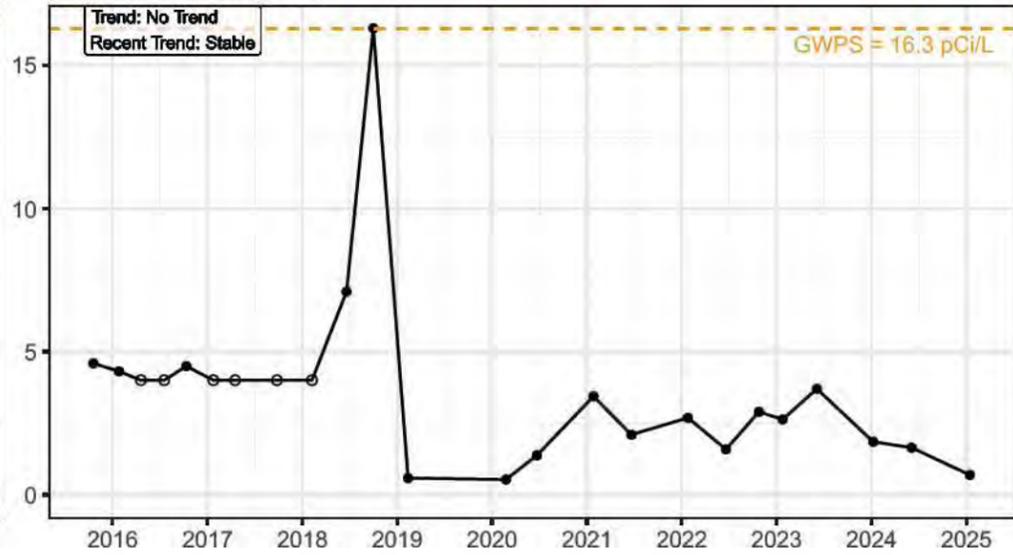
Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Radium-226 & 228

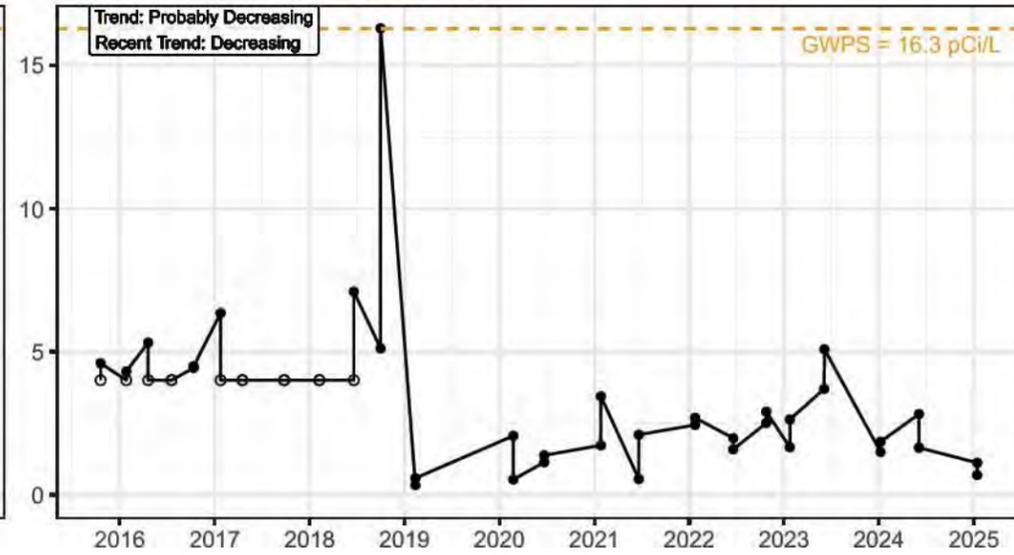
CBW-1 (Background Well)



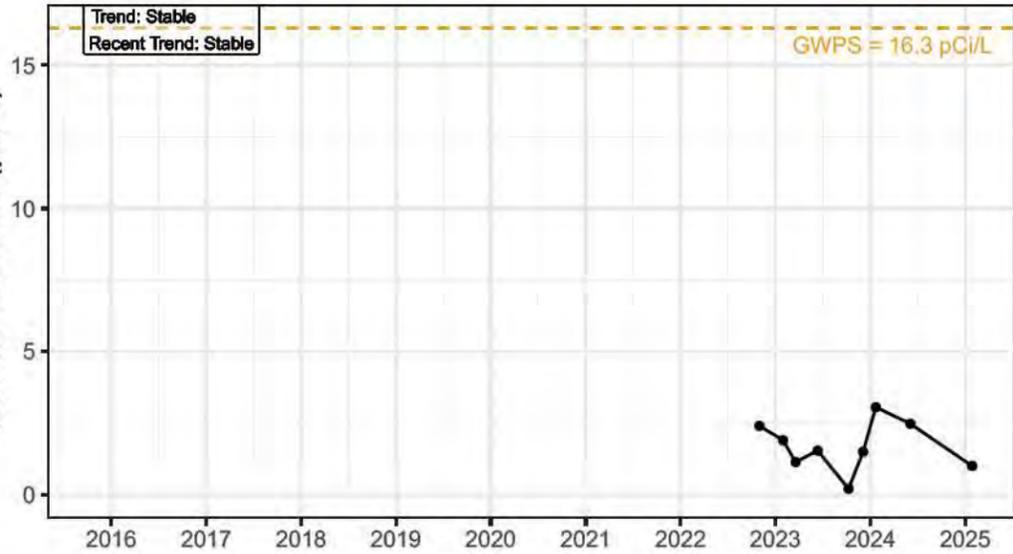
PM-1 (Background Well)



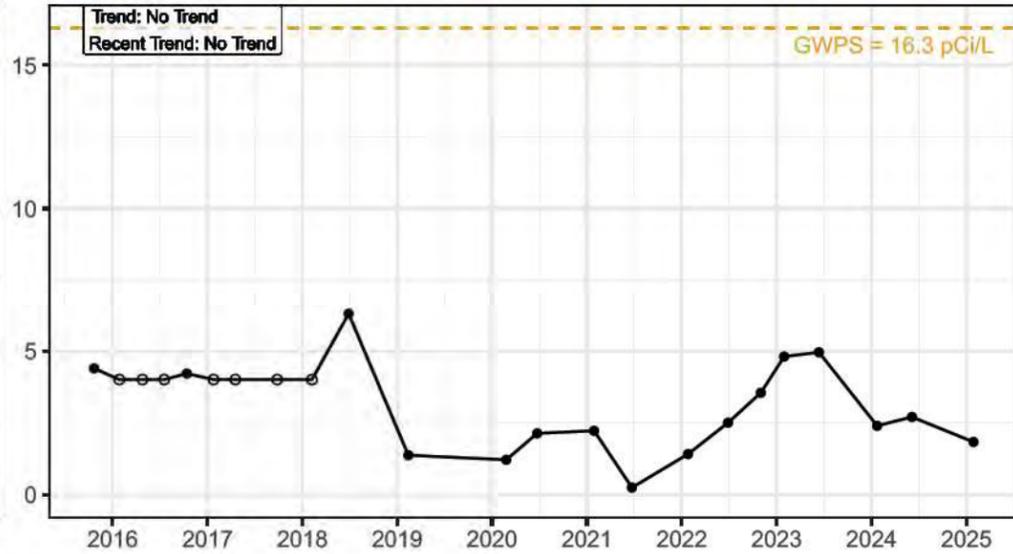
Pooled Background (Background Well)



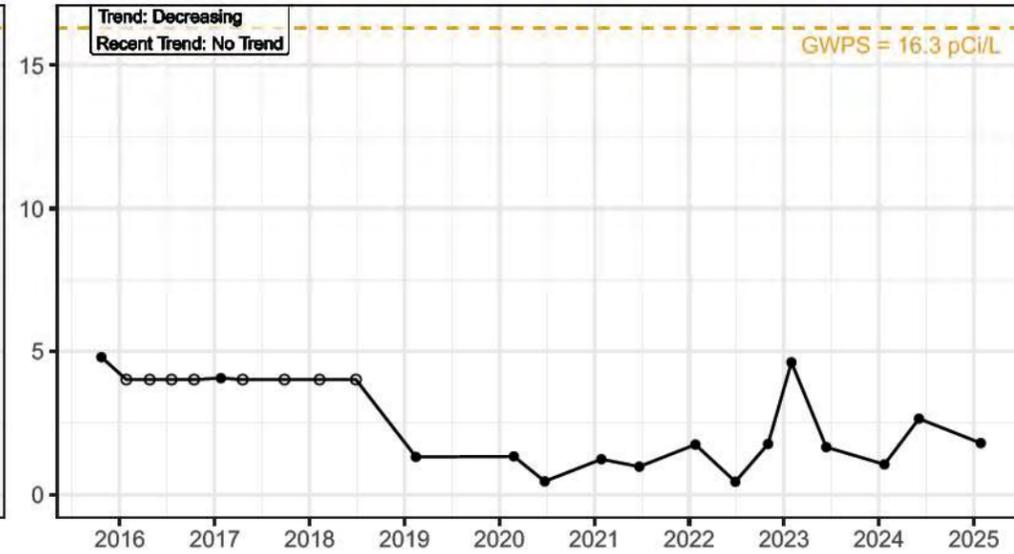
POZ-3



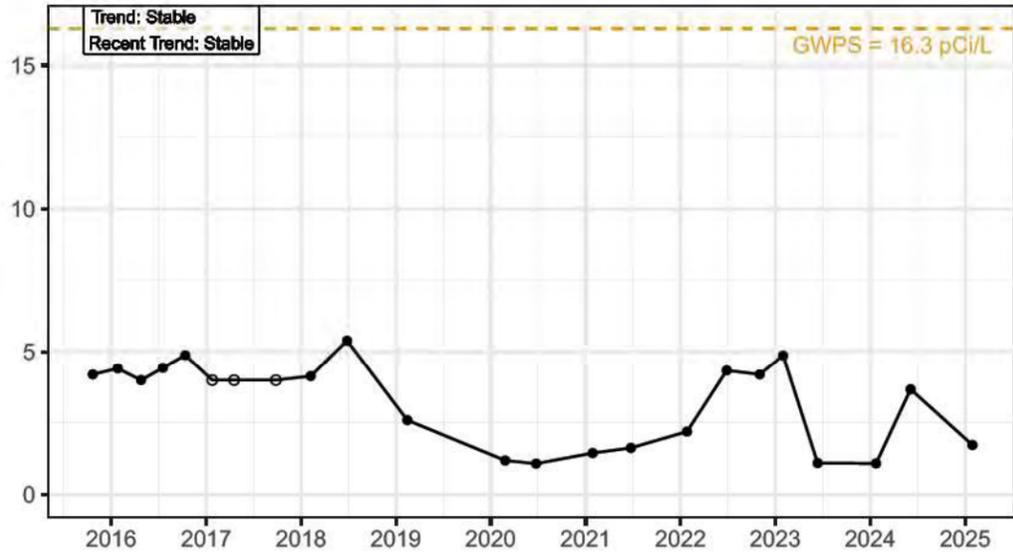
POZ-4



POZ-6



POZ-7

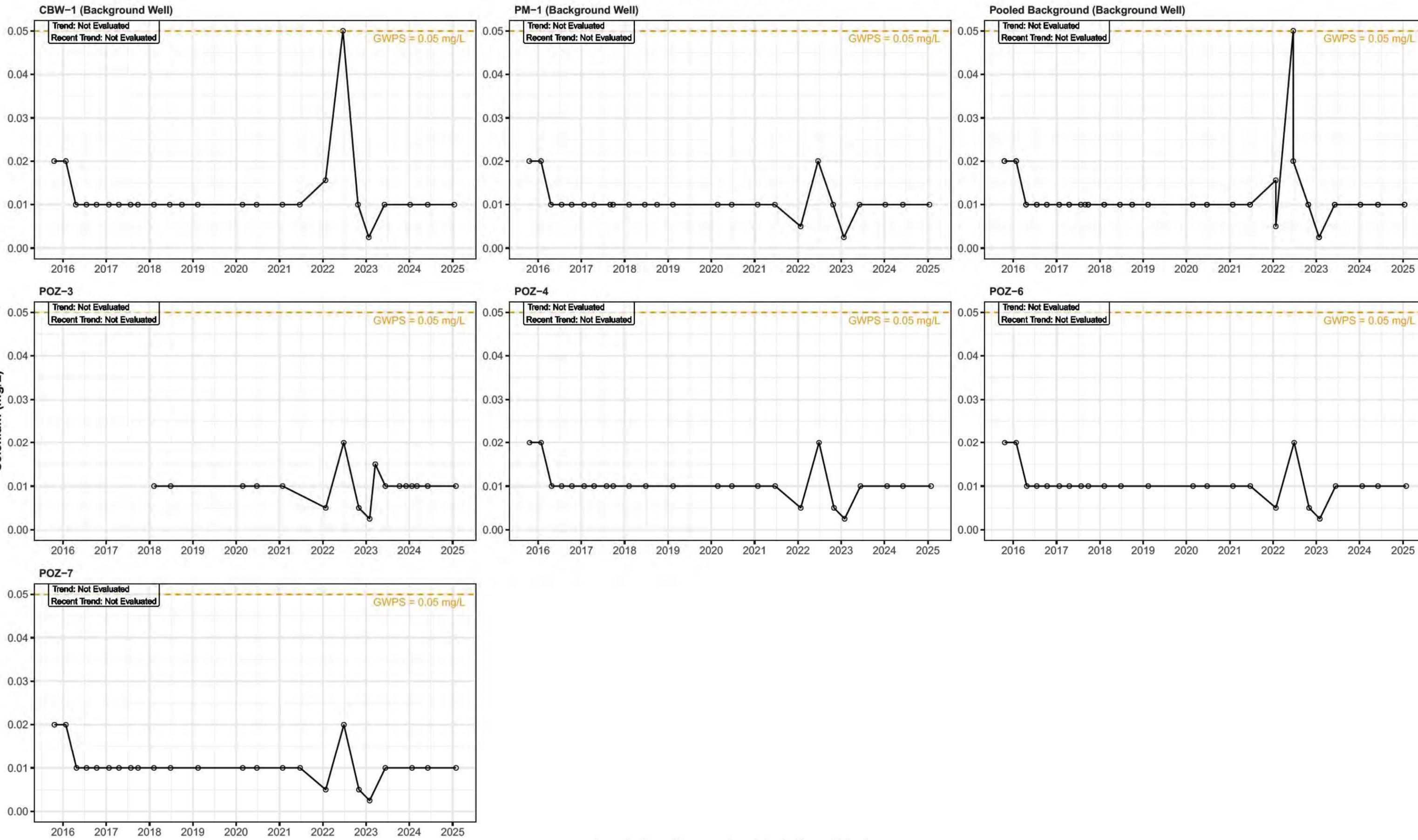


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Selenium

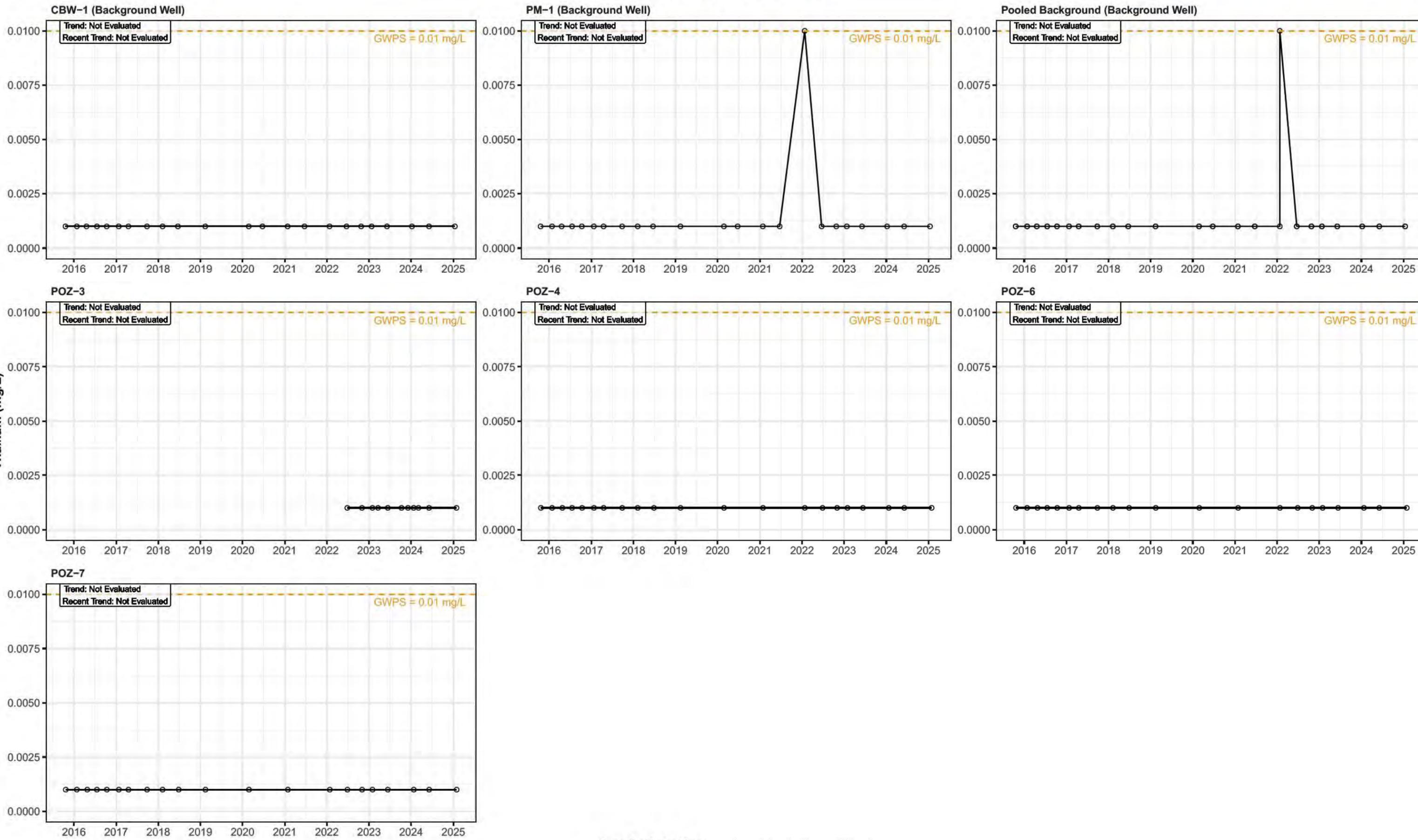


Sample Date (January 1st of the Indicated Year)

Detection Status: ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Thallium



Detection Status: ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.



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TECHNICAL MEMORANDUM

November 14, 2025

File No. 132892-102-002-02

SUBJECT: Statistical Evaluation of the June 2025 Corrective Action Groundwater Monitoring Data
Cross Generating Station
Class 2 Landfill

Pursuant to Title 40 Code of Federal Regulations (40 CFR) §257.93, §257.95, and §257.98 (Rule), this memorandum summarizes the statistical evaluation of the groundwater analytical results obtained from the June 2025 corrective action groundwater monitoring event for the Cross Generating Station (CGS) Class 2 Landfill. Data for this groundwater sampling event was validated August 18, 2025, by Santee Cooper and provided to Haley & Aldrich, Inc. (Haley & Aldrich).

BACKGROUND

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

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 the background wells. During previous groundwater sampling events, cobalt was the only Appendix IV constituent detected at an SSL above the GWPS.

STATISTICAL EVALUATION

The Rule provides four specific options to statistically evaluate whether water quality downgradient of the coal combustion residual unit (40 CFR §257.93(f) (1-4)) represents an 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 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 the 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, or site background concentration. Compliance well data from the most recent

groundwater sampling event were compared to the corresponding GWPS to determine if an 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 95 percent target confidence level. The upper endpoint of a tolerance interval is termed the upper tolerance limit (UTL). Depending on the assumed distribution of background, parametric or non-parametric procedures were used to develop the UTL. Parametric procedures use assumed distributions of the sample background data to develop 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 sampling event was above the GWPS, the lower confidence limit (LCL) for the downgradient well constituent was used to evaluate the presence of an 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 wells (CBW-1 and PM-1) analytical results from previous sampling 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 the statistical evaluation of analytical results collected through January 2025 and updated in the Statistical Output (Attachment A). The background dataset will be updated in Table 1 again after four additional data points are collected (first semiannual event of 2026) in accordance with the Unified Guidance.

TREND ANALYSIS

Mann-Kendall trend analyses were performed on both the overall dataset, and on the eight most recent samples. Trends were only evaluated for constituent/well datasets of sufficient sample size. Recent trend analysis results are included in Table 1, and both overall and recent trends are included in Attachment A, Table A-4. Trend analysis will continue to be used to monitor and evaluate concentrations in the context of overall site conditions.

Of the 20 well/constituent trends analyzed for recent data at downgradient compliance wells, 55 percent are stable, and 35 percent are variable with no statistically significant trend. POZ-6 had an increasing trend for antimony in recent data, but concentrations are below the GWPS. It is important to note that increasing trends are not part of the comparison criteria for triggering an SSL.

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, cobalt remains the only Appendix IV constituent present at an SSL above the GWPS at POZ-4. Mann-Kendall analysis indicates that cobalt concentrations at POZ-4 have been stable since 2015, and recent data do not follow a statistically significant trend.

All other wells meet the GWPS, including POZ-6, which did not meet the GWPS prior to implementation of the selected remedy. These results generally reflect the predicted cobalt groundwater fate and transport modeling results. Even though there is variability in the cobalt data, concentrations at downgradient well POZ-3, POZ-6, and POZ-7 are stable.

Fluoride was detected above the interwell UTL in POZ-3, POZ-4, POZ-6, and POZ-7; however, concentrations did not exceed the GWPS and therefore were not identified as an SSL.

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

Enclosures:

- Table 1 – June 2025 Corrective Action Monitoring Data (CGS Class 2 Landfill)
- Attachment A – Statistical Output, June 2025

TABLE

TABLE 1
 JUNE 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^(a)	Assumed Data Distribution	Inter-well Analysis										
													Sample Date	June 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^(b)	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>		
CCR Appendix IV: Antimony, Total (mg/L)																							
CBW-1	2/24	92%	0.005 - 0.025	0.0059	0.0050	0.0060	0.0060	69%	0	1	Increasing	Non-Parametric	6/3/2025	0.006	Yes	0.025	NA	0.006	0.025	NA	NA		
PM-1	2/24	92%	0.005 - 0.025	0.0061	0.0050	0.0094	0.0057	68%	0	2	Increasing		6/2/2025	0.0057	Yes	0.025	NA	0.006	0.025	NA	NA		
POZ-3	0/12	100%	0.005 - 0.05	0.0088	0.0050	0.0252	NA	148%	0	1	Not Evaluated	NA	6/10/2025	0.005	No	0.025	No	0.006	0.025	NA	No		
POZ-4	1/22	96%	0.005 - 0.025	0.0060	0.0050	0.0058	0.0058	72%	0	1	Not Evaluated	NA	6/9/2025	0.005	No	0.025	No	0.006	0.025	NA	No		
POZ-6	2/22	91%	0.005 - 0.025	0.0060	0.0050	0.0074	0.0075	71%	1	1	Increasing	NA	6/10/2025	0.0075	Yes	0.025	No	0.006	0.025	NA	No		
POZ-7	0/22	100%	0.005 - 0.025	0.0059	0.0050	0.0050	NA	72%	0	1	Not Evaluated	NA	6/10/2025	0.005	No	0.025	No	0.006	0.025	NA	No		
CCR Appendix IV: Arsenic, Total (mg/L)																							
CBW-1	3/26	89%	0.003 - 0.005	0.00527	0.005	0.00637	0.016	44%	1	0	Not Evaluated	Non-Parametric	6/3/2025	0.005	No	0.016	NA	0.01	0.016	NA	NA		
PM-1	3/26	89%	0.003 - 0.01	0.00496	0.005	0.00500	0.0042	24%	0	0	Not Evaluated		6/2/2025	0.005	No	0.016	NA	0.01	0.016	NA	NA		
POZ-3	0/18	100%	0.003 - 0.005	0.00456	0.005	0.00500	NA	19%	0	0	Not Evaluated	NA	6/10/2025	0.005	No	0.016	No	0.01	0.016	NA	No		
POZ-4	1/25	96%	0.003 - 0.005	0.00460	0.005	0.00500	0.0031	18%	0	0	Not Evaluated	NA	6/9/2025	0.005	No	0.016	No	0.01	0.016	NA	No		
POZ-6	1/25	96%	0.003 - 0.005	0.00464	0.005	0.00500	0.0039	16%	0	0	Not Evaluated	NA	6/10/2025	0.005	No	0.016	No	0.01	0.016	NA	No		
POZ-7	0/25	100%	0.003 - 0.005	0.00460	0.005	0.00500	NA	18%	0	0	Not Evaluated	NA	6/10/2025	0.005	No	0.016	No	0.01	0.016	NA	No		
CCR Appendix IV: Barium, Total (mg/L)																							
CBW-1	26/26	0%	NA	0.0424	0.0424	0.0471	0.061	12%	0	0	Stable	Non-Parametric	6/3/2025	0.0379	Yes	0.103	NA	2	2	NA	NA		
PM-1	26/26	0%	NA	0.0819	0.0805	0.0969	0.103	9%	0	0	No Trend		6/2/2025	0.0869	Yes	0.103	NA	2	2	NA	NA		
POZ-3	18/18	0%	NA	0.1080	0.1050	0.1500	0.166	18%	0	0	No Trend	NA	6/10/2025	0.0914	Yes	0.103	No	2	2	NA	No		
POZ-4	25/25	0%	NA	0.1130	0.0995	0.1830	0.255	40%	0	0	Stable	NA	6/9/2025	0.0691	Yes	0.103	No	2	2	NA	No		
POZ-6	25/25	0%	NA	0.06	0.05	0.09	0.1	28%	0	0	No Trend	NA	6/10/2025	0.0787	Yes	0.103	No	2	2	NA	No		
POZ-7	25/25	0%	NA	0.2090	0.2200	0.3030	0.389	39%	0	0	Stable	NA	6/10/2025	0.0924	Yes	0.103	No	2	2	NA	No		
CCR Appendix IV: Beryllium, Total (mg/L)																							
CBW-1	1/25	96%	0.0005 - 0.0005	0.0005	0.0005	0.0005	0.00063	5%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.0005	No	0.005	NA	0.004	0.005	NA	NA		
PM-1	0/26	100%	0.0005 - 0.005	0.0007	0.0005	0.0005	NA	131%	0	1	Not Evaluated		6/2/2025	0.0005	No	0.005	NA	0.004	0.005	NA	NA		
POZ-3	0/12	100%	0.0005 - 0.0005	0.0005	0.0005	0.0005	NA	0%	0	0	Not Evaluated	NA	6/10/2025	0.0005	No	0.005	No	0.004	0.005	NA	No		
POZ-4	11/24	54%	0.0005 - 0.0005	0.0006	0.0005	0.0011	0.00139	38%	0	0	Stable	NA	6/9/2025	0.0005	No	0.005	No	0.004	0.005	NA	No		
POZ-6	0/24	100%	0.0005 - 0.0005	0.0005	0.0005	0.0005	NA	0%	0	0	Not Evaluated	NA	6/10/2025	0.0005	No	0.005	No	0.004	0.005	NA	No		
POZ-7	13/24	46%	0.0005 - 0.0005	0.0006	0.0005	0.0009	0.000935	24%	0	0	Stable	NA	6/10/2025	0.0005	No	0.005	No	0.004	0.005	NA	No		

TABLE 1
 JUNE 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^(a)	Assumed Data Distribution	Inter-well Analysis										
													Sample Date	June 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^(b)	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>		
CCR Appendix IV: Cadmium, Total (mg/L)																							
CBW-1	0/25	100%	0.0005 - 0.004	0.0006	0.0005	0.0005	NA	109%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.0005	No	0.005	NA	0.005	0.005	NA	NA		
PM-1	0/25	100%	0.0005 - 0.005	0.0008	0.0005	0.0033	NA	136%	0	0	Not Evaluated		6/2/2025	0.0005	No	0.005	NA	0.005	0.005	NA	NA		
POZ-3	0/18	100%	0.0005 - 0.004	0.0007	0.0005	0.0010	NA	119%	0	0	Not Evaluated		NA	6/10/2025	0.0005	No	0.005	No	0.005	0.005	NA	No	
POZ-4	2/25	92%	0.0005 - 0.004	0.0007	0.0005	0.0008	0.00081	107%	0	0	Not Evaluated		NA	6/9/2025	0.0005	No	0.005	No	0.005	0.005	NA	No	
POZ-6	0/25	100%	0.0005 - 0.004	0.0006	0.0005	0.0005	NA	109%	0	0	Not Evaluated		NA	6/10/2025	0.0005	No	0.005	No	0.005	0.005	NA	No	
POZ-7	1/25	96%	0.0005 - 0.004	0.0006	0.0005	0.0006	0.0006	109%	0	0	Not Evaluated		NA	6/10/2025	0.0005	No	0.005	No	0.005	0.005	NA	No	
POZ-7	1/25	96%	0.0005 - 0.004	0.0006	0.0005	0.0006	0.0006	109%	0	0	Not Evaluated		NA	6/10/2025	0.0005	No	0.005	No	0.005	0.005	NA	No	
CCR Appendix IV: Chromium, Total (mg/L)																							
CBW-1	1/25	96%	0.005 - 0.005	0.005	0.005	0.005	0.014	34%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.005	No	0.014	NA	0.1	0.1	NA	NA		
PM-1	0/24	100%	0.005 - 0.005	0.005	0.005	0.005	NA	0%	0	0	Not Evaluated		6/2/2025	0.005	No	0.014	NA	0.1	0.1	NA	NA		
POZ-3	0/18	100%	0.005 - 0.005	0.005	0.005	0.005	NA	0%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.014	No	0.1	0.1	NA	No	
POZ-4	0/25	100%	0.005 - 0.005	0.005	0.005	0.005	NA	0%	0	0	Not Evaluated		NA	6/9/2025	0.005	No	0.014	No	0.1	0.1	NA	No	
POZ-6	0/25	100%	0.005 - 0.005	0.005	0.005	0.005	NA	0%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.014	No	0.1	0.1	NA	No	
POZ-7	1/25	96%	0.005 - 0.005	0.005	0.005	0.005	0.0059	4%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.014	No	0.1	0.1	NA	No	
POZ-7	1/25	96%	0.005 - 0.005	0.005	0.005	0.005	0.0059	4%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.014	No	0.1	0.1	NA	No	
CCR Appendix IV: Cobalt, Total (mg/L)																							
CBW-1	25/26	4%	0.001 - 0.001	0.0010	0.0009	0.0013	0.0034	52%	0	0	Increasing	Non-Parametric	6/3/2025	0.0011	Yes	0.005	NA	0.006	0.006	NA	NA		
PM-1	25/26	4%	0.005 - 0.005	0.0013	0.0010	0.0018	0.00189	66%	0	0	No Trend		6/2/2025	0.0017	Yes	0.005	NA	0.006	0.006	NA	NA		
POZ-3	16/16	0%	NA	0.0015	0.0010	0.0028	0.003	54%	0	0	Stable		NA	6/10/2025	0.0023	Yes	0.005	No	0.006	0.006	NA	No	
POZ-4	28/28	0%	NA	0.0880	0.0714	0.1980	0.21	69%	27	0	No Trend		Non-Parametric	6/9/2025	0.122	Yes	0.005	Yes	0.006	0.006	0.0499	Yes	
POZ-6	25/25	0%	NA	0.0030	0.0031	0.0049	0.0082	52%	1	0	Stable		NA	6/10/2025	0.0017	Yes	0.005	No	0.006	0.006	NA	No	
POZ-7	18/25	28%	0.0005 - 0.0005	0.0010	0.0010	0.0023	0.0028	57%	0	0	Stable		NA	6/10/2025	0.0011	Yes	0.005	No	0.006	0.006	NA	No	
POZ-7	18/25	28%	0.0005 - 0.0005	0.0010	0.0010	0.0023	0.0028	57%	0	0	Stable		NA	6/10/2025	0.0011	Yes	0.005	No	0.006	0.006	NA	No	
CCR Appendix IV: Fluoride, Total (mg/L)																							
CBW-1	25/26	4%	0.1 - 0.1	0.200	0.195	0.287	0.3	27%	0	0	Stable	Non-Parametric	6/3/2025	0.11	Yes	0.3	NA	4	4	NA	NA		
PM-1	0/26	100%	0.1 - 0.1	0.100	0.100	0.100	NA	0%	0	0	Not Evaluated		6/2/2025	0.1	No	0.3	NA	4	4	NA	NA		
POZ-3	7/11	36%	0.1 - 0.1	0.12	0.10	0.18	0.21	29%	0	0	Stable		NA	6/10/2025	0.1	No	0.3	Yes	4	4	NA	No	
POZ-4	9/25	64%	0.1 - 0.1	0.111	0.100	0.168	0.17	20%	0	0	No Trend		NA	6/9/2025	0.1	No	0.3	Yes	4	4	NA	No	
POZ-6	5/25	80%	0.1 - 0.1	0.110	0.100	0.150	0.16	18%	0	0	Not Evaluated		NA	6/10/2025	0.1	No	0.3	Yes	4	4	NA	No	
POZ-7	7/25	72%	0.1 - 0.1	0.111	0.100	0.130	0.27	31%	0	0	Not Evaluated		NA	6/10/2025	0.1	No	0.3	Yes	4	4	NA	No	
POZ-7	7/25	72%	0.1 - 0.1	0.111	0.100	0.130	0.27	31%	0	0	Not Evaluated		NA	6/10/2025	0.1	No	0.3	Yes	4	4	NA	No	

TABLE 1
 JUNE 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^(a)	Assumed Data Distribution	Inter-well Analysis																			
													Sample Date	June 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^(b)	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>											
CCR Appendix IV: Lead, Total (mg/L)																																
CBW-1	25/26	4%	0.01 - 0.01	0.003	0.003	0.008	0.011	63%	0	0	Decreasing	Non-Parametric	6/3/2025	0.0024	Yes	0.011	NA	0.015	0.015	NA	NA											
PM-1	0/26	100%	0.001 - 0.01	0.002	0.001	0.008	NA	127%	0	0	Not Evaluated		6/2/2025	0.001	No	0.011	NA	0.015	0.015	NA	NA											
POZ-3	0/18	100%	0.001 - 0.01	0.002	0.001	0.004	NA	116%	0	0	Not Evaluated		NA	6/10/2025	0.001	No	0.011	No	0.015	0.015	NA	No										
POZ-4	0/25	100%	0.001 - 0.01	0.002	0.001	0.003	NA	111%	0	0	Not Evaluated		NA	6/9/2025	0.001	No	0.011	No	0.015	0.015	NA	No										
POZ-6	0/25	100%	0.001 - 0.01	0.002	0.001	0.003	NA	111%	0	0	Not Evaluated		NA	6/10/2025	0.001	No	0.011	No	0.015	0.015	NA	No										
POZ-7	0/25	100%	0.001 - 0.01	0.002	0.001	0.003	NA	111%	0	0	Not Evaluated		NA	6/10/2025	0.001	No	0.011	No	0.015	0.015	NA	No										
POZ-7	0/25	100%	0.001 - 0.01	0.002	0.001	0.003	NA	111%	0	0	Not Evaluated		NA	6/10/2025	0.001	No	0.011	No	0.015	0.015	NA	No										
CCR Appendix IV: Lithium, Total (mg/L)																																
CBW-1	1/26	96%	0.005 - 0.02	0.0085	0.0100	0.0100	0.00066	43%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.005	No	0.02	NA	0.04	0.04	NA	NA											
PM-1	4/26	85%	0.005 - 0.01	0.0083	0.0100	0.0100	0.00544	30%	0	0	Stable		6/2/2025	0.005	No	0.02	NA	0.04	0.04	NA	NA											
POZ-3	1/12	92%	0.005 - 0.05	0.0093	0.0050	0.0280	0.00607	139%	0	1	Not Evaluated		NA	6/10/2025	0.005	No	0.02	No	0.04	0.04	NA	No										
POZ-4	17/22	23%	0.01 - 0.01	0.0139	0.0122	0.0225	0.0246	32%	0	0	No Trend		NA	6/9/2025	0.0147	Yes	0.02	No	0.04	0.04	NA	No										
POZ-6	8/22	64%	0.01 - 0.01	0.0106	0.0100	0.0133	0.0201	22%	0	0	No Trend		NA	6/10/2025	0.00995	Yes	0.02	No	0.04	0.04	NA	No										
POZ-7	4/22	82%	0.005 - 0.01	0.0090	0.0100	0.0109	0.02	38%	0	0	Stable		NA	6/10/2025	0.005	No	0.02	No	0.04	0.04	NA	No										
POZ-7	4/22	82%	0.005 - 0.01	0.0090	0.0100	0.0109	0.02	38%	0	0	Stable		NA	6/10/2025	0.005	No	0.02	No	0.04	0.04	NA	No										
CCR Appendix IV: Mercury, Total (mg/L)																																
CBW-1	0/26	100%	0.0002 - 0.001	0.0002	0.0002	0.0004	NA	67%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.0002	No	0.001	NA	0.002	0.002	NA	NA											
PM-1	0/26	100%	0.0002 - 0.001	0.0002	0.0002	0.0005	NA	70%	0	0	Not Evaluated		6/2/2025	0.0002	No	0.001	NA	0.002	0.002	NA	NA											
POZ-3	0/11	100%	0.0002 - 0.0003	0.0002	0.0002	0.0003	NA	14%	0	0	Not Evaluated		NA	6/10/2025	0.0002	No	0.001	No	0.002	0.002	NA	No										
POZ-4	0/22	100%	0.0002 - 0.001	0.0002	0.0002	0.0004	NA	71%	0	0	Not Evaluated		NA	6/9/2025	0.0002	No	0.001	No	0.002	0.002	NA	No										
POZ-6	0/22	100%	0.0002 - 0.001	0.0002	0.0002	0.0002	NA	72%	0	0	Not Evaluated		NA	6/10/2025	0.0002	No	0.001	No	0.002	0.002	NA	No										
POZ-7	2/22	91%	0.0002 - 0.001	0.0002	0.0002	0.0004	0.000378	70%	0	0	Not Evaluated		NA	6/10/2025	0.0002	No	0.001	No	0.002	0.002	NA	No										
POZ-7	2/22	91%	0.0002 - 0.001	0.0002	0.0002	0.0004	0.000378	70%	0	0	Not Evaluated		NA	6/10/2025	0.0002	No	0.001	No	0.002	0.002	NA	No										
CCR Appendix IV: Molybdenum, Total (mg/L)																																
CBW-1	0/24	100%	0.005 - 0.02	0.009	0.010	0.010	NA	39%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.005	No	0.02	NA	0.1	0.1	NA	NA											
PM-1	0/24	100%	0.005 - 0.01	0.008	0.010	0.010	NA	29%	0	0	Not Evaluated		6/2/2025	0.005	No	0.02	NA	0.1	0.1	NA	NA											
POZ-3	0/12	100%	0.005 - 0.04	0.008	0.005	0.024	NA	121%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.02	No	0.1	0.1	NA	No										
POZ-4	0/22	100%	0.005 - 0.01	0.008	0.010	0.010	NA	30%	0	0	Not Evaluated		NA	6/9/2025	0.005	No	0.02	No	0.1	0.1	NA	No										
POZ-6	0/22	100%	0.005 - 0.01	0.008	0.010	0.010	NA	30%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.02	No	0.1	0.1	NA	No										
POZ-7	0/22	100%	0.005 - 0.01	0.008	0.010	0.010	NA	30%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.02	No	0.1	0.1	NA	No										
POZ-7	0/22	100%	0.005 - 0.01	0.008	0.010	0.010	NA	30%	0	0	Not Evaluated		NA	6/10/2025	0.005	No	0.02	No	0.1	0.1	NA	No										

TABLE 1
JUNE 2025 CORRECTIVE ACTION MONITORING DATA (CGS CLASS 2 LANDFILL)
 CROSS GENERATING STATION
 CLASS 2 LANDFILL

Location	Frequency of Detection	Percent of Non-Detect Results	Range of Reporting Limits	Mean	50th Percentile (Median)	95th Percentile	Maximum Detected Value	Coefficient of Variance	Number of Detected Results MCL/RSL Exceedances	Number of Non-Detect Results MCL/RSL Exceedances	Mann-Kendall Trend ^[a]	Assumed Data Distribution	Inter-well Analysis																			
													Sample Date	June 2025 Concentration	Detect (Y/N)	Inter-well Upper Tolerance Limit (UTL) ^[b]	Statistically Significant Increase (SSI) <i>Sample results that exceed the Interwell UTL</i>	CCR MCL/RSL	Groundwater Protection Standard (GWPS) <i>Max level between the UTL and MCL/RSL</i>	Lower Confidence Limit (LCL) <i>Only calculated for GWPS Exceedances</i>	Statistically Significant Level (SSL) <i>Result > GWPS and LCL > GWPS</i>											
CCR Appendix IV: Radium 226 & Radium 228, Total (pCi/L)																																
CBW-1	18/25	28%	4 - 4	3.00	2.82	5.27	6.34	55%	4	0	Stable	Non-Parametric	6/3/2025	0.991	Yes	16.3	NA	5	16.3	NA	NA											
PM-1	19/25	24%	4 - 4	3.51	3.44	6.59	16.3	88%	2	0	Stable		6/2/2025	1.22	Yes	16.3	NA	5	16.3	NA	NA											
POZ-3	10/10	0%	NA	1.60	1.51	2.78	3.04	53%	0	0	Stable	NA	6/10/2025	0.915	Yes	16.3	No	5	16.3	NA	No											
POZ-4	17/24	29%	4 - 4	3.13	3.77	4.93	6.29	48%	1	0	Stable	NA	6/9/2025	0.999	Yes	16.3	No	5	16.3	NA	No											
POZ-6	16/24	33%	4 - 4	2.7	2.2	4.5	4.78	56%	0	0	No Trend	NA	6/10/2025	1.73	Yes	16.3	No	5	16.3	NA	No											
POZ-7	21/24	13%	4 - 4	3.14	4.00	4.88	5.39	48%	1	0	Probably Decreasing	NA	6/10/2025	0.789	Yes	16.3	No	5	16.3	NA	No											
CCR Appendix IV: Selenium, Total (mg/L)																																
CBW-1	0/26	100%	0.0025 - 0.05	0.012	0.010	0.020	NA	69%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.01	No	0.05	NA	0.05	0.05	NA	NA											
PM-1	0/26	100%	0.0025 - 0.02	0.011	0.010	0.020	NA	36%	0	0	Not Evaluated		6/2/2025	0.01	No	0.05	NA	0.05	0.05	NA	NA											
POZ-3	0/18	100%	0.0025 - 0.02	0.010	0.010	0.016	NA	37%	0	0	Not Evaluated	NA	6/10/2025	0.01	No	0.05	No	0.05	0.05	NA	No											
POZ-4	0/25	100%	0.0025 - 0.02	0.011	0.010	0.020	NA	39%	0	0	Not Evaluated	NA	6/9/2025	0.01	No	0.05	No	0.05	0.05	NA	No											
POZ-6	0/25	100%	0.0025 - 0.02	0.011	0.010	0.020	NA	39%	0	0	Not Evaluated	NA	6/10/2025	0.01	No	0.05	No	0.05	0.05	NA	No											
POZ-7	0/25	100%	0.0025 - 0.02	0.011	0.010	0.020	NA	39%	0	0	Not Evaluated	NA	6/10/2025	0.01	No	0.05	No	0.05	0.05	NA	No											
CCR Appendix IV: Thallium, Total (mg/L)																																
CBW-1	0/24	100%	0.001 - 0.001	0.001	0.001	0.001	NA	0%	0	0	Not Evaluated	Non-Parametric	6/3/2025	0.001	No	0.01	NA	0.002	0.01	NA	NA											
PM-1	0/24	100%	0.001 - 0.01	0.001	0.001	0.001	NA	134%	0	1	Not Evaluated		6/2/2025	0.001	No	0.01	NA	0.002	0.01	NA	NA											
POZ-3	0/12	100%	0.001 - 0.001	0.001	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	6/10/2025	0.001	No	0.01	No	0.002	0.01	NA	No											
POZ-4	0/22	100%	0.001 - 0.001	0.001	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	6/9/2025	0.001	No	0.01	No	0.002	0.01	NA	No											
POZ-6	0/22	100%	0.001 - 0.001	0.001	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	6/10/2025	0.001	No	0.01	No	0.002	0.01	NA	No											
POZ-7	0/22	100%	0.001 - 0.001	0.001	0.001	0.001	NA	0%	0	0	Not Evaluated	NA	6/10/2025	0.001	No	0.01	No	0.002	0.01	NA	No											

NOTES:

[a] Mann-Kendall Trends calculated from the 8 most recent samples at a 95% confidence limits and trend classifications are determined based on guidance from the Monitoring and Remediation Optimization System (Aziz, 2003). Recent trend date ranges vary by well/constituent and are included in Attachment A, Table A-4. 'Probably increasing' and 'probably decreasing' trends indicate that while no statistically significant trend was identified at the indicated confidence level, data suggest emerging trends at a lower confidence level. Data sets that do not meet test requirements, such as having a detection rate of at least 25%, are labeled as 'Not Evaluated'.

[b] Interwell Tolerance Limits are calculated from data collected from pooled upgradient well data (CBW-1 and PM-1) through January 2025. No statistical outlier data points were removed from background datasets.

MCL/RSL: Maximum contaminant level/Regional screening level

mg/L: milligrams per liter, pCi/L: picocuries per liter

n: sample count

NA: not applicable

<: Constituent not detected above the method detection limit and the sample-specific reporting limit is show.

ATTACHMENT A
Statistical Output, June 2025

Table A-1. Descriptive Statistics

Location	Constituent	Units	n	n, non-detects	percent of non-detects	max	min	mean	median	standard deviation	coefficient of variation (%)	reporting limit range	date range
CBW-1 (Background)	Antimony	mg/L	24	22	92	0.025	0.005	0.00591	0.005	0.0041	68.9	0.005 - 0.025	2015-10-19 to 2025-06-03
PM-1 (Background)	Antimony	mg/L	24	22	92	0.025	0.005	0.0061	0.005	0.0042	68.2	0.005 - 0.025	2015-10-19 to 2025-06-02
POZ-3	Antimony	mg/L	12	12	100	0.05	0.005	0.00875	0.005	0.013	148	0.005 - 0.05	2022-06-27 to 2025-06-10
POZ-4	Antimony	mg/L	22	21	95	0.025	0.005	0.00595	0.005	0.0043	71.6	0.005 - 0.025	2015-10-22 to 2025-06-09
POZ-6	Antimony	mg/L	22	20	91	0.025	0.005	0.00604	0.005	0.0043	70.7	0.005 - 0.025	2015-10-22 to 2025-06-10
POZ-7	Antimony	mg/L	22	22	100	0.025	0.005	0.00591	0.005	0.0043	72.2	0.005 - 0.025	2015-10-22 to 2025-06-10
Pooled Background	Antimony	mg/L	48	44	92	0.025	0.005	0.006	0.005	0.0041	67.8	0.005 - 0.025	2015-10-19 to 2025-06-03
CBW-1 (Background)	Arsenic	mg/L	26	23	88	0.016	0.003	0.00527	0.005	0.0023	43.9	0.003 - 0.005	2015-10-19 to 2025-06-03
PM-1 (Background)	Arsenic	mg/L	26	23	88	0.01	0.003	0.00496	0.005	0.0012	23.7	0.003 - 0.01	2015-10-19 to 2025-06-02
POZ-3	Arsenic	mg/L	18	18	100	0.005	0.003	0.00456	0.005	0.00086	18.8	0.003 - 0.005	2018-02-08 to 2025-06-10
POZ-4	Arsenic	mg/L	25	24	96	0.005	0.003	0.0046	0.005	0.00081	17.6	0.003 - 0.005	2015-10-22 to 2025-06-09
POZ-6	Arsenic	mg/L	25	24	96	0.005	0.003	0.00464	0.005	0.00076	16.4	0.003 - 0.005	2015-10-22 to 2025-06-10
POZ-7	Arsenic	mg/L	25	25	100	0.005	0.003	0.0046	0.005	0.00082	17.7	0.003 - 0.005	2015-10-22 to 2025-06-10
Pooled Background	Arsenic	mg/L	52	46	88	0.016	0.003	0.00512	0.005	0.0018	35.7	0.003 - 0.01	2015-10-19 to 2025-06-03
CBW-1 (Background)	Barium	mg/L	26	0	0	0.061	0.033	0.0424	0.0424	0.005	11.8	NA	2015-10-19 to 2025-06-03
PM-1 (Background)	Barium	mg/L	26	0	0	0.103	0.0703	0.0819	0.0805	0.0076	9.24	NA	2015-10-19 to 2025-06-02
POZ-3	Barium	mg/L	18	0	0	0.166	0.0911	0.108	0.105	0.02	18.1	NA	2018-02-08 to 2025-06-10
POZ-4	Barium	mg/L	25	0	0	0.255	0.0691	0.113	0.0995	0.045	39.5	NA	2015-10-22 to 2025-06-09
POZ-6	Barium	mg/L	25	0	0	0.1	0.0395	0.0599	0.0539	0.017	28.4	NA	2015-10-22 to 2025-06-10
POZ-7	Barium	mg/L	25	0	0	0.389	0.0924	0.209	0.22	0.081	38.9	NA	2015-10-22 to 2025-06-10
Pooled Background	Barium	mg/L	52	0	0	0.103	0.033	0.0622	0.0656	0.021	33.7	NA	2015-10-19 to 2025-06-03
CBW-1 (Background)	Beryllium	mg/L	25	24	96	0.00063	0.0005	0.000505	0.0005	2.6e-05	5.15	0.0005 - 0.0005	2015-10-19 to 2025-06-03
PM-1 (Background)	Beryllium	mg/L	26	26	100	0.005	0.0005	0.000673	0.0005	0.00088	131	0.0005 - 0.005	2015-10-19 to 2025-06-02
POZ-3	Beryllium	mg/L	12	12	100	0.0005	0.0005	0.0005	0.0005	0	0	0.0005 - 0.0005	2022-06-27 to 2025-06-10
POZ-4	Beryllium	mg/L	24	13	54	0.00139	0.0005	0.00062	0.0005	0.00024	38.1	0.0005 - 0.0005	2015-10-22 to 2025-06-09
POZ-6	Beryllium	mg/L	24	24	100	0.0005	0.0005	0.0005	0.0005	0	0	0.0005 - 0.0005	2015-10-22 to 2025-06-10
POZ-7	Beryllium	mg/L	24	11	46	0.000935	0.0005	0.000618	0.000515	0.00015	24	0.0005 - 0.0005	2015-10-22 to 2025-06-10
Pooled Background	Beryllium	mg/L	51	50	98	0.005	0.0005	0.000591	0.0005	0.00063	107	0.0005 - 0.005	2015-10-19 to 2025-06-03
CBW-1 (Background)	Cadmium	mg/L	25	25	100	0.004	0.0005	0.00064	0.0005	0.0007	109	0.0005 - 0.004	2015-10-19 to 2025-06-03
PM-1 (Background)	Cadmium	mg/L	25	25	100	0.005	0.0005	0.00082	0.0005	0.0011	136	0.0005 - 0.005	2015-10-19 to 2025-06-02
POZ-3	Cadmium	mg/L	18	18	100	0.004	0.0005	0.000694	0.0005	0.00082	119	0.0005 - 0.004	2018-02-08 to 2025-06-10
POZ-4	Cadmium	mg/L	25	23	92	0.004	0.0005	0.000656	0.0005	0.0007	107	0.0005 - 0.004	2015-10-22 to 2025-06-09
POZ-6	Cadmium	mg/L	25	25	100	0.004	0.0005	0.00064	0.0005	0.0007	109	0.0005 - 0.004	2015-10-22 to 2025-06-10
POZ-7	Cadmium	mg/L	25	24	96	0.004	0.0005	0.000644	0.0005	0.0007	109	0.0005 - 0.004	2015-10-22 to 2025-06-10
Pooled Background	Cadmium	mg/L	50	50	100	0.005	0.0005	0.00073	0.0005	0.00093	127	0.0005 - 0.005	2015-10-19 to 2025-06-03
CBW-1 (Background)	Chromium	mg/L	25	24	96	0.014	0.005	0.00536	0.005	0.0018	33.6	0.005 - 0.005	2015-10-19 to 2025-06-03
PM-1 (Background)	Chromium	mg/L	24	24	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2015-10-19 to 2025-06-02
POZ-3	Chromium	mg/L	18	18	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2018-02-08 to 2025-06-10
POZ-4	Chromium	mg/L	25	25	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2015-10-22 to 2025-06-09
POZ-6	Chromium	mg/L	25	25	100	0.005	0.005	0.005	0.005	0	0	0.005 - 0.005	2015-10-22 to 2025-06-10
POZ-7	Chromium	mg/L	25	24	96	0.0059	0.005	0.00504	0.005	0.00018	3.57	0.005 - 0.005	2015-10-22 to 2025-06-10
Pooled Background	Chromium	mg/L	49	48	98	0.014	0.005	0.00518	0.005	0.0013	24.8	0.005 - 0.005	2015-10-19 to 2025-06-03
CBW-1 (Background)	Cobalt	mg/L	26	1	4	0.0034	0.00063	0.000996	0.00085	0.00052	52.1	0.001 - 0.001	2015-10-19 to 2025-06-03
PM-1 (Background)	Cobalt	mg/L	26	1	4	0.005	0.00079	0.00125	0.001	0.00082	65.9	0.005 - 0.005	2015-10-19 to 2025-06-02
POZ-3	Cobalt	mg/L	16	0	0	0.003	0.00066	0.00147	0.001	0.0008	54	NA	2020-02-26 to 2025-06-10
POZ-4	Cobalt	mg/L	28	0	0	0.21	0.0036	0.088	0.0714	0.061	68.8	NA	2015-10-22 to 2025-06-09
POZ-6	Cobalt	mg/L	25	0	0	0.0082	0.00074	0.003	0.0031	0.0016	51.9	NA	2015-10-22 to 2025-06-10
POZ-7	Cobalt	mg/L	25	7	28	0.0028	0.0005	0.00104	0.00096	0.00059	56.5	0.0005 - 0.0005	2015-10-22 to 2025-06-10
Pooled Background	Cobalt	mg/L	52	2	4	0.005	0.00063	0.00112	0.000935	0.00069	61.8	0.001 - 0.005	2015-10-19 to 2025-06-03
CBW-1 (Background)	Fluoride	mg/L	26	1	4	0.3	0.1	0.2	0.195	0.055	27.3	0.1 - 0.1	2015-10-19 to 2025-06-03
PM-1 (Background)	Fluoride	mg/L	26	26	100	0.1	0.1	0.1	0.1	0	0	0.1 - 0.1	2015-10-19 to 2025-06-02
POZ-3	Fluoride	mg/L	11	4	36	0.21	0.1	0.121	0.1	0.034	28.5	0.1 - 0.1	2022-11-01 to 2025-06-10
POZ-4	Fluoride	mg/L	25	16	64	0.17	0.1	0.111	0.1	0.023	20.3	0.1 - 0.1	2015-10-22 to 2025-06-09
POZ-6	Fluoride	mg/L	25	20	80	0.16	0.1	0.11	0.1	0.02	18.3	0.1 - 0.1	2015-10-22 to 2025-06-10
POZ-7	Fluoride	mg/L	25	18	72	0.27	0.1	0.111	0.1	0.035	31.1	0.1 - 0.1	2015-10-22 to 2025-06-10
Pooled Background	Fluoride	mg/L	52	27	52	0.3	0.1	0.15	0.1	0.063	42.2	0.1 - 0.1	2015-10-19 to 2025-06-03

Notes: Data collected through the current reporting period are summarized in this table. Data sets used to calculate background limits are summarized in Table A-5 and may not include all data summarized here because background limits are only updated periodically.

Location	Constituent	Units	n	n, non-detects	percent of non-detects	max	min	mean	median	standard deviation	coefficient of variation (%)	reporting limit range	date range
CBW-1 (Background)	Lead	mg/L	26	1	4	0.011	0.002	0.0034	0.00275	0.0021	62.9	0.01 - 0.01	2015-10-19 to 2025-06-03
PM-1 (Background)	Lead	mg/L	26	26	100	0.01	0.001	0.00192	0.001	0.0024	127	0.001 - 0.01	2015-10-19 to 2025-06-02
POZ-3	Lead	mg/L	18	18	100	0.01	0.001	0.00183	0.001	0.0021	116	0.001 - 0.01	2018-02-08 to 2025-06-10
POZ-4	Lead	mg/L	25	25	100	0.01	0.001	0.00166	0.001	0.0018	111	0.001 - 0.01	2015-10-22 to 2025-06-09
POZ-6	Lead	mg/L	25	25	100	0.01	0.001	0.00166	0.001	0.0018	111	0.001 - 0.01	2015-10-22 to 2025-06-10
POZ-7	Lead	mg/L	25	25	100	0.01	0.001	0.00166	0.001	0.0018	111	0.001 - 0.01	2015-10-22 to 2025-06-10
Pooled Background	Lead	mg/L	52	27	52	0.011	0.001	0.00266	0.0025	0.0024	89.9	0.001 - 0.01	2015-10-19 to 2025-06-03
CBW-1 (Background)	Lithium	mg/L	26	25	96	0.02	0.00066	0.00849	0.01	0.0036	42.7	0.005 - 0.02	2015-10-19 to 2025-06-03
PM-1 (Background)	Lithium	mg/L	26	22	85	0.01	0.0037	0.00825	0.01	0.0025	30	0.005 - 0.01	2015-10-19 to 2025-06-02
POZ-3	Lithium	mg/L	12	11	92	0.05	0.005	0.00926	0.005	0.013	139	0.005 - 0.05	2022-06-27 to 2025-06-10
POZ-4	Lithium	mg/L	22	5	23	0.0246	0.01	0.0139	0.0122	0.0045	32.1	0.01 - 0.01	2015-10-22 to 2025-06-09
POZ-6	Lithium	mg/L	22	14	64	0.0201	0.00858	0.0106	0.01	0.0023	21.7	0.01 - 0.01	2015-10-22 to 2025-06-10
POZ-7	Lithium	mg/L	22	18	82	0.02	0.0037	0.009	0.01	0.0034	38.1	0.005 - 0.01	2015-10-22 to 2025-06-10
Pooled Background	Lithium	mg/L	52	47	90	0.02	0.00066	0.00837	0.01	0.0031	36.7	0.005 - 0.02	2015-10-19 to 2025-06-03
CBW-1 (Background)	Mercury	mg/L	25	25	100	0.001	0.0002	0.00024	0.0002	0.00016	68	0.0002 - 0.001	2015-10-19 to 2025-06-03
CBW-1 (Background)	Mercury	mg/L	1	1	100	0.0002	0.0002	0.0002	0.0002	NA	NA	0.0002 - 0.0002	2018-11-29 to 2018-11-29
PM-1 (Background)	Mercury	mg/L	25	25	100	0.001	0.0002	0.000248	0.0002	0.00018	70.9	0.0002 - 0.001	2015-10-19 to 2025-06-02
PM-1 (Background)	Mercury	mg/L	1	1	100	0.0002	0.0002	0.0002	0.0002	NA	NA	0.0002 - 0.0002	2018-11-29 to 2018-11-29
POZ-3	Mercury	mg/L	11	11	100	0.0003	0.0002	0.000209	0.0002	3e-05	14.4	0.0002 - 0.0003	2022-11-01 to 2025-06-10
POZ-4	Mercury	mg/L	22	22	100	0.001	0.0002	0.000245	0.0002	0.00017	70.8	0.0002 - 0.001	2015-10-22 to 2025-06-09
POZ-6	Mercury	mg/L	22	22	100	0.001	0.0002	0.000236	0.0002	0.00017	72.2	0.0002 - 0.001	2015-10-22 to 2025-06-10
POZ-7	Mercury	mg/L	22	20	91	0.001	0.0002	0.000247	0.0002	0.00017	70	0.0002 - 0.001	2015-10-22 to 2025-06-10
Pooled Background	Mercury	mg/L	50	50	100	0.001	0.0002	0.000244	0.0002	0.00017	68.9	0.0002 - 0.001	2015-10-19 to 2025-06-03
CBW-1 (Background)	Molybdenum	mg/L	24	24	100	0.02	0.005	0.00875	0.01	0.0034	38.6	0.005 - 0.02	2015-10-19 to 2025-06-03
PM-1 (Background)	Molybdenum	mg/L	24	24	100	0.01	0.005	0.00833	0.01	0.0024	28.9	0.005 - 0.01	2015-10-19 to 2025-06-02
POZ-3	Molybdenum	mg/L	12	12	100	0.04	0.005	0.00833	0.005	0.01	121	0.005 - 0.04	2022-06-27 to 2025-06-10
POZ-4	Molybdenum	mg/L	22	22	100	0.01	0.005	0.00818	0.01	0.0025	30.1	0.005 - 0.01	2015-10-22 to 2025-06-09
POZ-6	Molybdenum	mg/L	22	22	100	0.01	0.005	0.00818	0.01	0.0025	30.1	0.005 - 0.01	2015-10-22 to 2025-06-10
POZ-7	Molybdenum	mg/L	22	22	100	0.01	0.005	0.00818	0.01	0.0025	30.1	0.005 - 0.01	2015-10-22 to 2025-06-10
Pooled Background	Molybdenum	mg/L	48	48	100	0.02	0.005	0.00854	0.01	0.0029	34.1	0.005 - 0.02	2015-10-19 to 2025-06-03
CBW-1 (Background)	Radium-226 & 228	pCi/L	25	7	28	6.34	0.346	3	2.82	1.7	55.4	4 - 4	2015-10-19 to 2025-06-03
PM-1 (Background)	Radium-226 & 228	pCi/L	25	6	24	16.3	0.538	3.51	3.44	3.1	88.1	4 - 4	2015-10-19 to 2025-06-02
POZ-3	Radium-226 & 228	pCi/L	10	0	0	3.04	0.205	1.6	1.51	0.85	53.1	NA	2022-11-01 to 2025-06-10
POZ-4	Radium-226 & 228	pCi/L	24	7	29	6.29	0.244	3.13	3.77	1.5	47.8	4 - 4	2015-10-22 to 2025-06-09
POZ-6	Radium-226 & 228	pCi/L	24	8	33	4.78	0.447	2.65	2.21	1.5	55.5	4 - 4	2015-10-22 to 2025-06-10
POZ-7	Radium-226 & 228	pCi/L	24	3	12	5.39	0.789	3.14	4	1.5	48.1	4 - 4	2015-10-22 to 2025-06-10
Pooled Background	Radium-226 & 228	pCi/L	50	13	26	16.3	0.346	3.26	3.17	2.5	75.9	4 - 4	2015-10-19 to 2025-06-03
CBW-1 (Background)	Selenium	mg/L	26	26	100	0.05	0.0025	0.0122	0.01	0.0084	68.5	0.0025 - 0.05	2015-10-19 to 2025-06-03
PM-1 (Background)	Selenium	mg/L	26	26	100	0.02	0.0025	0.0107	0.01	0.0038	36	0.0025 - 0.02	2015-10-19 to 2025-06-02
POZ-3	Selenium	mg/L	18	18	100	0.02	0.0025	0.00986	0.01	0.0037	37.4	0.0025 - 0.02	2018-02-08 to 2025-06-10
POZ-4	Selenium	mg/L	25	25	100	0.02	0.0025	0.0105	0.01	0.0041	38.9	0.0025 - 0.02	2015-10-22 to 2025-06-09
POZ-6	Selenium	mg/L	25	25	100	0.02	0.0025	0.0105	0.01	0.0041	38.9	0.0025 - 0.02	2015-10-22 to 2025-06-10
POZ-7	Selenium	mg/L	25	25	100	0.02	0.0025	0.0105	0.01	0.0041	38.9	0.0025 - 0.02	2015-10-22 to 2025-06-10
Pooled Background	Selenium	mg/L	52	52	100	0.05	0.0025	0.0115	0.01	0.0065	56.8	0.0025 - 0.05	2015-10-19 to 2025-06-03
CBW-1 (Background)	Thallium	mg/L	24	24	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-19 to 2025-06-03
PM-1 (Background)	Thallium	mg/L	24	24	100	0.01	0.001	0.00137	0.001	0.0018	134	0.001 - 0.01	2015-10-19 to 2025-06-02
POZ-3	Thallium	mg/L	12	12	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2022-06-27 to 2025-06-10
POZ-4	Thallium	mg/L	22	22	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-22 to 2025-06-09
POZ-6	Thallium	mg/L	22	22	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-22 to 2025-06-10
POZ-7	Thallium	mg/L	22	22	100	0.001	0.001	0.001	0.001	0	0	0.001 - 0.001	2015-10-22 to 2025-06-10
Pooled Background	Thallium	mg/L	48	48	100	0.01	0.001	0.00119	0.001	0.0013	109	0.001 - 0.01	2015-10-19 to 2025-06-03

Notes: Data collected through the current reporting period are summarized in this table. Data sets used to calculate background limits are summarized in Table A-5 and may not include all data summarized here because background limits are only updated periodically.

Table A-2. Results of Shapiro-Wilk Test for Normality

Shapiro-Wilk Test for Normality (R programming, package = stats, version 4.3.3, function = shapiro.test, non-detects substituted by 0.5*reporting limit)

Location	Constituent	W statistic	p-value	Sample Count (n)	Non-Detect Count (n)	Data Normality (significance level = 0.05)
CBW-1 (Background)	Antimony	0.370	3.8e-09	24	22	Not normal
PM-1 (Background)	Antimony	0.416	9.4e-09	24	22	Not normal
POZ-3	Antimony	NA	NA	12	12	Not Evaluated - All Non-Detect Results
POZ-4	Antimony	0.310	3.3e-09	22	21	Not normal
POZ-6	Antimony	0.402	1.8e-08	22	20	Not normal
POZ-7	Antimony	NA	NA	22	22	Not Evaluated - All Non-Detect Results
Pooled Background	Antimony	0.388	7.2e-13	48	44	Not normal
CBW-1 (Background)	Arsenic	0.399	2.8e-09	26	23	Not normal
PM-1 (Background)	Arsenic	0.568	1.3e-07	26	23	Not normal
POZ-3	Arsenic	NA	NA	18	18	Not Evaluated - All Non-Detect Results
POZ-4	Arsenic	0.568	1.9e-07	25	24	Not normal
POZ-6	Arsenic	0.596	3.8e-07	25	24	Not normal
POZ-7	Arsenic	NA	NA	25	25	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Barium	0.822	0.00044	26	0	Not normal
PM-1 (Background)	Barium	0.895	0.012	26	0	Not normal
POZ-3	Barium	0.759	0.00042	18	0	Not normal
POZ-4	Barium	0.843	0.0013	25	0	Not normal
POZ-6	Barium	0.887	0.0096	25	0	Not normal
POZ-7	Barium	0.933	0.1	25	0	Normal
CBW-1 (Background)	Beryllium	0.203	1.2e-10	25	24	Not normal
PM-1 (Background)	Beryllium	NA	NA	26	26	Not Evaluated - All Non-Detect Results
POZ-3	Beryllium	NA	NA	12	12	Not Evaluated - All Non-Detect Results
POZ-4	Beryllium	0.758	6.6e-05	24	13	Not normal
POZ-6	Beryllium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-7	Beryllium	0.816	0.00054	24	11	Not normal
CBW-1 (Background)	Cadmium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Cadmium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-3	Cadmium	NA	NA	18	18	Not Evaluated - All Non-Detect Results
POZ-4	Cadmium	0.334	1.2e-09	25	23	Not normal
POZ-6	Cadmium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-7	Cadmium	0.259	3.1e-10	25	24	Not normal
CBW-1 (Background)	Chromium	0.203	1.2e-10	25	24	Not normal
PM-1 (Background)	Chromium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-3	Chromium	NA	NA	18	18	Not Evaluated - All Non-Detect Results
POZ-4	Chromium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-6	Chromium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-7	Chromium	0.203	1.2e-10	25	24	Not normal
CBW-1 (Background)	Cobalt	0.523	4.3e-08	26	1	Not normal
PM-1 (Background)	Cobalt	0.749	2.7e-05	26	1	Not normal
POZ-3	Cobalt	0.815	0.0044	16	0	Not normal
POZ-4	Cobalt	0.926	0.048	28	0	Not normal
POZ-6	Cobalt	0.879	0.0065	25	0	Not normal
POZ-7	Cobalt	0.873	0.0049	25	7	Not normal
CBW-1 (Background)	Fluoride	0.977	0.8	26	1	Normal
PM-1 (Background)	Fluoride	NA	NA	26	26	Not Evaluated - All Non-Detect Results
POZ-3	Fluoride	0.889	0.13	11	4	Normal
POZ-4	Fluoride	0.697	6.7e-06	25	16	Not normal
POZ-6	Fluoride	0.513	5e-08	25	20	Not normal
POZ-7	Fluoride	0.561	1.6e-07	25	18	Not normal
CBW-1 (Background)	Lead	0.484	1.7e-08	26	1	Not normal
PM-1 (Background)	Lead	NA	NA	26	26	Not Evaluated - All Non-Detect Results
POZ-3	Lead	NA	NA	18	18	Not Evaluated - All Non-Detect Results
POZ-4	Lead	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-6	Lead	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-7	Lead	NA	NA	25	25	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Lithium	0.746	2.4e-05	26	25	Not normal
PM-1 (Background)	Lithium	0.596	2.7e-07	26	22	Not normal
POZ-3	Lithium	0.434	6e-06	12	11	Not normal
POZ-4	Lithium	0.919	0.073	22	5	Normal
POZ-6	Lithium	0.683	1.2e-05	22	14	Not normal
POZ-7	Lithium	0.597	1.2e-06	22	18	Not normal
CBW-1 (Background)	Mercury	NA	NA	26	26	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Mercury	NA	NA	26	26	Not Evaluated - All Non-Detect Results
POZ-3	Mercury	NA	NA	11	11	Not Evaluated - All Non-Detect Results
POZ-4	Mercury	NA	NA	22	22	Not Evaluated - All Non-Detect Results
POZ-6	Mercury	NA	NA	22	22	Not Evaluated - All Non-Detect Results
POZ-7	Mercury	0.422	2.6e-08	22	20	Not normal
CBW-1 (Background)	Molybdenum	NA	NA	24	24	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Molybdenum	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-3	Molybdenum	NA	NA	12	12	Not Evaluated - All Non-Detect Results
POZ-4	Molybdenum	NA	NA	22	22	Not Evaluated - All Non-Detect Results
POZ-6	Molybdenum	NA	NA	22	22	Not Evaluated - All Non-Detect Results
POZ-7	Molybdenum	NA	NA	22	22	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Radium-226 & 228	0.838	0.001	25	7	Not normal
PM-1 (Background)	Radium-226 & 228	0.608	5.3e-07	25	6	Not normal
POZ-3	Radium-226 & 228	0.978	0.95	10	0	Normal
POZ-4	Radium-226 & 228	0.884	0.0099	24	7	Not normal
POZ-6	Radium-226 & 228	0.820	0.00063	24	8	Not normal
POZ-7	Radium-226 & 228	0.887	0.012	24	3	Not normal

Notes: Results for data sets used to calculate background limits are summarized in Table A-5 and selected distributions for testing may differ from distributions shown in this table. Final distributions for background limits calculation and LCL calculations are determined based on both goodness-of-fit test results, and based on visual review of probability, time series, and box plots.

Shapiro-Wilk Test for Normality (R programming, package = stats, version 4.3.3, function = shapiro.test, non-detects substituted by 0.5*reporting limit)

Location	Constituent	W statistic	p-value	Sample Count (n)	Non-Detect Count (n)	Data Normality (significance level = 0.05)
CBW-1 (Background)	Selenium	NA	NA	26	26	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Selenium	NA	NA	26	26	Not Evaluated - All Non-Detect Results
POZ-3	Selenium	NA	NA	18	18	Not Evaluated - All Non-Detect Results
POZ-4	Selenium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-6	Selenium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
POZ-7	Selenium	NA	NA	25	25	Not Evaluated - All Non-Detect Results
CBW-1 (Background)	Thallium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
PM-1 (Background)	Thallium	NA	NA	24	24	Not Evaluated - All Non-Detect Results
POZ-3	Thallium	NA	NA	12	12	Not Evaluated - All Non-Detect Results
POZ-4	Thallium	NA	NA	22	22	Not Evaluated - All Non-Detect Results
POZ-6	Thallium	NA	NA	22	22	Not Evaluated - All Non-Detect Results
POZ-7	Thallium	NA	NA	22	22	Not Evaluated - All Non-Detect Results

Notes: Results for data sets used to calculate background limits are summarized in Table A-5 and selected distributions for testing may differ from distributions shown in this table. Final distributions for background limits calculation and LCL calculations are determined based on both goodness-of-fit test results, and based on visual review of probability, time series, and box plots.

Table A-3. Results of Rosner/Dixon Test for Outliers

Rosner or Dixon Test for Outliers (R programming, package = outliers, version 0.15, function = dixon.test or rosnerTest, non-detects substituted by reporting limit)										
Location	Constituent	n	n, non-detects	Outlier Test	statistic	p-value (Dixon)	critical value (Rosner)	n of statistical outliers (significance level = 0.05, Rosner)	statistical outlier (significance level = 0.05, Dixon)	outlier removed
CBW-1	Antimony	24	22	Dixon	0.955	0	NA	NA	Yes	No
PM-1	Antimony	24	22	Dixon	0.965	0	NA	NA	Yes	No
POZ-3	Antimony	12	12	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Antimony	22	21	Dixon	1	0	NA	NA	Yes	No
POZ-6	Antimony	22	20	Dixon	0.985	0	NA	NA	Yes	No
POZ-7	Antimony	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
Pooled Background	Antimony	48	44	Rosner	4.665, 6.492, 6.319	NA	3.112, 3.103, 3.094	3	NA	No
CBW-1	Arsenic	26	23	Rosner	4.632, 2.397, 2.574	NA	2.841, 2.822, 2.802	1	NA	No
PM-1	Arsenic	26	23	Rosner	4.278, 2.997, 3.231	NA	2.841, 2.822, 2.802	3	NA	No
POZ-3	Arsenic	18	18	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Arsenic	25	24	Dixon	0	0	NA	NA	Yes	No
POZ-6	Arsenic	25	24	Dixon	0	0	NA	NA	Yes	No
POZ-7	Arsenic	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
Pooled Background	Arsenic	52	46	Rosner	5.96, 5.134, 2.784	NA	3.144, 3.136, 3.128	2	NA	No
CBW-1	Barium	26	0	Rosner	3.716, 2.608, 1.842	NA	2.841, 2.822, 2.802	1	NA	No
PM-1	Barium	26	0	Rosner	2.782, 2.972, 1.961	NA	2.841, 2.822, 2.802	2	NA	No
POZ-3	Barium	18	0	Dixon	0.6164	0.0002006	NA	NA	Yes	No
POZ-4	Barium	25	0	Dixon	0.5145	0.0104	NA	NA	Yes	No
POZ-6	Barium	25	0	Dixon	0.2938	0.4446	NA	NA	No	No
POZ-7	Barium	25	0	Dixon	0.2926	0.4499	NA	NA	No	No
Pooled Background	Barium	52	0	Rosner	1.95, 1.9, 1.397	NA	3.144, 3.136, 3.128	0	NA	No
CBW-1	Beryllium	25	24	Dixon	1	0	NA	NA	Yes	No
PM-1	Beryllium	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Beryllium	12	12	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Beryllium	24	13	Dixon	0.4382	0.06447	NA	NA	No	No
POZ-6	Beryllium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Beryllium	24	11	Dixon	0.2414	0.7448	NA	NA	No	No
Pooled Background	Beryllium	51	50	Rosner	6.998, 6.93, NA	NA	3.136, 3.128, 3.12	2	NA	No
CBW-1	Cadmium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
PM-1	Cadmium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Cadmium	18	18	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Cadmium	25	23	Dixon	0.9714	0	NA	NA	Yes	No
POZ-6	Cadmium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Cadmium	25	24	Dixon	1	0	NA	NA	Yes	No
Pooled Background	Cadmium	50	50	Rosner	All results are non-detect	NA	NA	NA	NA	No
CBW-1	Chromium	25	24	Dixon	1	0	NA	NA	Yes	No
PM-1	Chromium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Chromium	18	18	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Chromium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-6	Chromium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Chromium	25	24	Dixon	1	0	NA	NA	Yes	No
Pooled Background	Chromium	49	48	Rosner	6.857, NA, NA	NA	3.12, 3.112, 3.103	1	NA	No
CBW-1	Cobalt	26	1	Rosner	4.631, 2.304, 1.78	NA	2.841, 2.822, 2.802	1	NA	No
PM-1	Cobalt	26	1	Rosner	4.563, 2.583, 2.405	NA	2.841, 2.822, 2.802	1	NA	No
POZ-3	Cobalt	16	0	Dixon	0.2342	0.859	NA	NA	No	No
POZ-4	Cobalt	28	0	Rosner	2.015, 2.02, 2.23	NA	2.876, 2.859, 2.841	0	NA	No
POZ-6	Cobalt	25	0	Dixon	0.5132	0.01077	NA	NA	Yes	No
POZ-7	Cobalt	25	7	Dixon	0.4348	0.06019	NA	NA	No	No
Pooled Background	Cobalt	52	2	Rosner	5.599, 5.51, 3.347	NA	3.144, 3.136, 3.128	3	NA	No
CBW-1	Fluoride	26	1	Rosner	1.835, 1.853, 1.853	NA	2.841, 2.822, 2.802	0	NA	No
PM-1	Fluoride	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Fluoride	11	4	Dixon	0.6364	0.04117	NA	NA	Yes	No
POZ-4	Fluoride	25	16	Dixon	0.1429	0.632	NA	NA	No	No
POZ-6	Fluoride	25	20	Dixon	0.1667	0.7909	NA	NA	No	No
POZ-7	Fluoride	25	18	Dixon	0.8235	0	NA	NA	Yes	No
Pooled Background	Fluoride	52	27	Rosner	2.374, 2.378, 2.378	NA	3.144, 3.136, 3.128	0	NA	No
CBW-1	Lead	26	1	Rosner	3.56, 4.608, 2.208	NA	2.841, 2.822, 2.802	2	NA	No
PM-1	Lead	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Lead	18	18	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Lead	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-6	Lead	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Lead	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
Pooled Background	Lead	52	27	Rosner	3.491, 3.576, 4.2	NA	3.144, 3.136, 3.128	3	NA	No
CBW-1	Lithium	26	25	Rosner	3.18, 2.619, 1.384	NA	2.841, 2.822, 2.802	1	NA	No
PM-1	Lithium	26	22	Rosner	1.841, 1.467, 1.572	NA	2.841, 2.822, 2.802	0	NA	No
POZ-3	Lithium	12	11	Dixon	0.9762	0	NA	NA	Yes	No
POZ-4	Lithium	22	5	Dixon	0.2466	0.7905	NA	NA	No	No
POZ-6	Lithium	22	14	Dixon	0.7766	0	NA	NA	Yes	No
POZ-7	Lithium	22	18	Dixon	0.6667	0	NA	NA	Yes	No
Pooled Background	Lithium	52	47	Rosner	3.787, 2.855, 1.899	NA	3.144, 3.136, 3.128	1	NA	No
CBW-1	Mercury	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
PM-1	Mercury	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Mercury	11	11	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Mercury	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-6	Mercury	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Mercury	22	20	Dixon	0.9375	0	NA	NA	Yes	No
Pooled Background	Mercury	50	50	Rosner	All results are non-detect	NA	NA	NA	NA	No
CBW-1	Molybdenum	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	No
PM-1	Molybdenum	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Molybdenum	12	12	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Molybdenum	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No

Rosner or Dixon Test for Outliers (R programming, package = outliers, version 0.15, function = dixon.test or rosnerTest, non-detects substituted by reporting limit)

Location	Constituent	n	n, non-detects	Outlier Test	statistic	p-value (Dixon)	critical value (Rosner)	n of statistical outliers (significance level = 0.05, Rosner)	statistical outlier (significance level = 0.05, Dixon)	outlier removed
POZ-6	Molybdenum	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Molybdenum	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
Pooled Background	Molybdenum	48	48	Rosner	All results are non-detect	NA	NA	NA	NA	No
CBW-1	Radium-226 & 228	25	7	Dixon	0.2299	0.7821	NA	NA	No	No
PM-1	Radium-226 & 228	25	6	Dixon	0.7504	0	NA	NA	Yes	No
POZ-3	Radium-226 & 228	10	0	Dixon	0.2721	0.5737	NA	NA	No	No
POZ-4	Radium-226 & 228	24	7	Dixon	0.2933	0.4747	NA	NA	No	No
POZ-6	Radium-226 & 228	24	8	Dixon	0.1454	0.6226	NA	NA	No	No
POZ-7	Radium-226 & 228	24	3	Dixon	0.07351	0.1978	NA	NA	No	No
Pooled Background	Radium-226 & 228	50	13	Rosner	5.278, 2.534, 2.261	NA	3.128, 3.12, 3.112	1	NA	No
CBW-1	Selenium	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
PM-1	Selenium	26	26	Rosner	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Selenium	18	18	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Selenium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-6	Selenium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Selenium	25	25	Dixon	All results are non-detect	NA	NA	NA	NA	No
Pooled Background	Selenium	52	52	Rosner	All results are non-detect	NA	NA	NA	NA	No
CBW-1	Thallium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	No
PM-1	Thallium	24	24	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-3	Thallium	12	12	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-4	Thallium	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-6	Thallium	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
POZ-7	Thallium	22	22	Dixon	All results are non-detect	NA	NA	NA	NA	No
Pooled Background	Thallium	48	48	Rosner	All results are non-detect	NA	NA	NA	NA	No

Table A-4. Results of Mann Kendall Test

Location	Constituent	Secular Trend Evaluation for All Data									Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)							
		Mann Kendall Trends		Mann-Kendall Test							Mann-Kendall Test							
		Trends, All Data	Trends, Recent Data	n	n, detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n, detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)
CBW-1 (Background)	Antimony	Not Evaluated - Majority of data (>75%) non-detect.	Increasing	24	2	0.688	NA	NA	NA	NA	8	2	2020-06-22 to 2025-06-03	0.475	0.681	0.0485	95.2	13
PM-1 (Background)	Antimony	Not Evaluated - Majority of data (>75%) non-detect.	Increasing	24	2	0.67	NA	NA	NA	NA	8	2	2020-06-22 to 2025-06-02	0.444	0.681	0.0485	95.2	13
POZ-3	Antimony	Not Evaluated - No detected results.	Not Evaluated - No detected results.	12	0	1.48	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Antimony	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	22	1	0.713	NA	NA	NA	NA	8	1	2019-02-13 to 2025-06-09	0.401	NA	NA	NA	NA
POZ-6	Antimony	Not Evaluated - Majority of data (>75%) non-detect.	Increasing	22	2	0.718	NA	NA	NA	NA	8	2	2019-02-14 to 2025-06-10	0.546	0.681	0.0485	95.2	13
POZ-7	Antimony	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0.722	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0	NA	NA	NA	NA
Pooled Background	Antimony	Not Evaluated - Majority of data (>75%) non-detect.	Increasing	48	4	0.672	NA	NA	NA	NA	8	4	2023-01-24 to 2025-06-03	0.426	0.725	0.0239	97.6	18
CBW-1 (Background)	Arsenic	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	26	3	0.889	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0.206	NA	NA	NA	NA
PM-1 (Background)	Arsenic	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - Only one detected result.	26	3	0.245	NA	NA	NA	NA	8	1	2020-06-22 to 2025-06-02	0.197	NA	NA	NA	NA
POZ-3	Arsenic	Not Evaluated - No detected results.	Not Evaluated - No detected results.	18	0	0.188	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Arsenic	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	25	1	0.17	NA	NA	NA	NA	8	0	2020-06-23 to 2025-06-09	0.206	NA	NA	NA	NA
POZ-6	Arsenic	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	25	1	0.203	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0.206	NA	NA	NA	NA
POZ-7	Arsenic	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.177	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0.206	NA	NA	NA	NA
Pooled Background	Arsenic	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	52	6	0.697	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA
CBW-1 (Background)	Barium	Decreasing	Stable	26	26	0.118	-0.406	0.00413	99.6	-131	8	8	2020-06-22 to 2025-06-03	0.102	-0.286	0.386	61.4	-8
PM-1 (Background)	Barium	Stable	No Trend	26	26	0.0924	-0.071	0.628	37.2	-23	8	8	2020-06-22 to 2025-06-02	0.0536	0.357	0.266	73.4	10
POZ-3	Barium	Decreasing	No Trend	18	18	0.181	-0.51	0.00387	99.6	-77	8	8	2022-06-27 to 2025-06-10	0.0579	0.214	0.536	46.4	6
POZ-4	Barium	No Trend	Stable	25	25	0.395	0.0936	0.528	47.2	28	8	8	2020-06-23 to 2025-06-09	0.282	-0.357	0.266	73.4	-10
POZ-6	Barium	Increasing	No Trend	25	25	0.284	0.29	0.0445	95.5	87	8	8	2020-06-24 to 2025-06-10	0.15	0.327	0.319	68.1	9
POZ-7	Barium	Decreasing	Stable	25	25	0.389	-0.517	0.000346	100	-154	8	8	2020-06-24 to 2025-06-10	0.431	-0.357	0.266	73.4	-10
Pooled Background	Barium	Stable	No Trend	52	52	0.337	-0.101	0.294	70.6	-134	8	8	2023-01-24 to 2025-06-03	0.384	0.143	0.711	28.9	4
CBW-1 (Background)	Beryllium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	25	1	0.287	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0	NA	NA	NA	NA
PM-1 (Background)	Beryllium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	1.31	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	0	NA	NA	NA	NA
POZ-3	Beryllium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	12	0	0	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Beryllium	Decreasing	Stable	24	11	0.672	-0.407	0.0107	98.9	-95	8	2	2020-06-23 to 2025-06-09	0.515	-0.472	0.188	81.2	-9
POZ-6	Beryllium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0	NA	NA	NA	NA
POZ-7	Beryllium	Decreasing	Stable	24	13	0.512	-0.381	0.0149	98.5	-94	8	2	2020-06-24 to 2025-06-10	0.549	-0.157	0.742	25.8	-3
Pooled Background	Beryllium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	51	1	1.06	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA

Note:
Mann Kendall Trends are classified based on Aziz (2003) guidance.

Secular Trend Evaluation for All Data											Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)							
Mann-Kendall Test											Mann-Kendall Test							
Mann Kendall Trends				(R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							(R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							
Location	Constituent	Trends, All Data	Trends, Recent Data	n	n, detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n, detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)
CBW-1 (Background)	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.09	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	1.32	NA	NA	NA	NA
PM-1 (Background)	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.36	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	1.32	NA	NA	NA	NA
POZ-3	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	18	0	1.19	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Cadmium	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	25	2	1.03	NA	NA	NA	NA	8	0	2020-06-23 to 2025-06-09	1.32	NA	NA	NA	NA
POZ-6	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.09	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	1.32	NA	NA	NA	NA
POZ-7	Cadmium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	25	1	1.06	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	1.32	NA	NA	NA	NA
Pooled Background	Cadmium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	50	0	1.27	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA
CBW-1 (Background)	Chromium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	25	1	0.777	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0	NA	NA	NA	NA
PM-1 (Background)	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0	NA	NA	NA	NA	8	0	2020-02-24 to 2025-06-02	0	NA	NA	NA	NA
POZ-3	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	18	0	0	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0	NA	NA	NA	NA	8	0	2020-06-23 to 2025-06-09	0	NA	NA	NA	NA
POZ-6	Chromium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0	NA	NA	NA	NA
POZ-7	Chromium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	25	1	0.258	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0	NA	NA	NA	NA
Pooled Background	Chromium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	49	1	0.601	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA
CBW-1 (Background)	Cobalt	Decreasing	Increasing	26	25	0.541	-0.474	0.000798	99.9	-153	8	7	2020-06-22 to 2025-06-03	0.222	0.786	0.00937	99.1	22
PM-1 (Background)	Cobalt	Increasing	No Trend	26	25	0.354	0.615	0.000018	100	194	8	8	2020-06-22 to 2025-06-02	0.196	0.4	0.212	78.8	11
POZ-3	Cobalt	No Trend	Stable	16	16	0.54	0.159	0.417	58.3	19	8	8	2022-06-27 to 2025-06-10	0.466	-0.0364	1	0	-1
POZ-4	Cobalt	Stable	No Trend	28	28	0.688	-0.0423	0.767	23.3	-16	8	8	2020-06-23 to 2025-06-09	0.464	0.143	0.711	28.9	4
POZ-6	Cobalt	Stable	Stable	25	25	0.519	-0.00337	1	0	-1	8	8	2020-06-24 to 2025-06-10	0.29	-0.143	0.711	28.9	-4
POZ-7	Cobalt	Stable	Stable	25	18	0.681	-0.0139	0.943	5.7	-4	8	7	2020-06-24 to 2025-06-10	0.403	-0.143	0.711	28.9	-4
Pooled Background	Cobalt	Stable	No Trend	52	50	0.447	-0.0367	0.71	29	-48	8	8	2023-01-24 to 2025-06-03	0.301	0.182	0.618	38.2	5
CBW-1 (Background)	Fluoride	Decreasing	Stable	26	25	0.298	-0.708	0.00000711	100	-225	8	7	2020-06-22 to 2025-06-03	0.37	-0.357	0.266	73.4	-10
PM-1 (Background)	Fluoride	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	0	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	0	NA	NA	NA	NA
POZ-3	Fluoride	Stable	Stable	11	7	0.502	0	1	0	0	8	5	2022-11-01 to 2025-06-10	0.539	-0.0378	1	0	-1
POZ-4	Fluoride	Stable	No Trend	25	9	0.543	-0.109	0.511	48.9	-25	8	2	2020-06-23 to 2025-06-09	0.611	0.0524	1	0	1
POZ-6	Fluoride	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	25	5	0.578	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0	NA	NA	NA	NA
POZ-7	Fluoride	Decreasing	Not Evaluated - Only one detected result.	25	7	0.672	-0.327	0.0466	95.3	-68	8	1	2020-06-24 to 2025-06-10	1	NA	NA	NA	NA
Pooled Background	Fluoride	Decreasing	Stable	52	25	0.688	-0.229	0.0277	97.2	-259	8	4	2023-01-24 to 2025-06-03	0.48	-0.242	0.507	49.3	-6
CBW-1 (Background)	Lead	Decreasing	Decreasing	26	25	0.53	-0.582	0.0000431	100	-186	8	7	2020-06-22 to 2025-06-03	0.348	-0.837	0.00609	99.4	-23
PM-1 (Background)	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	1.27	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	1.24	NA	NA	NA	NA

Note:

Mann Kendall Trends are classified based on Aziz (2003) guidance.

Secular Trend Evaluation for All Data											Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)							
Mann-Kendall Test											Mann-Kendall Test							
Mann Kendall Trends				(R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							(R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)							
Location	Constituent	Trends, All Data	Trends, Recent Data	n	n, detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n, detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)
POZ-3	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	18	0	1.16	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.11	NA	NA	NA	NA	8	0	2020-06-23 to 2025-06-09	1.24	NA	NA	NA	NA
POZ-6	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.11	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	1.24	NA	NA	NA	NA
POZ-7	Lead	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	1.11	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	1.24	NA	NA	NA	NA
Pooled Background	Lead	Stable	Stable	52	25	0.889	-0.138	0.174	82.6	-168	8	4	2023-01-24 to 2025-06-03	0.684	-0.124	0.789	21.1	-3
CBW-1 (Background)	Lithium	Not Evaluated - Only one detected result.	Not Evaluated - No detected results.	26	1	0.419	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0.314	NA	NA	NA	NA
PM-1 (Background)	Lithium	Not Evaluated - Majority of data (>75%) non-detect.	Stable	26	4	0.23	NA	NA	NA	NA	8	3	2020-06-22 to 2025-06-02	0.375	-0.242	0.507	49.3	-6
POZ-3	Lithium	Not Evaluated - Only one detected result.	Not Evaluated - Only one detected result.	12	1	1.32	NA	NA	NA	NA	8	1	2022-06-27 to 2025-06-10	0.428	NA	NA	NA	NA
POZ-4	Lithium	No Trend	No Trend	22	17	0.456	0.24	0.132	86.8	54	8	8	2019-02-13 to 2025-06-09	0.32	0.357	0.266	73.4	10
POZ-6	Lithium	Increasing	No Trend	22	8	0.529	0.645	0.000155	100	116	8	7	2019-02-14 to 2025-06-10	0.401	0.5	0.108	89.2	14
POZ-7	Lithium	Not Evaluated - Majority of data (>75%) non-detect.	Stable	22	4	0.69	NA	NA	NA	NA	8	2	2019-02-14 to 2025-06-10	0.72	-0.178	0.667	33.3	-4
Pooled Background	Lithium	Not Evaluated - Majority of data (>75%) non-detect.	Stable	52	5	0.331	NA	NA	NA	NA	8	2	2023-01-24 to 2025-06-03	0.389	-0.157	0.742	25.8	-3
CBW-1 (Background)	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	0.672	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0.314	NA	NA	NA	NA
PM-1 (Background)	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	0.701	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	0.566	NA	NA	NA	NA
POZ-3	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	11	0	0.144	NA	NA	NA	NA	8	0	2022-11-01 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0.708	NA	NA	NA	NA	8	0	2019-02-13 to 2025-06-09	0.314	NA	NA	NA	NA
POZ-6	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0.722	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0	NA	NA	NA	NA
POZ-7	Mercury	Not Evaluated - Majority of data (>75%) non-detect.	Not Evaluated - No detected results.	22	2	0.758	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0	NA	NA	NA	NA
Pooled Background	Mercury	Not Evaluated - No detected results.	Not Evaluated - No detected results.	50	0	0.689	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA
CBW-1 (Background)	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0.386	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0.314	NA	NA	NA	NA
PM-1 (Background)	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0.289	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	0.314	NA	NA	NA	NA
POZ-3	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	12	0	1.21	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0.301	NA	NA	NA	NA	8	0	2019-02-13 to 2025-06-09	0.314	NA	NA	NA	NA
POZ-6	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0.301	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0.314	NA	NA	NA	NA
POZ-7	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0.301	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0.314	NA	NA	NA	NA
Pooled Background	Molybdenum	Not Evaluated - No detected results.	Not Evaluated - No detected results.	48	0	0.341	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA
CBW-1 (Background)	Radium-226 & 228	Probably Decreasing	Stable	25	18	0.641	-0.245	0.0979	90.2	-71	8	8	2020-06-22 to 2025-06-03	0.599	-0.429	0.174	82.6	-12
PM-1 (Background)	Radium-226 & 228	Probably Decreasing	Stable	25	19	1.03	-0.25	0.0901	91	-73	8	8	2020-06-22 to 2025-06-02	0.483	-0.429	0.174	82.6	-12
POZ-3	Radium-226 & 228	Stable	Stable	10	10	0.531	-0.244	0.371	62.9	-11	8	8	2022-11-01 to 2025-06-10	0.613	-0.0714	0.902	9.8	-2
POZ-4	Radium-226 & 228	No Trend	Stable	24	17	0.561	0.0113	0.96	4	3	8	8	2020-06-23 to 2025-06-09	0.467	-0.429	0.174	82.6	-12

Note:

Mann Kendall Trends are classified based on Aziz (2003) guidance.

Secular Trend Evaluation for All Data										Secular Trend Evaluation for Recent Data (subset of 8 most recent data points)								
		Mann-Kendall Test								Mann-Kendall Test								
Mann Kendall Trends		(R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)								(R programming, package = Kendall, version = 2.2.1, function = MannKendall, non-detects substituted by 0.5*reporting limit)								
Location	Constituent	Trends, All Data	Trends, Recent Data	n	n, detected results	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)	n	n, detected results	recent data date range	Coefficient of Variance	Kendall's Tau	p-value	Confidence Factor	Kendall Score (S)
POZ-6	Radium-226 & 228	Decreasing	No Trend	24	16	0.554	-0.329	0.0314	96.9	-86	8	8	2020-06-24 to 2025-06-10	0.633	0.143	0.711	28.9	4
POZ-7	Radium-226 & 228	Decreasing	Probably Decreasing	24	21	0.524	-0.307	0.0392	96.1	-84	8	8	2020-06-24 to 2025-06-10	0.626	-0.571	0.0635	93.7	-16
Pooled Background	Radium-226 & 228	Decreasing	Stable	50	37	0.903	-0.217	0.0306	96.9	-257	8	8	2023-01-24 to 2025-06-03	0.444	-0.5	0.108	89.2	-14
CBW-1 (Background)	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	0.685	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	1.05	NA	NA	NA	NA
PM-1 (Background)	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	26	0	0.36	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	0.457	NA	NA	NA	NA
POZ-3	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	18	0	0.374	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.389	NA	NA	NA	NA	8	0	2020-06-23 to 2025-06-09	0.524	NA	NA	NA	NA
POZ-6	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.389	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0.524	NA	NA	NA	NA
POZ-7	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	25	0	0.389	NA	NA	NA	NA	8	0	2020-06-24 to 2025-06-10	0.524	NA	NA	NA	NA
Pooled Background	Selenium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	52	0	0.568	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA
CBW-1 (Background)	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	0	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-03	0	NA	NA	NA	NA
PM-1 (Background)	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	24	0	1.34	NA	NA	NA	NA	8	0	2020-06-22 to 2025-06-02	0	NA	NA	NA	NA
POZ-3	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	12	0	0	NA	NA	NA	NA	8	0	2022-06-27 to 2025-06-10	0	NA	NA	NA	NA
POZ-4	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0	NA	NA	NA	NA	8	0	2019-02-13 to 2025-06-09	0	NA	NA	NA	NA
POZ-6	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0	NA	NA	NA	NA
POZ-7	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	22	0	0	NA	NA	NA	NA	8	0	2019-02-14 to 2025-06-10	0	NA	NA	NA	NA
Pooled Background	Thallium	Not Evaluated - No detected results.	Not Evaluated - No detected results.	48	0	1.09	NA	NA	NA	NA	8	0	2023-01-24 to 2025-06-03	0	NA	NA	NA	NA

Note:
Mann Kendall Trends are classified based on Aziz (2003) guidance.

Table A-5. Upper Tolerance Limits (UTLs) & Updated Groundwater Protection Standards (GWPS)

Constituent	Units	n	Interwell Background Data Characterization [a]					Groundwater Protection Standard (GWPS) Determination					UTL Calculation Details		Minimum Coverage (%)							
			n, non-detects	max reporting limit	max detected value	mean	median	min sample date	max sample date	standard deviation	coefficient of variation	Mann Kendall trend	data distribution [Shapiro-Francis] [b]	normalizing data transformation (if any)		UTL	UTL Result Detection Status [c]	MCL/RSL	GWPS Source	UTL calculation method	UTL calculation details	
Antimony	mg/L	46	44	0.025	0.0059	0.00601	0.005	2015-10-19	2025-01-14	0.00416	0.692	No Trend	Not normal (Interwell Background)	NA - Original Data	0.025	No	0.006	0.025	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	99.7
Arsenic	mg/L	50	44	0.01	0.016	0.00512	0.005	2015-10-19	2025-01-14	0.00186	0.364	Probably Decreasing	Not normal (Interwell Background)	NA - Original Data	0.016	Yes	0.01	0.016	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Barium	mg/L	50	0	NA	0.103	0.0622	0.0656	2015-10-19	2025-01-14	0.0208	0.334	Stable	Not normal (Interwell Background)	NA - Original Data	0.103	Yes	2	2	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Beryllium	mg/L	49	48	0.003	0.00063	0.000594	0.0003	2015-10-19	2025-01-14	0.000643	1.08	No Trend	Not normal (Interwell Background)	NA - Original Data	0.003	No	0.004	0.003	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.1
Cadmium	mg/L	48	48	0.005	NA	0.00074	0.0005	2015-10-19	2025-01-14	0.000943	1.28	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.005	No	0.003	0.003	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.9
Chromium	mg/L	47	46	0.005	0.014	0.00519	0.005	2015-10-19	2025-01-14	0.00131	0.253	Probably Decreasing	Not normal (Interwell Background)	NA - Original Data	0.014	Yes	0.1	0.1	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.8
Cobalt	mg/L	50	2	0.005	0.0094	0.00111	0.00092	2015-10-19	2025-01-14	0.000702	0.632	Stable	Not normal (Interwell Background)	NA - Original Data	0.005	No	0.006	0.006	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Fluoride	mg/L	50	26	0.1	0.3	0.132	0.1	2015-10-19	2025-01-14	0.0638	0.421	Decreasing	Not normal (Interwell Background)	NA - Original Data	0.3	Yes	4	4	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Lead	mg/L	50	26	0.01	0.011	0.0027	0.0025	2015-10-19	2025-01-14	0.00243	0.839	Stable	Not normal (Interwell Background)	NA - Original Data	0.011	Yes	0.013	0.013	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Lithium	mg/L	50	45	0.02	0.00544	0.0085	0.01	2015-10-19	2025-01-14	0.00306	0.359	Decreasing	Not normal (Interwell Background)	NA - Original Data	0.02	No	0.04	0.04	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Mercury	mg/L	50	50	0.001	NA	0.000244	0.0002	2015-10-19	2025-01-14	0.000168	0.689	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.001	No	0.002	0.002	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Molybdenum	mg/L	46	46	0.02	NA	0.0087	0.01	2015-10-19	2025-01-14	0.00287	0.331	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.02	No	0.1	0.1	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.7
Radium-226 & 228	pCi/L	48	53	4	16.3	3.33	3.57	2015-10-19	2025-01-14	2.48	0.742	Decreasing	Not normal (Interwell Background)	NA - Original Data	16.3	Yes	5	16.3	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.9
Selenium	mg/L	50	50	0.03	NA	0.0113	0.01	2015-10-19	2025-01-14	0.00663	0.576	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.03	No	0.03	0.03	MCL/RSL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	94.2
Thallium	mg/L	46	46	0.01	NA	0.0012	0.001	2015-10-19	2025-01-14	0.00133	1.11	All non-detect results.	Not normal (Interwell Background)	NA - Original Data	0.01	No	0.002	0.01	UTL	Non-Parametric Tolerance Limits (USEPA, 2009 - Chapter 17.2.2)	Maximum Value (Non-detects substituted by the reporting limit)	93.7

Note:
 [a] Interwell background datasets are analyte specific and include data collected from background wells (CBW-1 and PM-1). Interwell background datasets were re-tested for outliers, secular trends, and data normality. No outliers were removed.
 [b] Parametric tolerance limit calculations were performed on normally distributed background data. If background data were not normally distributed, non-parametric tolerance limit calculations were performed.
 [c] In some cases, the maximum value selected as the UTL is a non-detect result with an elevated reporting limit.
 Units = mg/L, milligrams per liter. pCi/L = picocuries per liter.

Table A-6. Confidence Intervals & SSL Identification

Location	Chemical	Units	Confidence Interval (CI) Dataset						CI Calculation [a]				SSL Confirmation		Non-Parametric CI Statistics	
			n	max (Rank n)	min (Rank 1)	median	mean	standard deviation	CI calculation method	degrees of freedom	95% Confidence UCL	95% Confidence LCL	GWPS	LCL > GWPS?	bootstrap iterations	bootstrap median
POZ-4	Cobalt	mg/L	28	0.21	0.0036	0.0714	0.088	0.0606	Bootstrap Calculation of the Confidence Interval Around the Median (Non-Parametric)	27	0.104	0.0498	0.006	Yes, SSL	10000	0.0842

Note:

Confidence intervals are calculated for analyte/well pairs with GWPS exceedances in the event dataset.

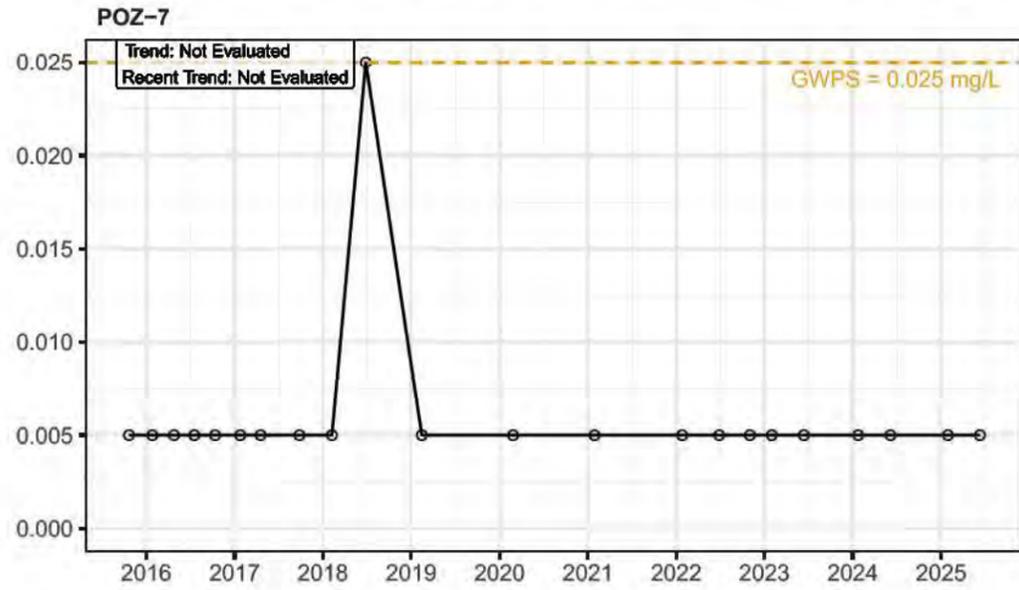
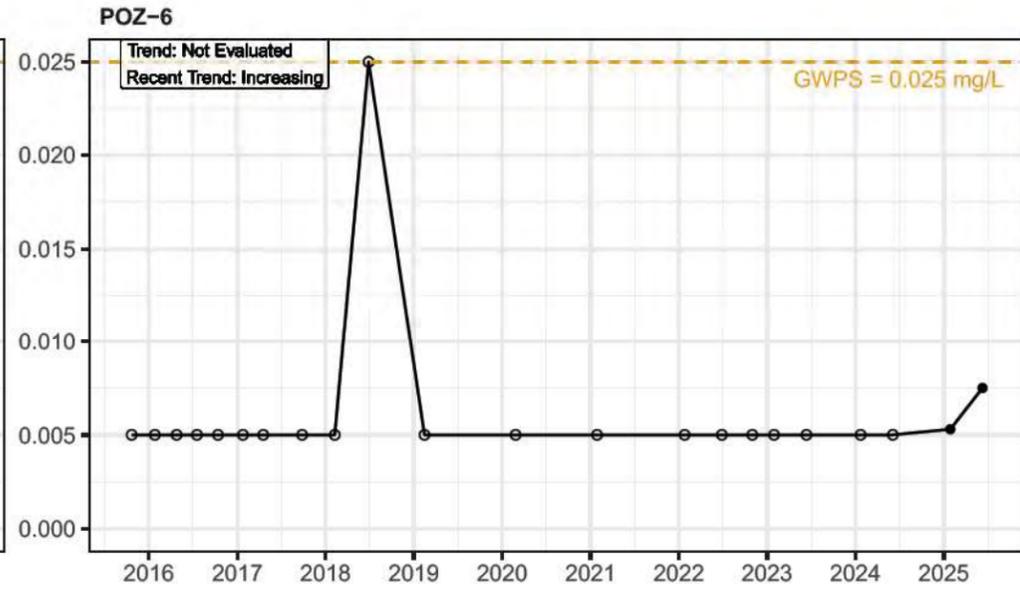
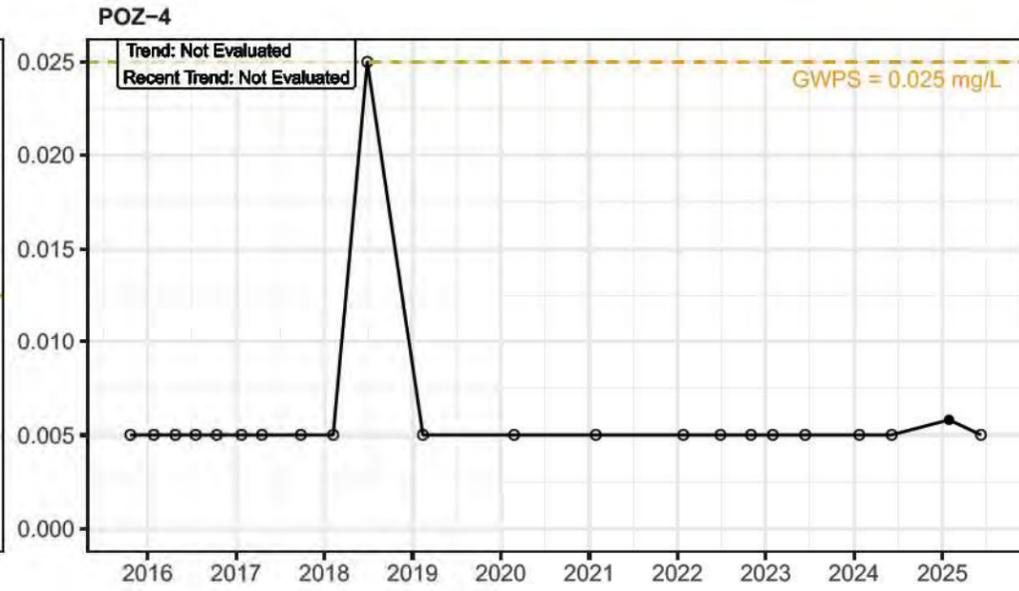
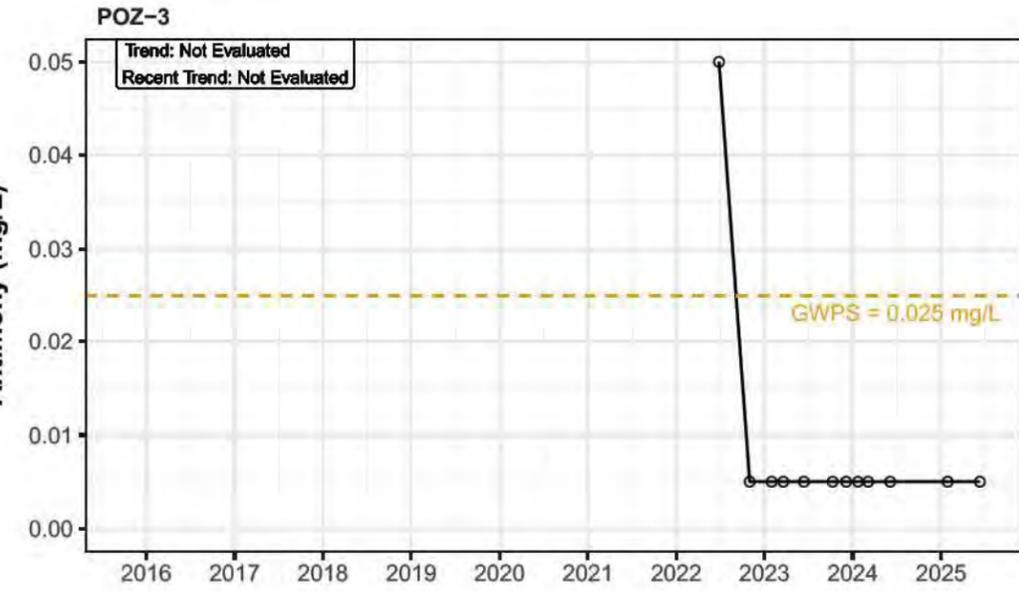
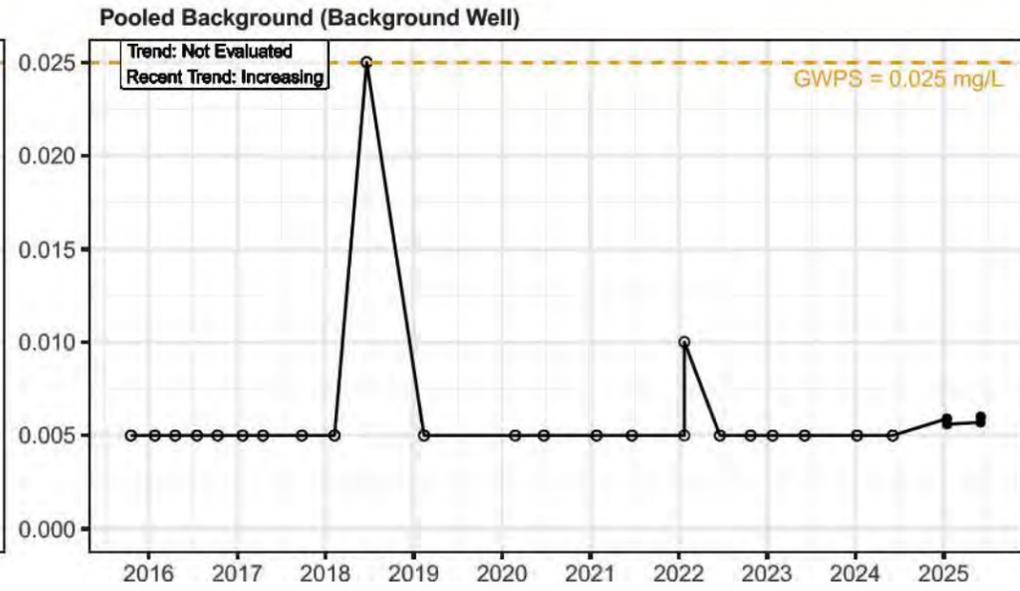
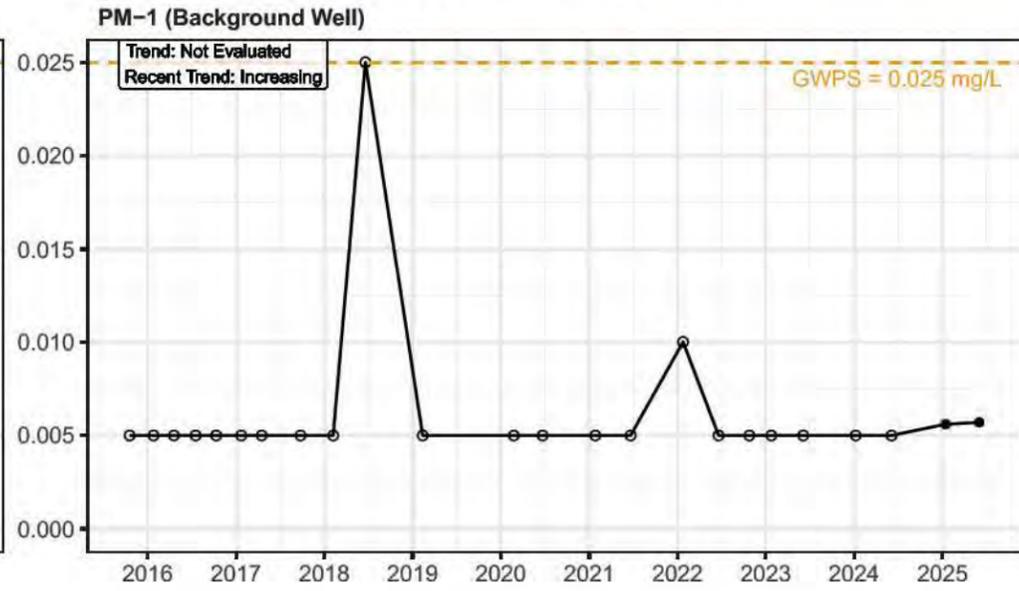
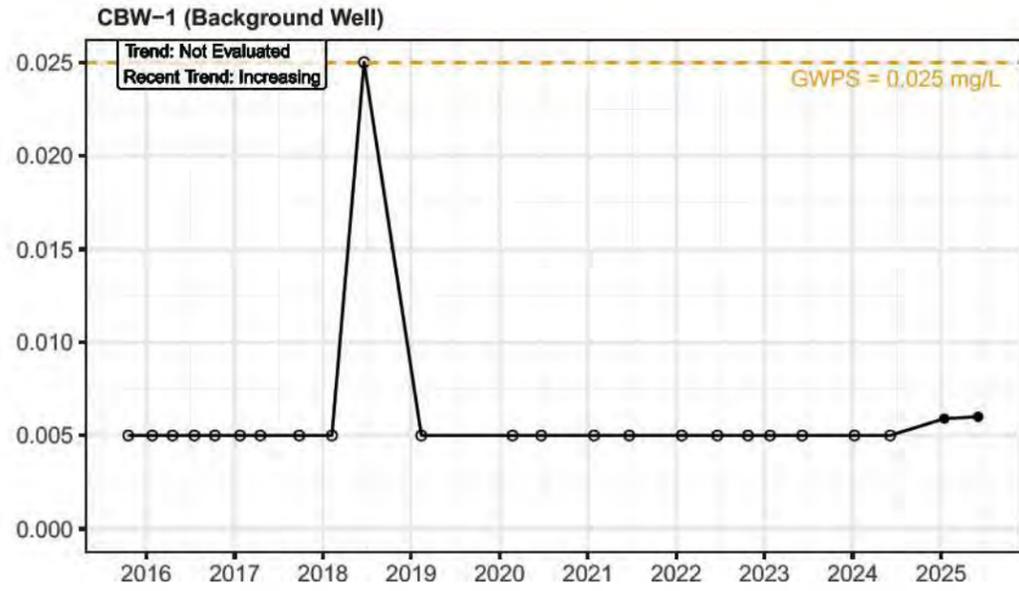
[a] The 95% lower confidence level (LCL) is compared to the Groundwater Protection Standard (GWPS) to confirm a statistically significant level (SSL). The 95% upper confidence level (UCL) is also shown for purposes of comparison.

Table A-7. Groundwater Protection Standard (GWPS) Comparison Table

Location	Constituent	Units	Sample Date	Sample Result	Upper Threshold Limit (UTL)	GWPS	GWPS Exceedance	LCL	SSL Confirmed
POZ-4	Cobalt	mg/L	2025-06-09	0.122	0.005	0.006	Yes	0.0498	Yes
POZ-3	Antimony	mg/L	2025-06-10	0.005	0.025	0.025	No	NA	No
POZ-4	Antimony	mg/L	2025-06-09	0.005	0.025	0.025	No	NA	No
POZ-6	Antimony	mg/L	2025-06-10	0.0075	0.025	0.025	No	NA	No
POZ-7	Antimony	mg/L	2025-06-10	0.005	0.025	0.025	No	NA	No
POZ-3	Arsenic	mg/L	2025-06-10	0.005	0.016	0.016	No	NA	No
POZ-4	Arsenic	mg/L	2025-06-09	0.005	0.016	0.016	No	NA	No
POZ-6	Arsenic	mg/L	2025-06-10	0.005	0.016	0.016	No	NA	No
POZ-7	Arsenic	mg/L	2025-06-10	0.005	0.016	0.016	No	NA	No
POZ-3	Barium	mg/L	2025-06-10	0.0914	0.103	2	No	NA	No
POZ-4	Barium	mg/L	2025-06-09	0.0691	0.103	2	No	NA	No
POZ-6	Barium	mg/L	2025-06-10	0.0787	0.103	2	No	NA	No
POZ-7	Barium	mg/L	2025-06-10	0.0924	0.103	2	No	NA	No
POZ-3	Beryllium	mg/L	2025-06-10	0.0005	0.005	0.005	No	NA	No
POZ-4	Beryllium	mg/L	2025-06-09	0.0005	0.005	0.005	No	NA	No
POZ-6	Beryllium	mg/L	2025-06-10	0.0005	0.005	0.005	No	NA	No
POZ-7	Beryllium	mg/L	2025-06-10	0.0005	0.005	0.005	No	NA	No
POZ-3	Cadmium	mg/L	2025-06-10	0.0005	0.005	0.005	No	NA	No
POZ-4	Cadmium	mg/L	2025-06-09	0.0005	0.005	0.005	No	NA	No
POZ-6	Cadmium	mg/L	2025-06-10	0.0005	0.005	0.005	No	NA	No
POZ-7	Cadmium	mg/L	2025-06-10	0.0005	0.005	0.005	No	NA	No
POZ-3	Chromium	mg/L	2025-06-10	0.005	0.014	0.1	No	NA	No
POZ-4	Chromium	mg/L	2025-06-09	0.005	0.014	0.1	No	NA	No
POZ-6	Chromium	mg/L	2025-06-10	0.005	0.014	0.1	No	NA	No
POZ-7	Chromium	mg/L	2025-06-10	0.005	0.014	0.1	No	NA	No
POZ-3	Cobalt	mg/L	2025-06-10	0.0023	0.005	0.006	No	NA	No
POZ-6	Cobalt	mg/L	2025-06-10	0.0017	0.005	0.006	No	NA	No
POZ-7	Cobalt	mg/L	2025-06-10	0.0011	0.005	0.006	No	NA	No
POZ-3	Fluoride	mg/L	2025-06-10	0.1	0.3	4	No	NA	No
POZ-4	Fluoride	mg/L	2025-06-09	0.1	0.3	4	No	NA	No
POZ-6	Fluoride	mg/L	2025-06-10	0.1	0.3	4	No	NA	No
POZ-7	Fluoride	mg/L	2025-06-10	0.1	0.3	4	No	NA	No
POZ-3	Lead	mg/L	2025-06-10	0.001	0.011	0.015	No	NA	No
POZ-4	Lead	mg/L	2025-06-09	0.001	0.011	0.015	No	NA	No
POZ-6	Lead	mg/L	2025-06-10	0.001	0.011	0.015	No	NA	No
POZ-7	Lead	mg/L	2025-06-10	0.001	0.011	0.015	No	NA	No
POZ-3	Lithium	mg/L	2025-06-10	0.005	0.02	0.04	No	NA	No
POZ-4	Lithium	mg/L	2025-06-09	0.0147	0.02	0.04	No	NA	No
POZ-6	Lithium	mg/L	2025-06-10	0.00995	0.02	0.04	No	NA	No
POZ-7	Lithium	mg/L	2025-06-10	0.005	0.02	0.04	No	NA	No
POZ-3	Mercury	mg/L	2025-06-10	0.0002	0.001	0.002	No	NA	No
POZ-4	Mercury	mg/L	2025-06-09	0.0002	0.001	0.002	No	NA	No
POZ-6	Mercury	mg/L	2025-06-10	0.0002	0.001	0.002	No	NA	No
POZ-7	Mercury	mg/L	2025-06-10	0.0002	0.001	0.002	No	NA	No
POZ-3	Molybdenum	mg/L	2025-06-10	0.005	0.02	0.1	No	NA	No
POZ-4	Molybdenum	mg/L	2025-06-09	0.005	0.02	0.1	No	NA	No
POZ-6	Molybdenum	mg/L	2025-06-10	0.005	0.02	0.1	No	NA	No
POZ-7	Molybdenum	mg/L	2025-06-10	0.005	0.02	0.1	No	NA	No
POZ-3	Radium-226 & 228	pCi/L	2025-06-10	0.915	16.3	16.3	No	NA	No
POZ-4	Radium-226 & 228	pCi/L	2025-06-09	0.999	16.3	16.3	No	NA	No
POZ-6	Radium-226 & 228	pCi/L	2025-06-10	1.73	16.3	16.3	No	NA	No
POZ-7	Radium-226 & 228	pCi/L	2025-06-10	0.789	16.3	16.3	No	NA	No
POZ-3	Selenium	mg/L	2025-06-10	0.01	0.05	0.05	No	NA	No
POZ-4	Selenium	mg/L	2025-06-09	0.01	0.05	0.05	No	NA	No
POZ-6	Selenium	mg/L	2025-06-10	0.01	0.05	0.05	No	NA	No
POZ-7	Selenium	mg/L	2025-06-10	0.01	0.05	0.05	No	NA	No
POZ-3	Thallium	mg/L	2025-06-10	0.001	0.01	0.01	No	NA	No
POZ-4	Thallium	mg/L	2025-06-09	0.001	0.01	0.01	No	NA	No
POZ-6	Thallium	mg/L	2025-06-10	0.001	0.01	0.01	No	NA	No
POZ-7	Thallium	mg/L	2025-06-10	0.001	0.01	0.01	No	NA	No

Groundwater Protection Standard (GWPS) is the maximum value between the Upper Threshold Limit (UTL) and the Maximum Contaminant Level/Regional Screening Level (MCL/RSL). The 95% Lower Confidence Limit (LCL) is calculated if the event sample result exceeded the GWPS. If the LCL is greater than the GWPS, a Statistically Significant Level (SSL) is confirmed.

Trend Analysis for Antimony

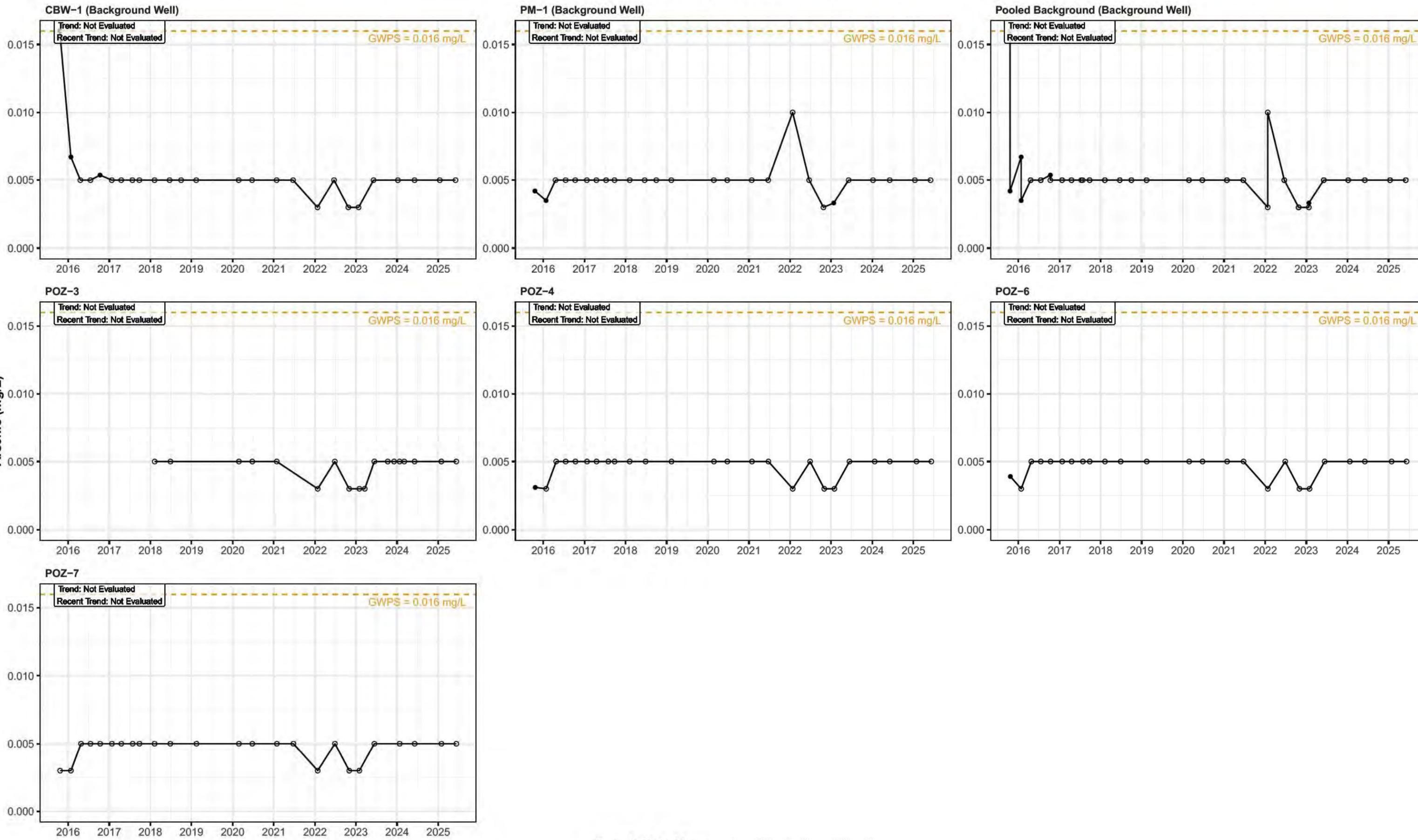


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Arsenic

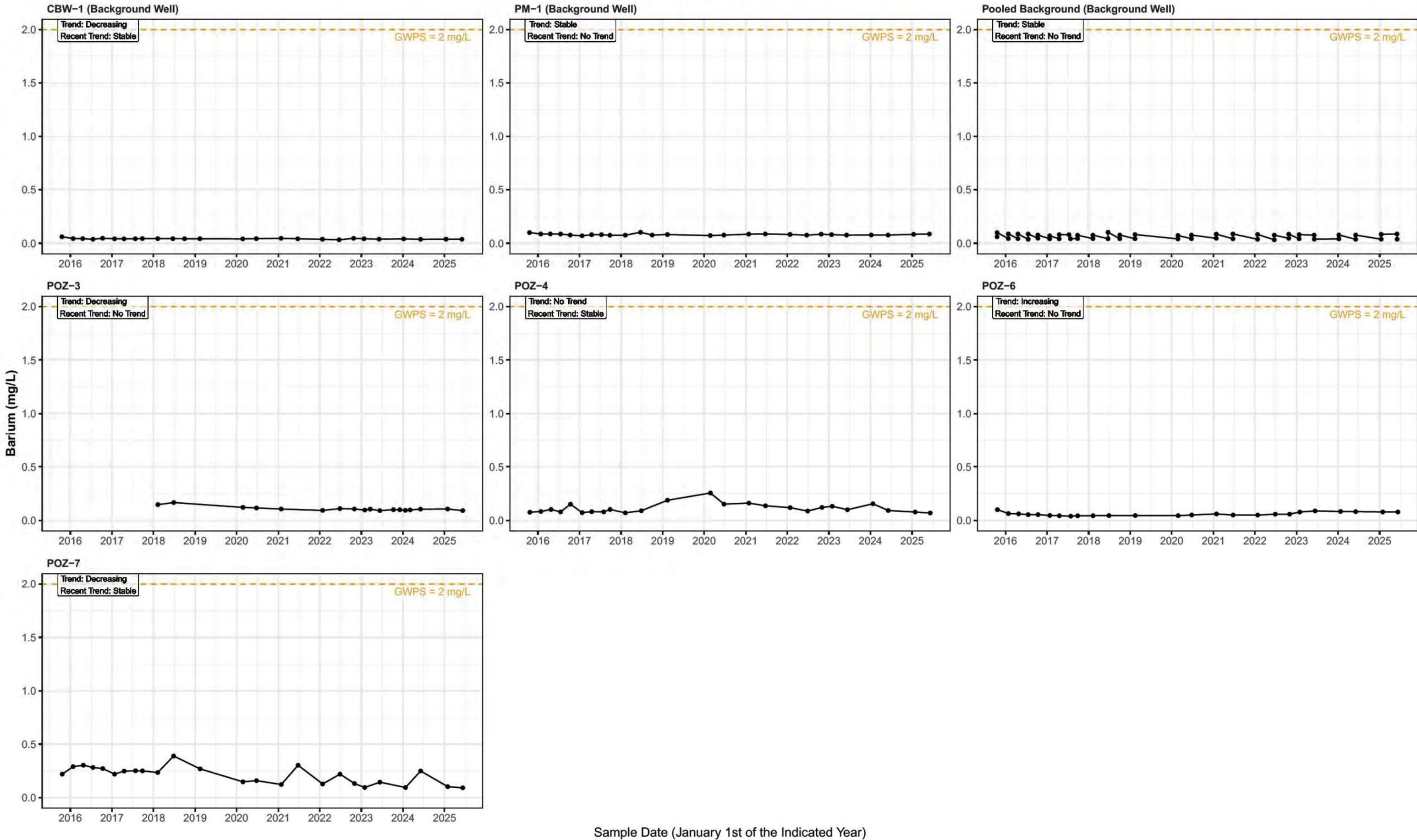


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

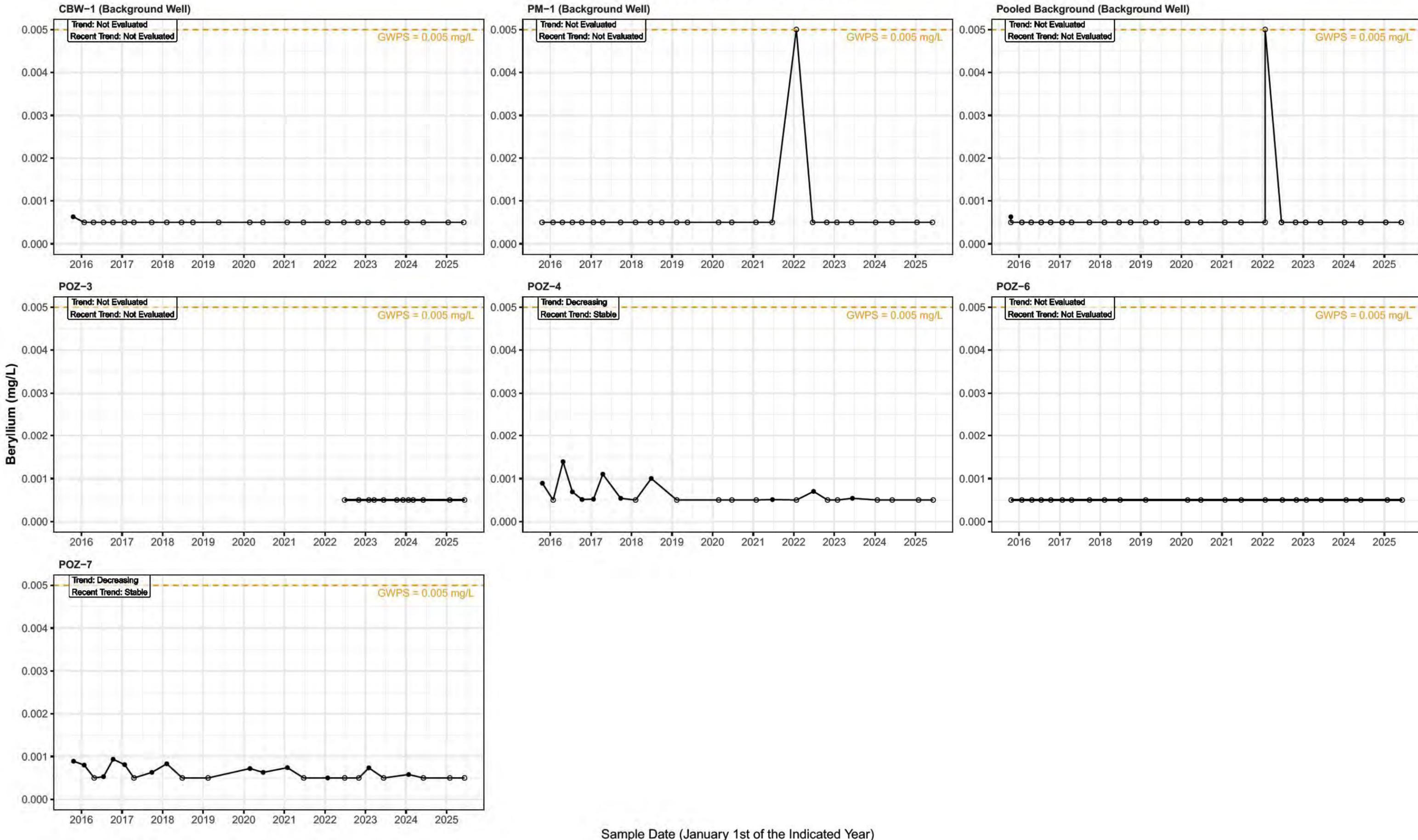
Trend Analysis for Barium



Detection Status: ● Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

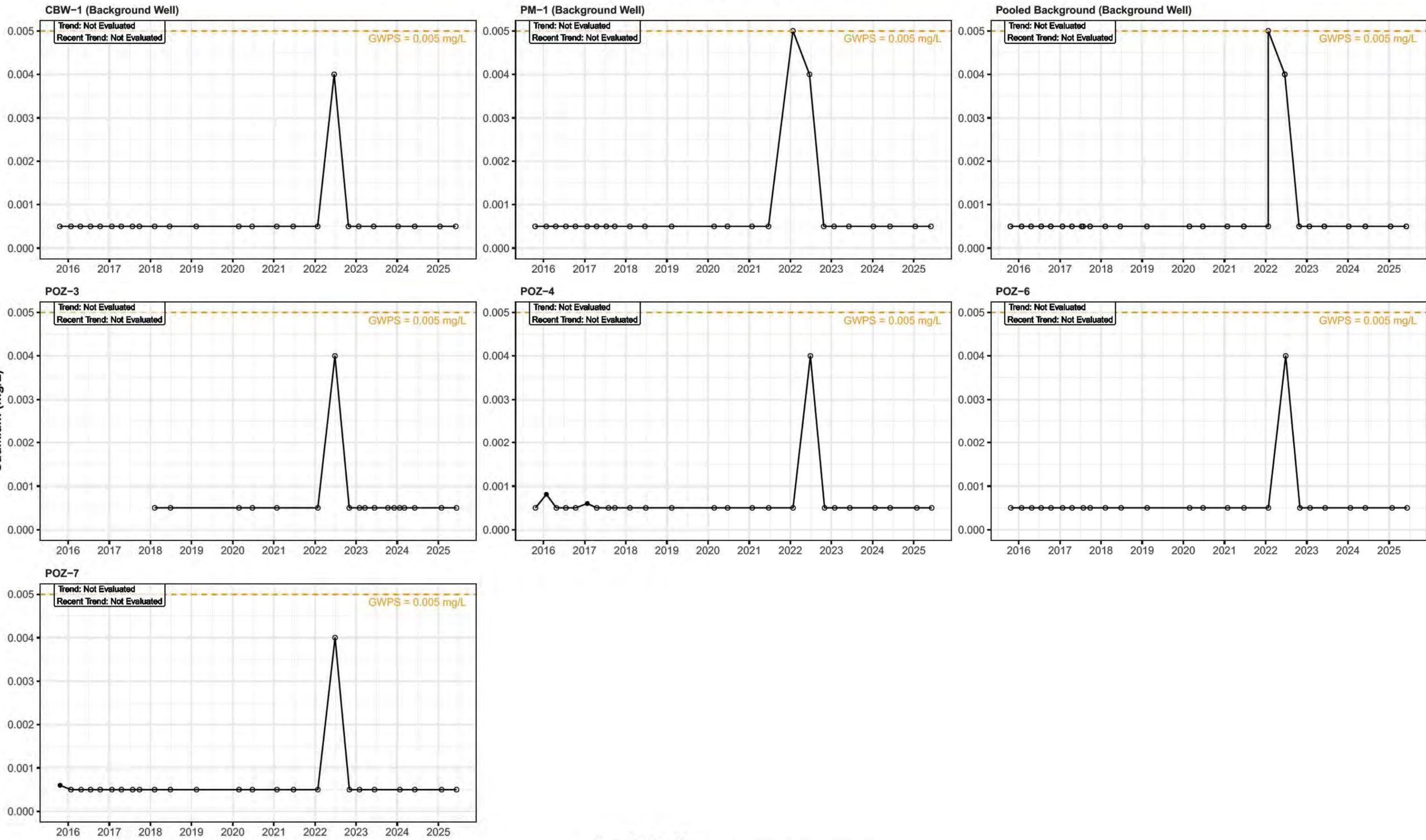
Trend Analysis for Beryllium



Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

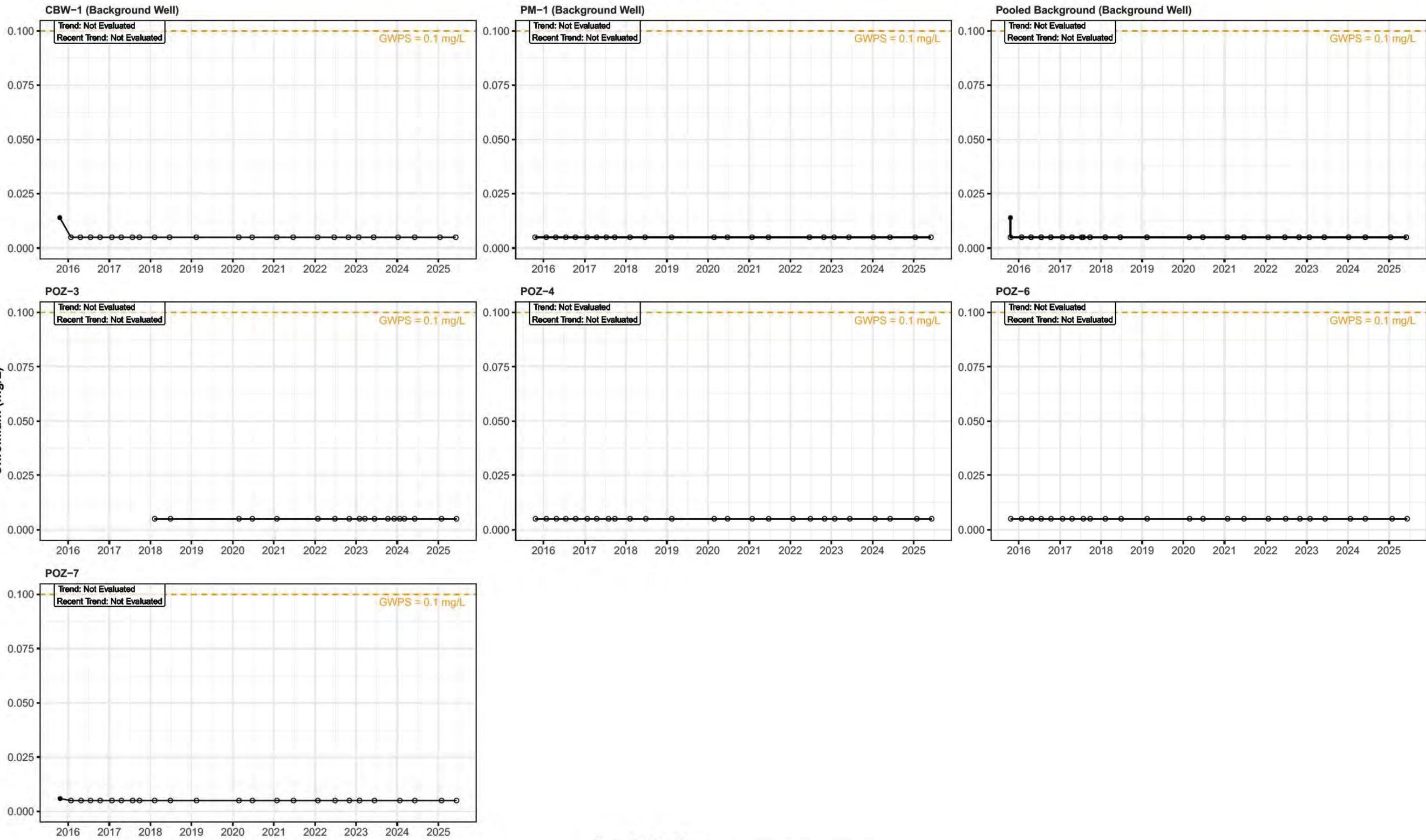
Trend Analysis for Cadmium



Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

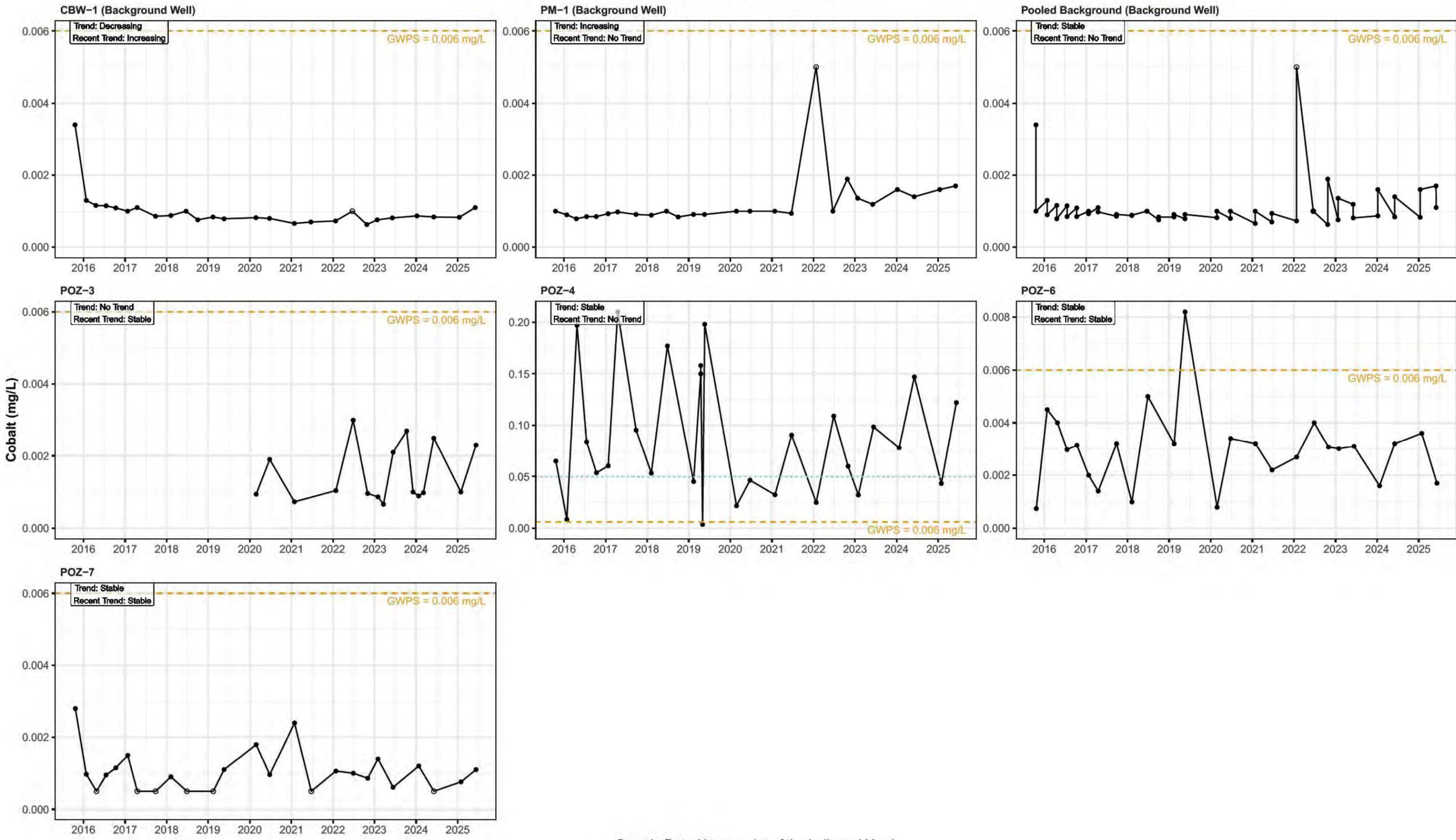
Trend Analysis for Chromium



Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

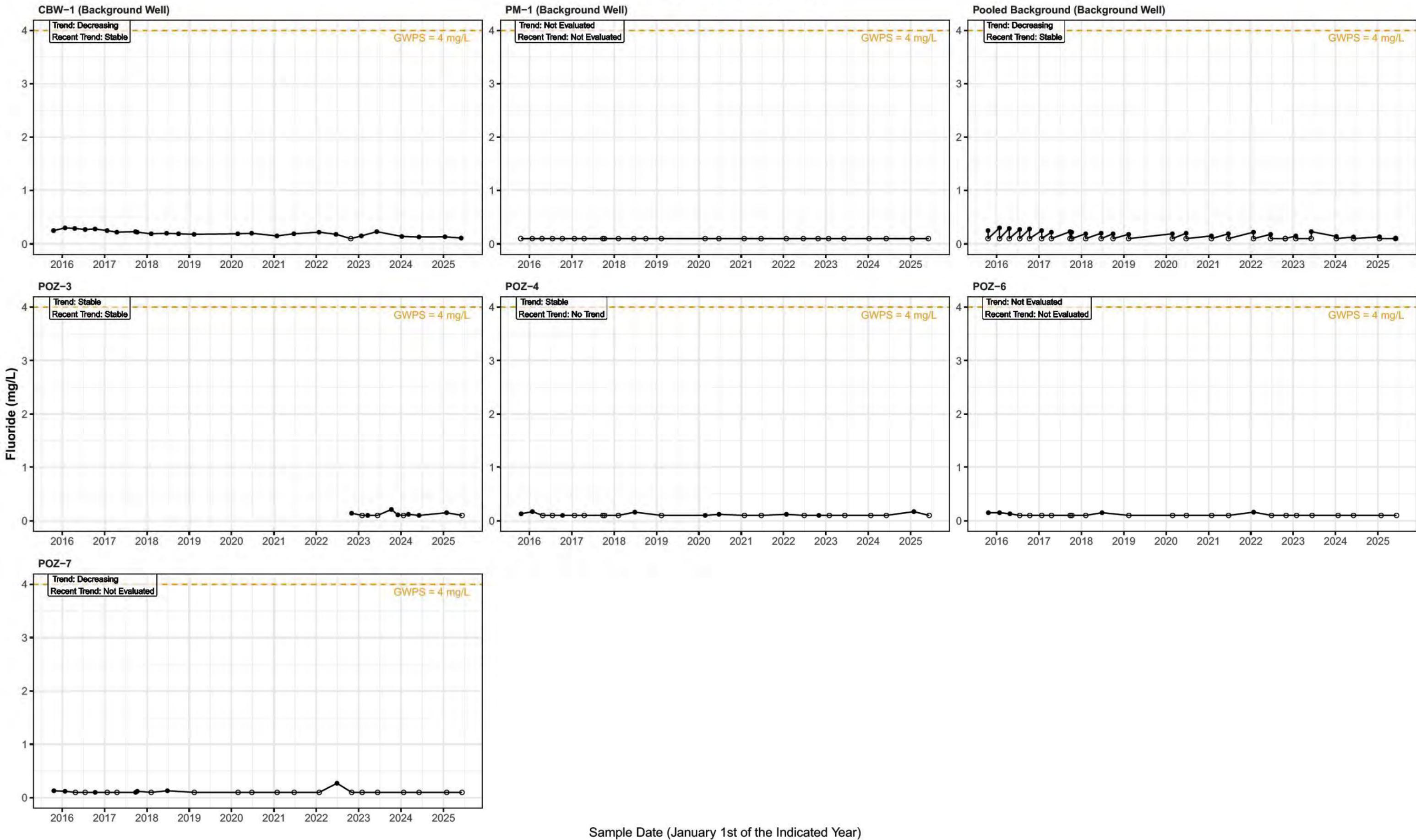
Trend Analysis Plots for Cobalt



--- GWPS
 ---- LCL
 Detection Status:
 ● Detect
 ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). LCL = lower confidence limit. If LCL > GWPS, a statistically significant level (SSL) is concluded.
 *Recent data are considered the 8 most recent data points collected for each well/analyte.
 Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Fluoride

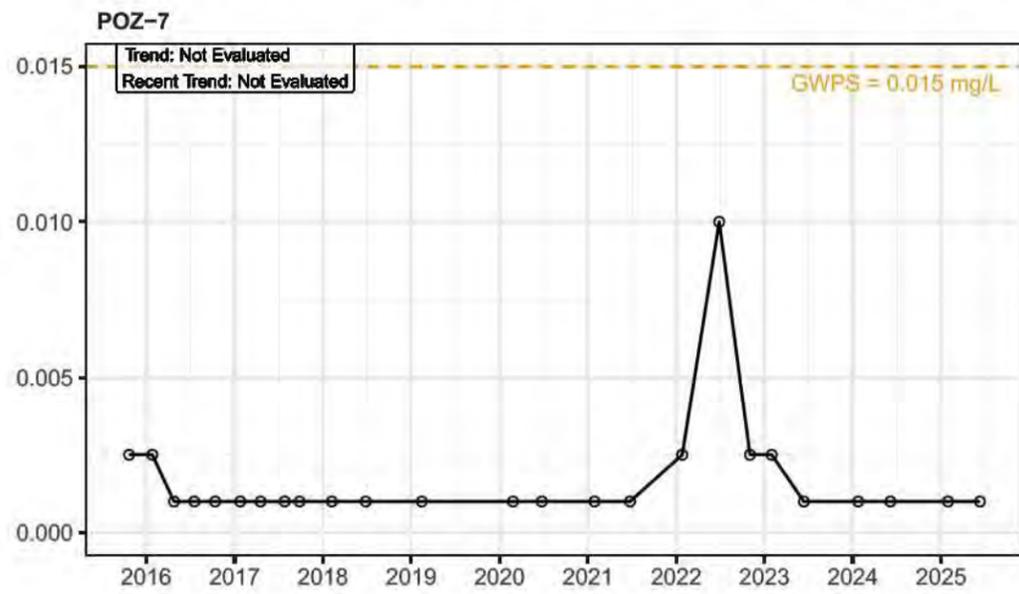
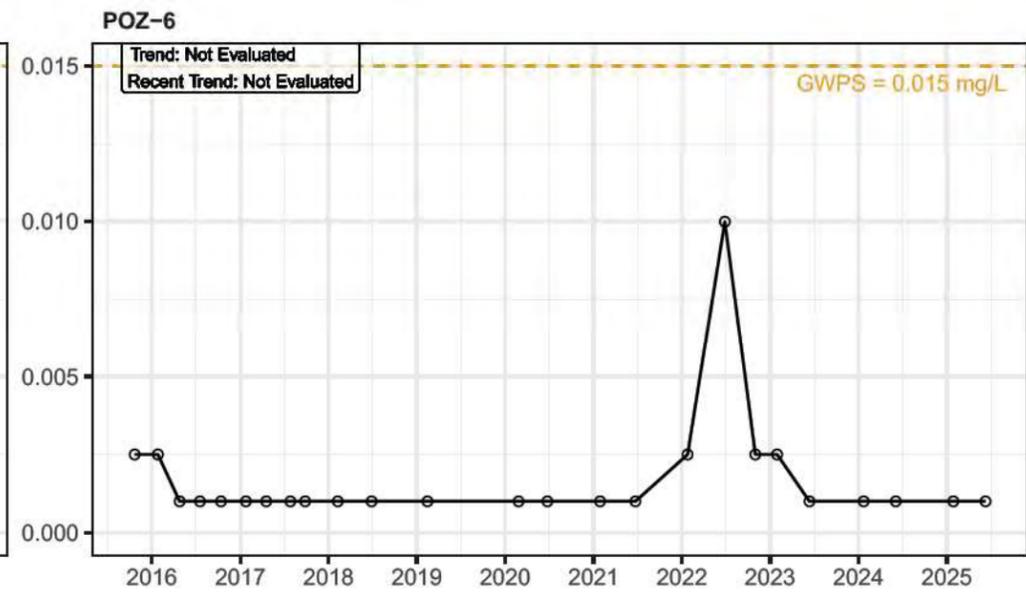
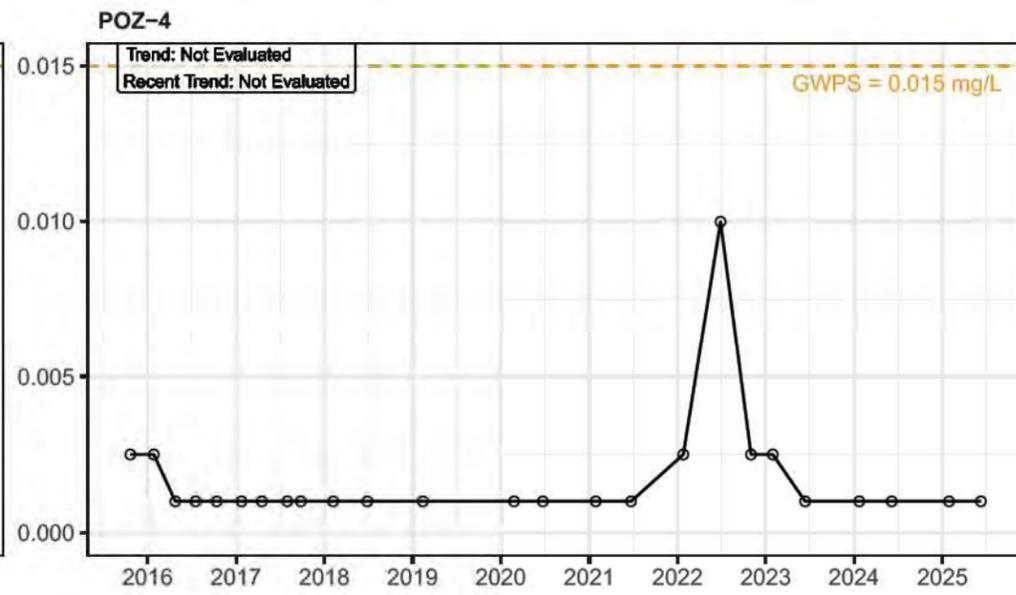
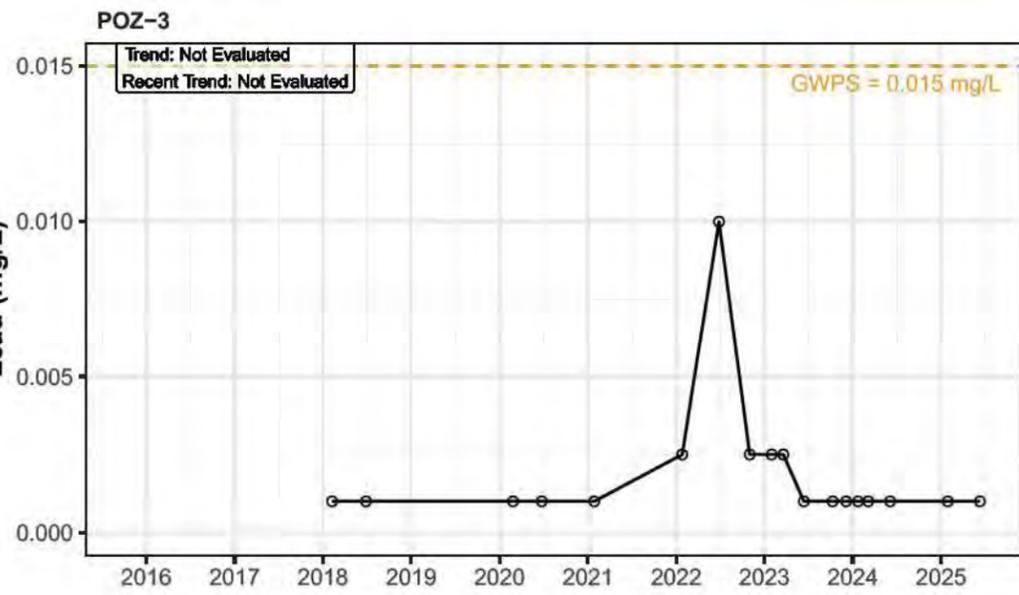
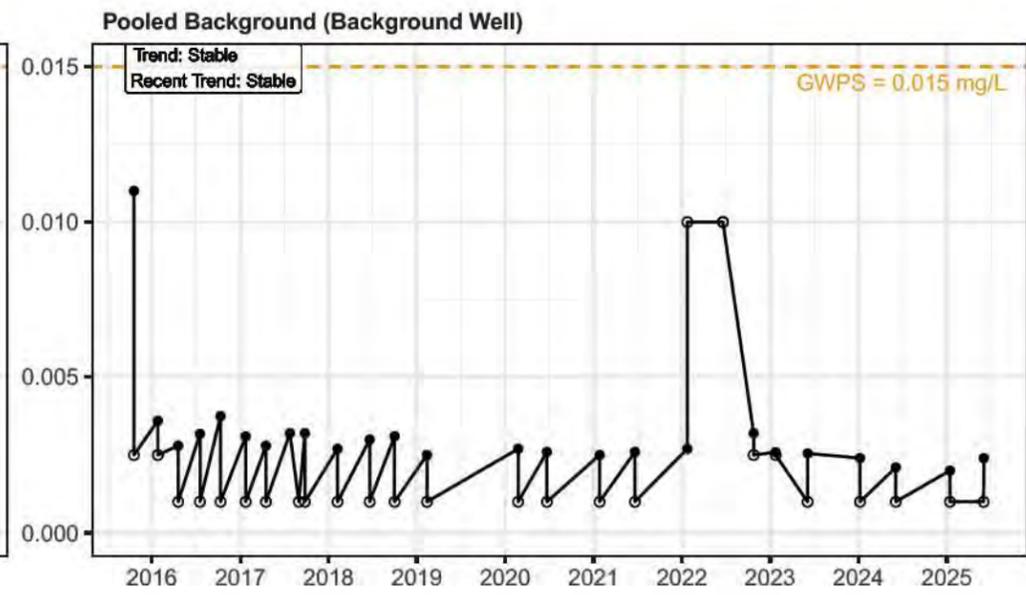
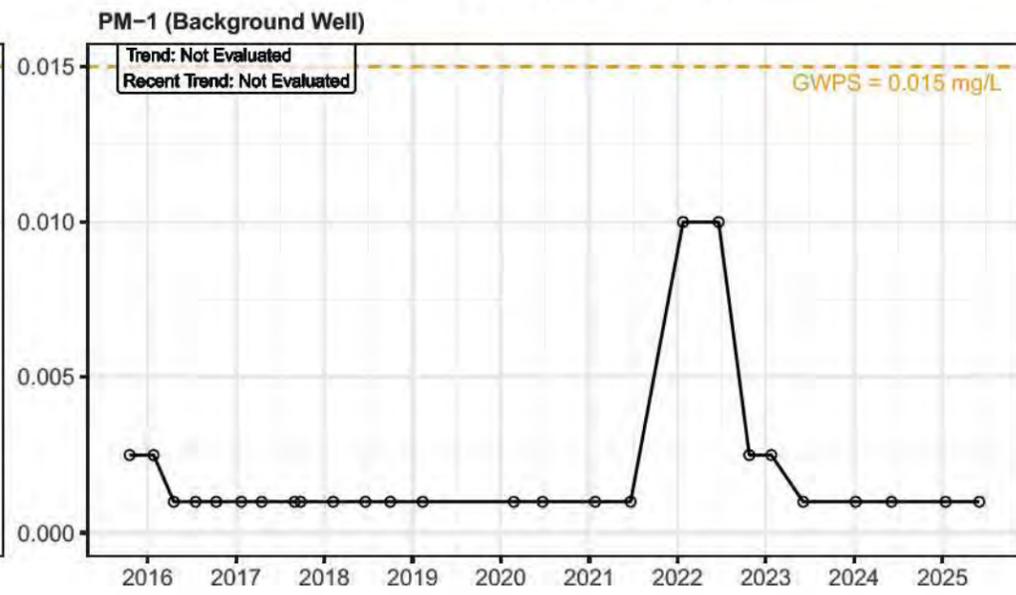
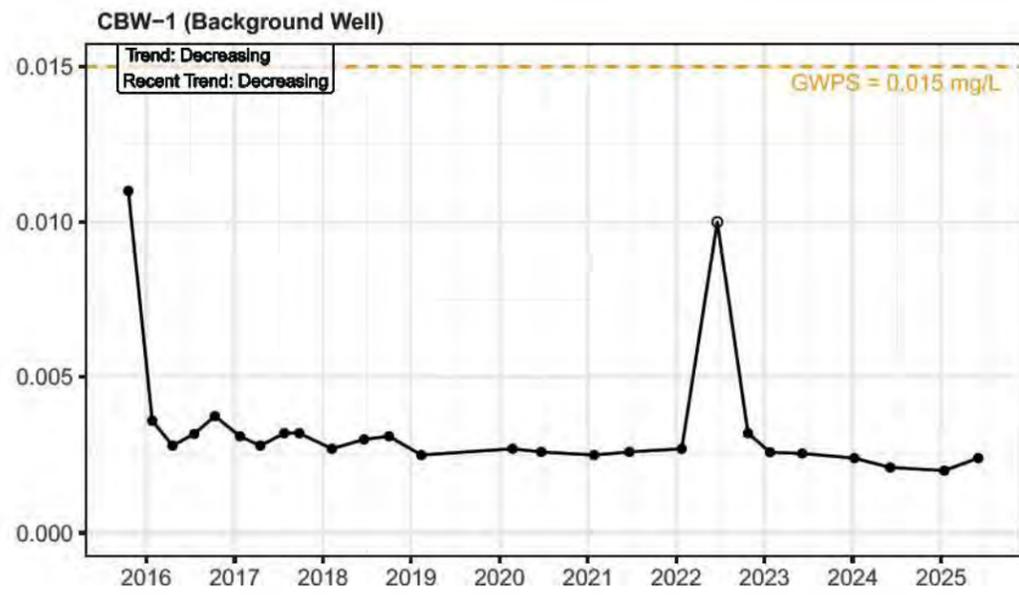


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Lead

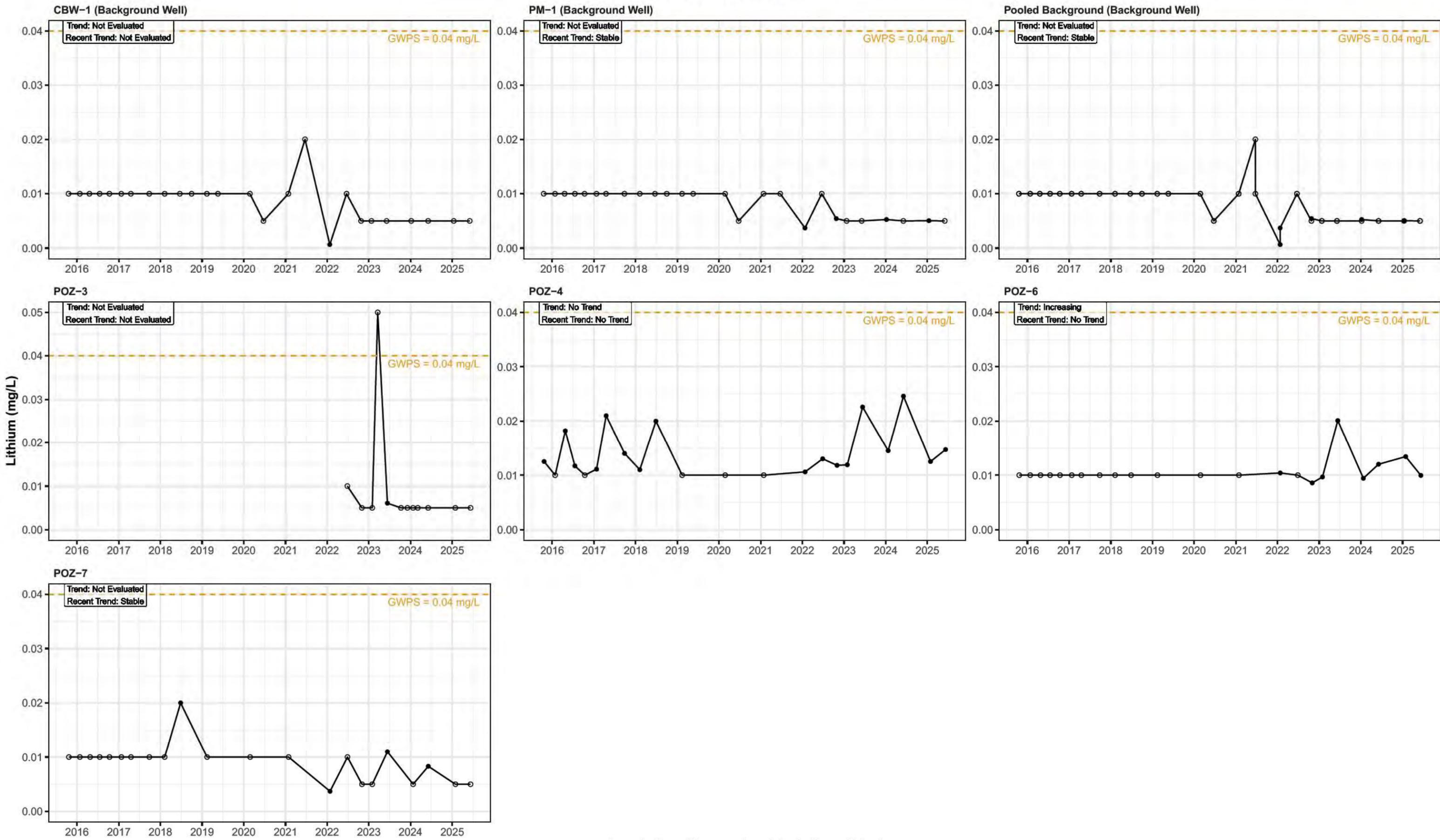


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Lithium

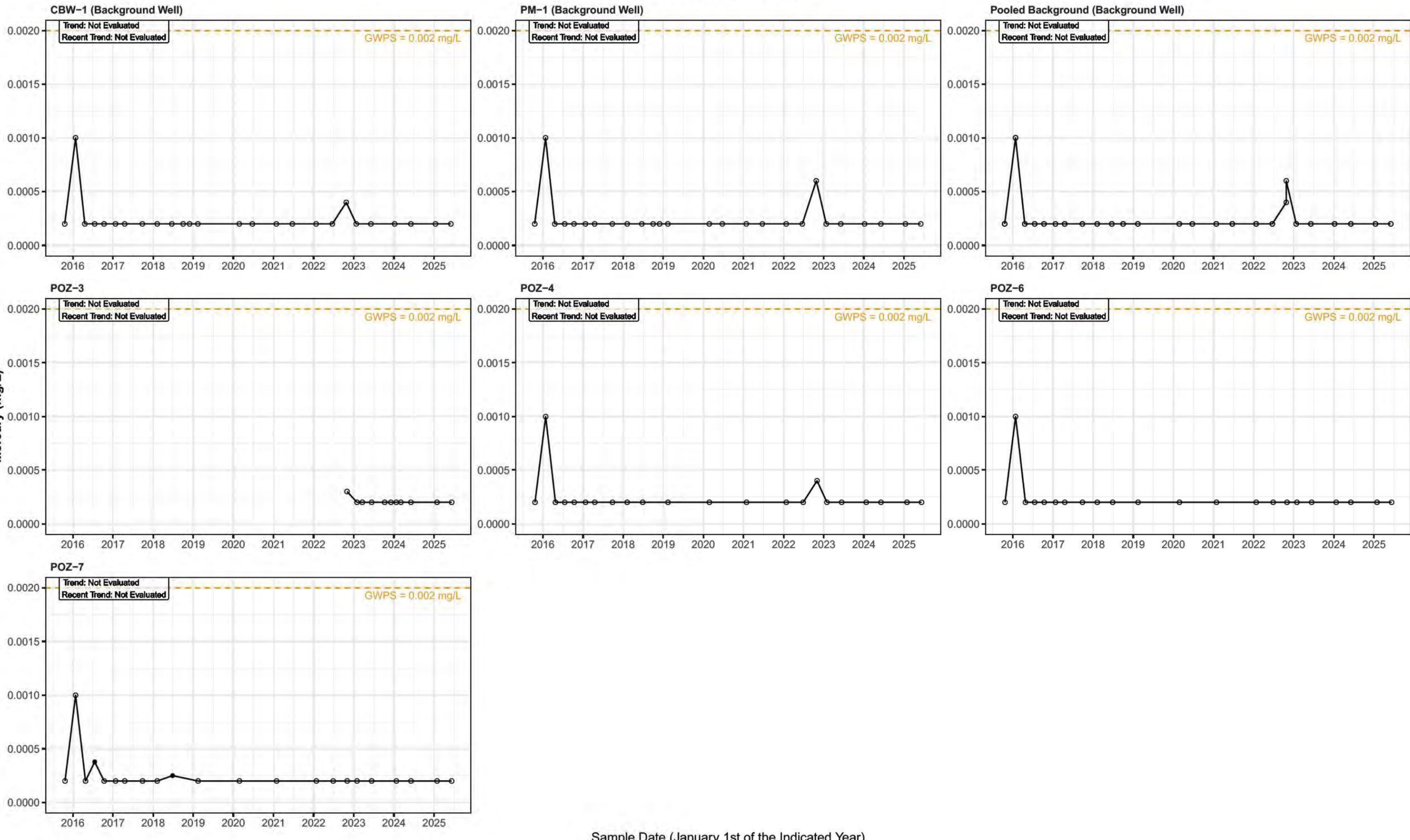


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

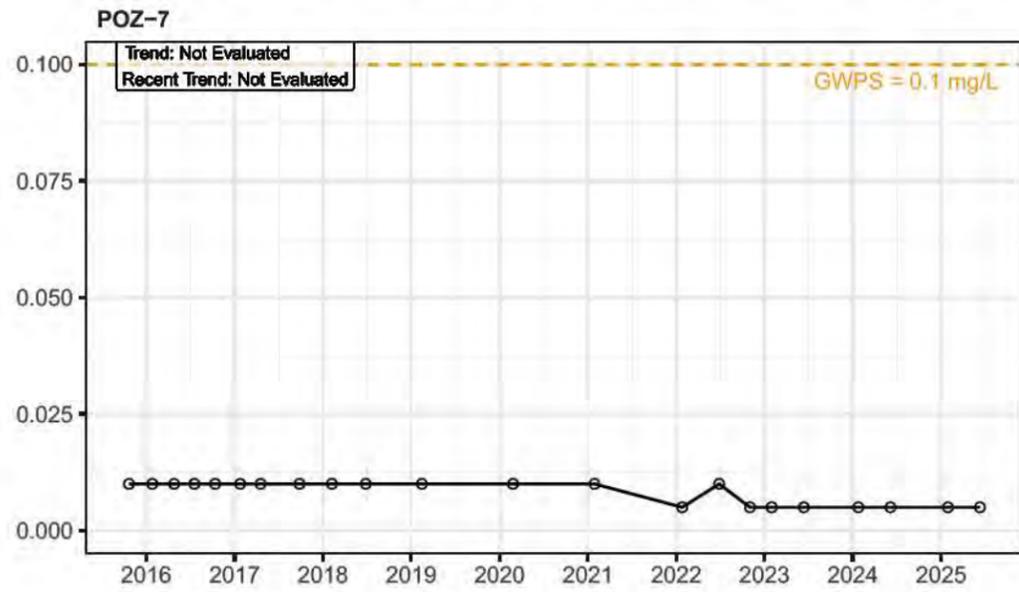
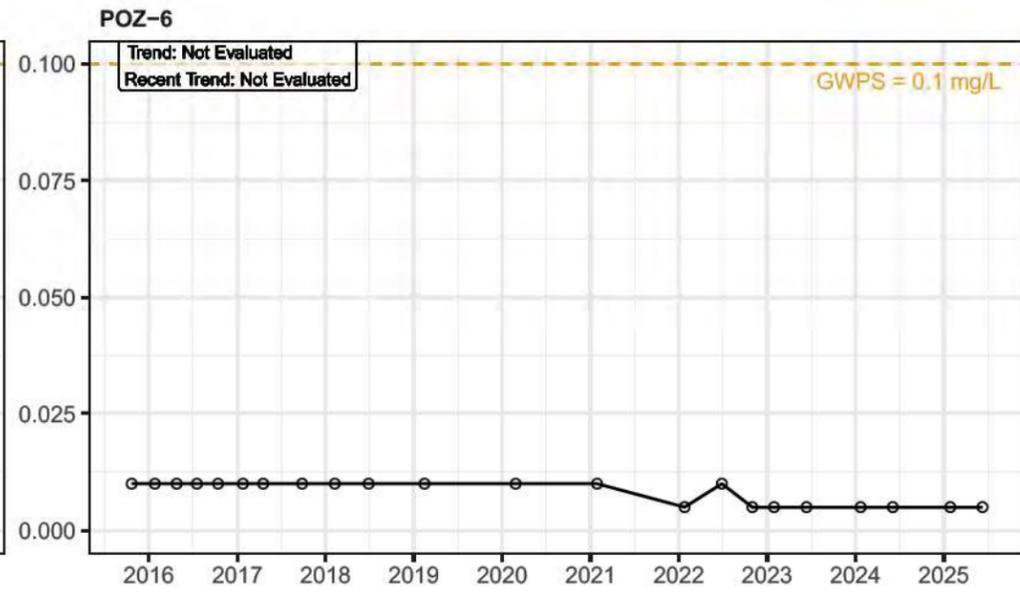
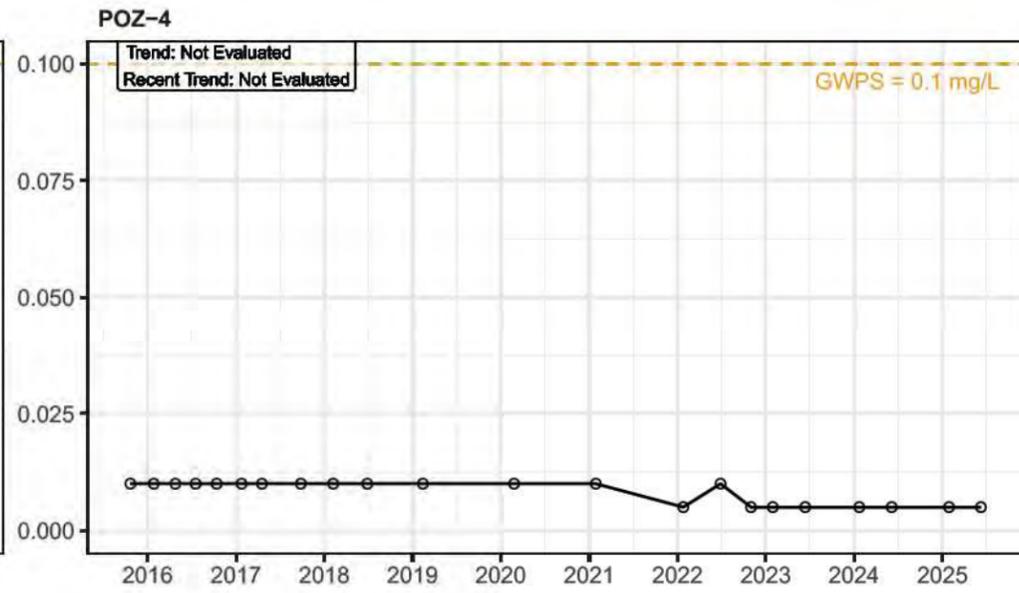
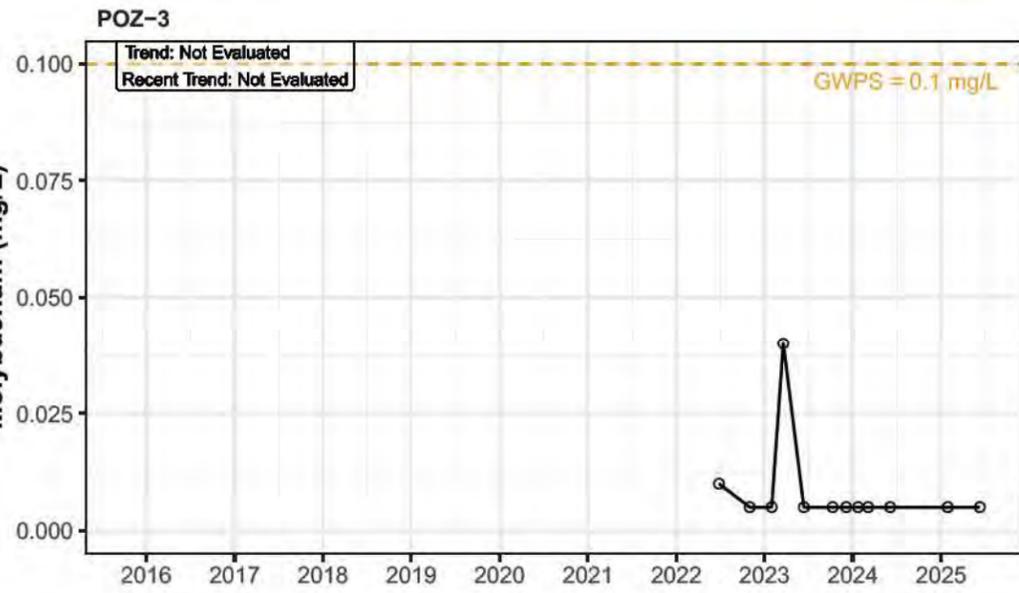
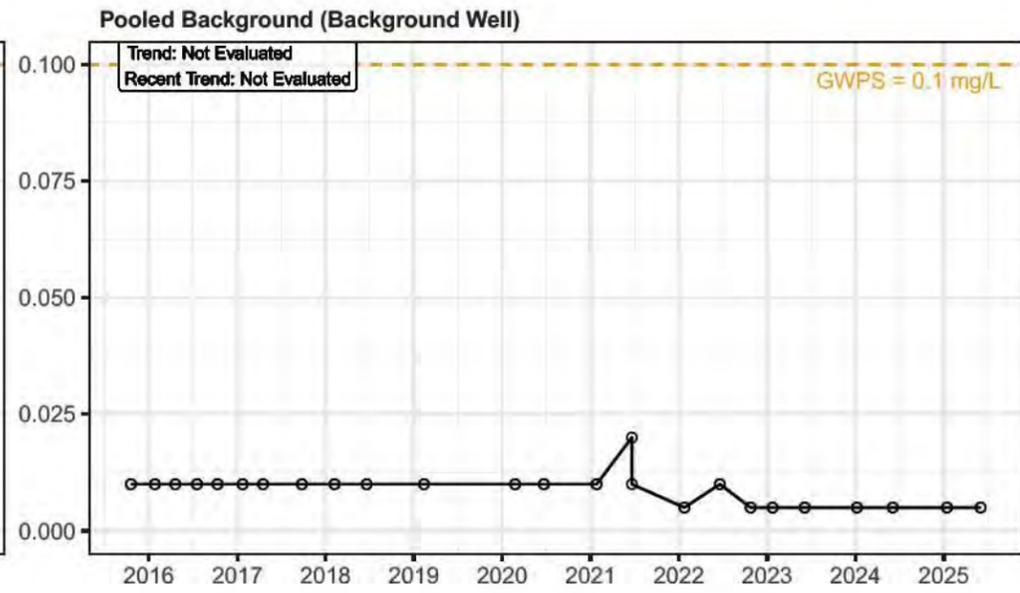
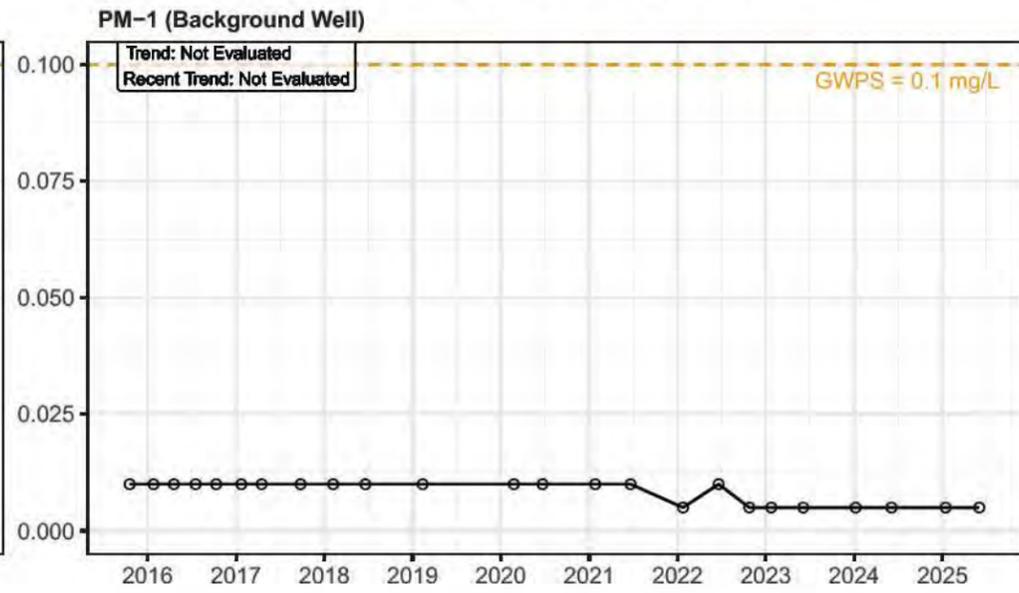
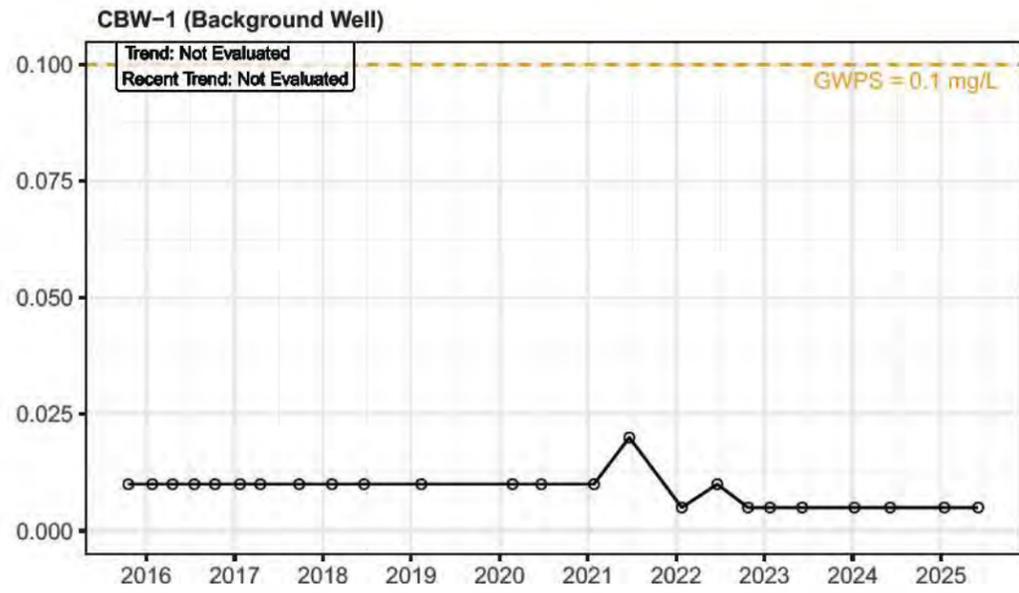
Trend Analysis for Mercury



Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Molybdenum



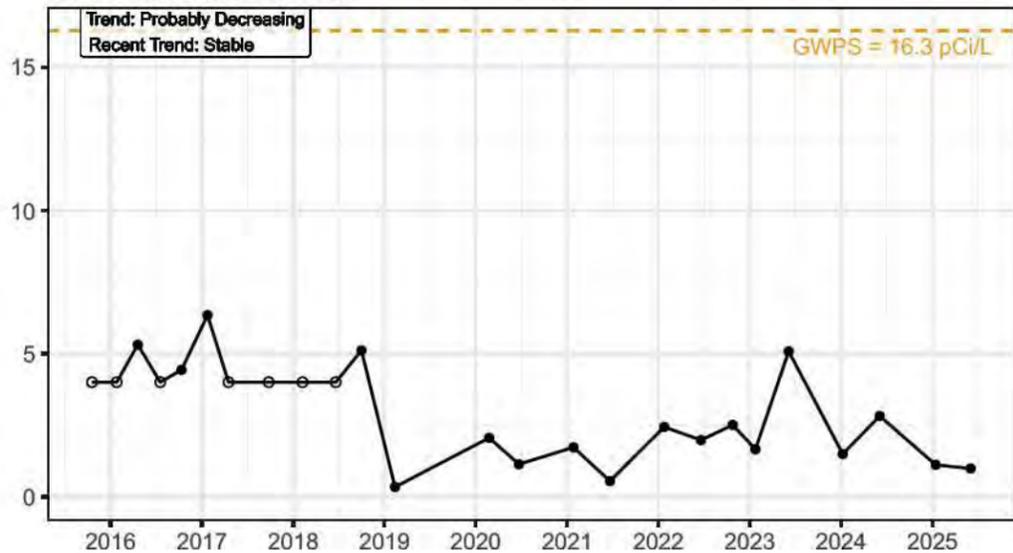
Sample Date (January 1st of the Indicated Year)

Detection Status: ○ Non-Detect

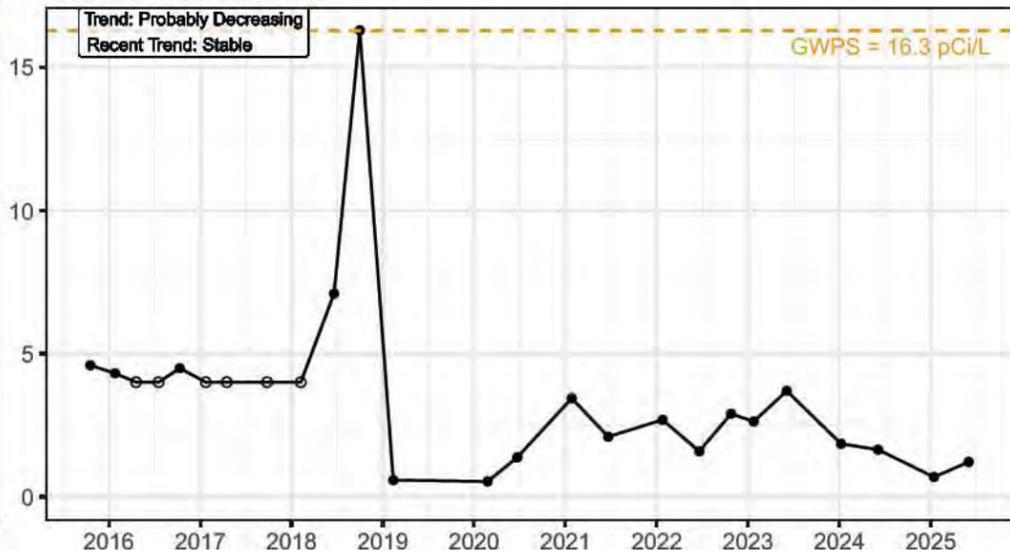
Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Radium-226 & 228

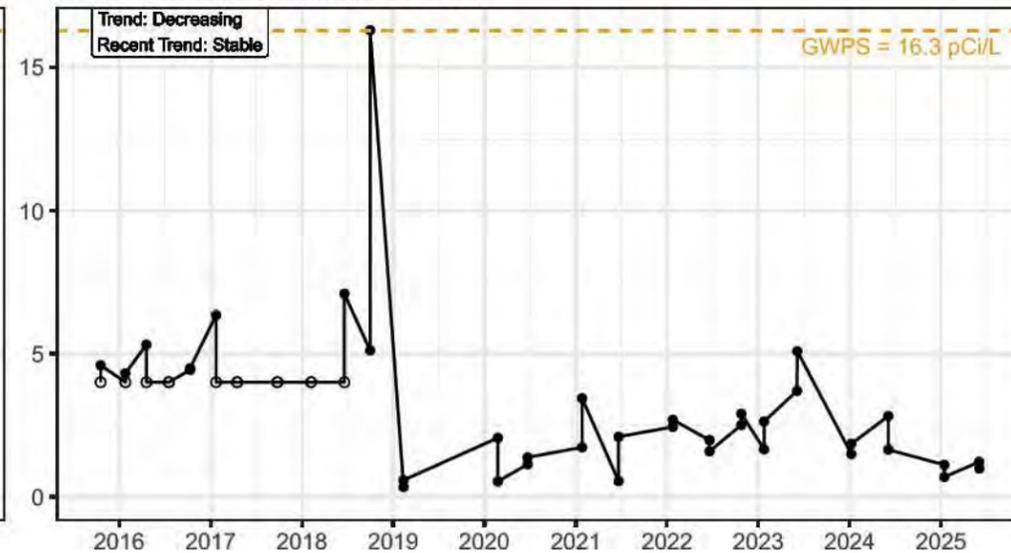
CBW-1 (Background Well)



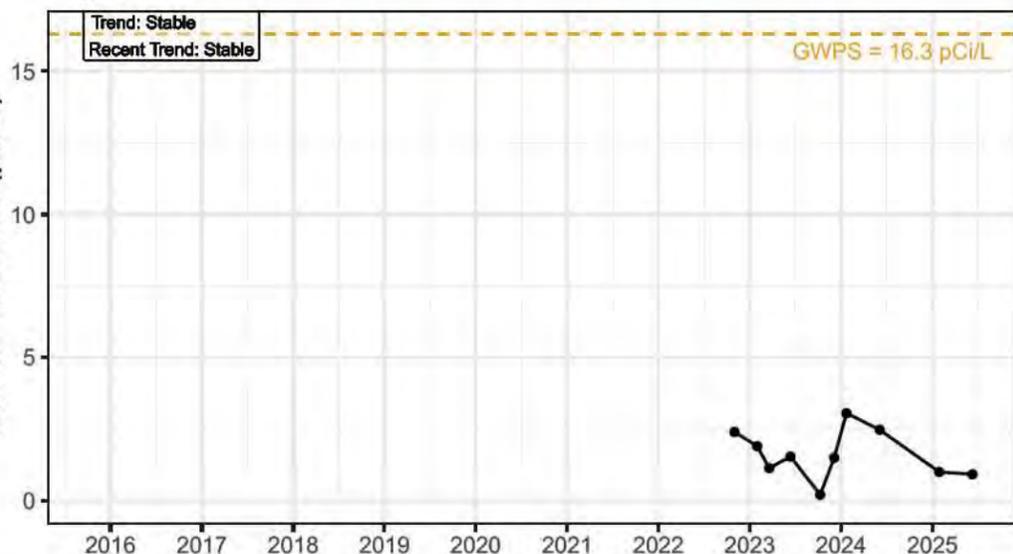
PM-1 (Background Well)



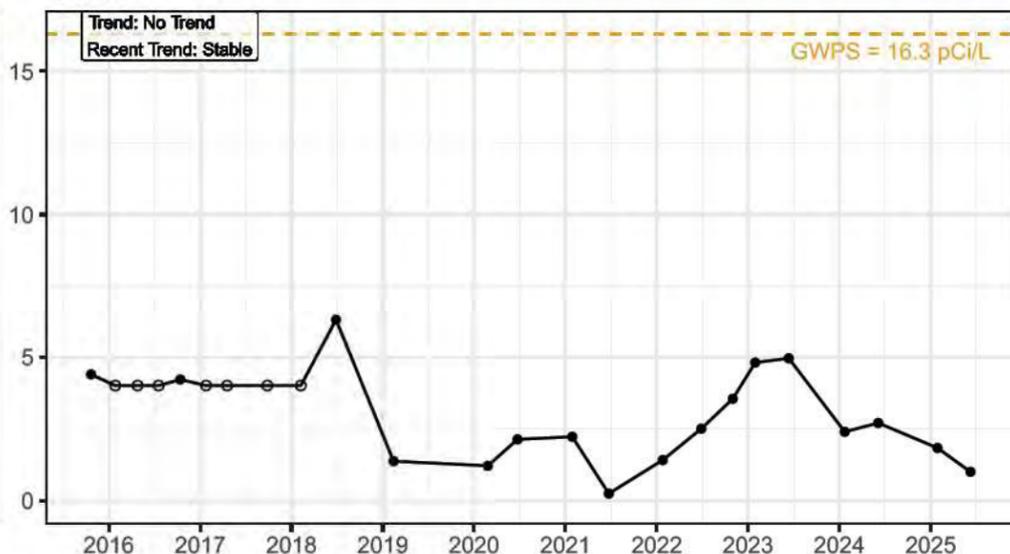
Pooled Background (Background Well)



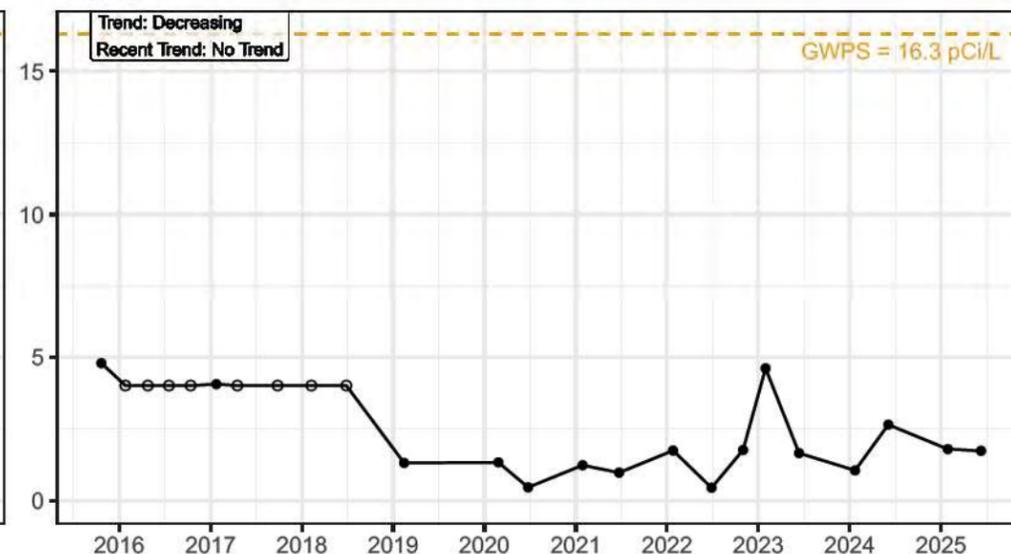
POZ-3



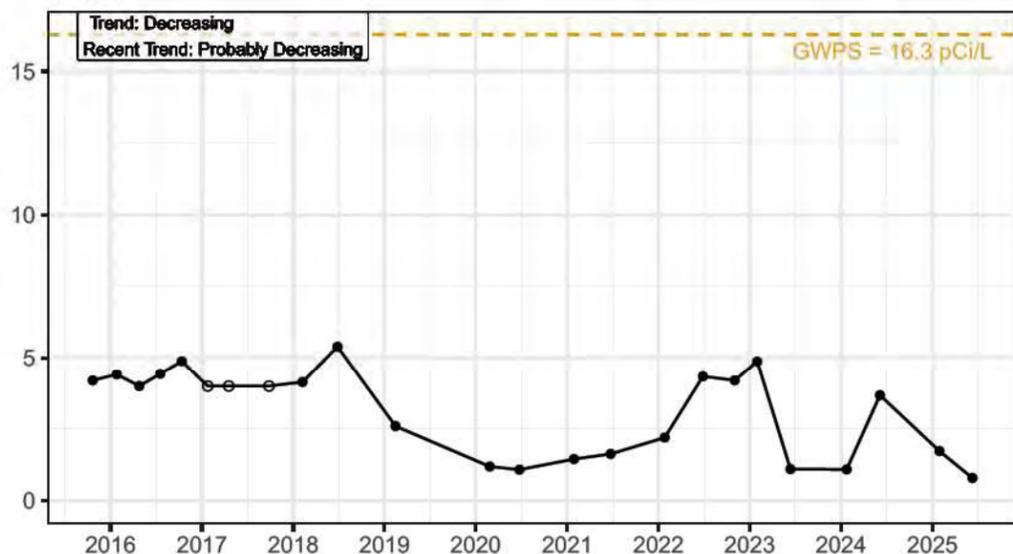
POZ-4



POZ-6



POZ-7

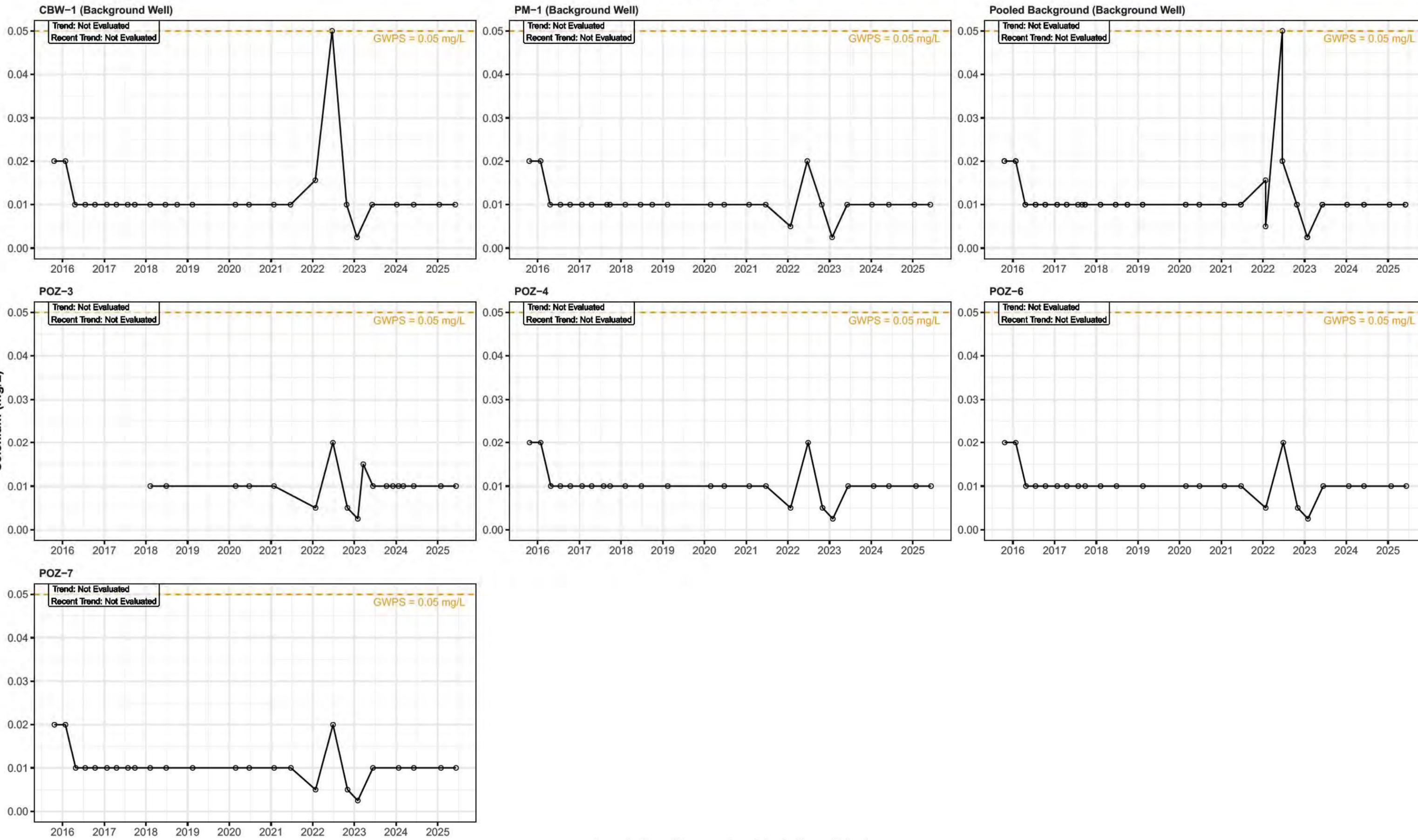


Sample Date (January 1st of the Indicated Year)

Detection Status: ● Detect ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Selenium

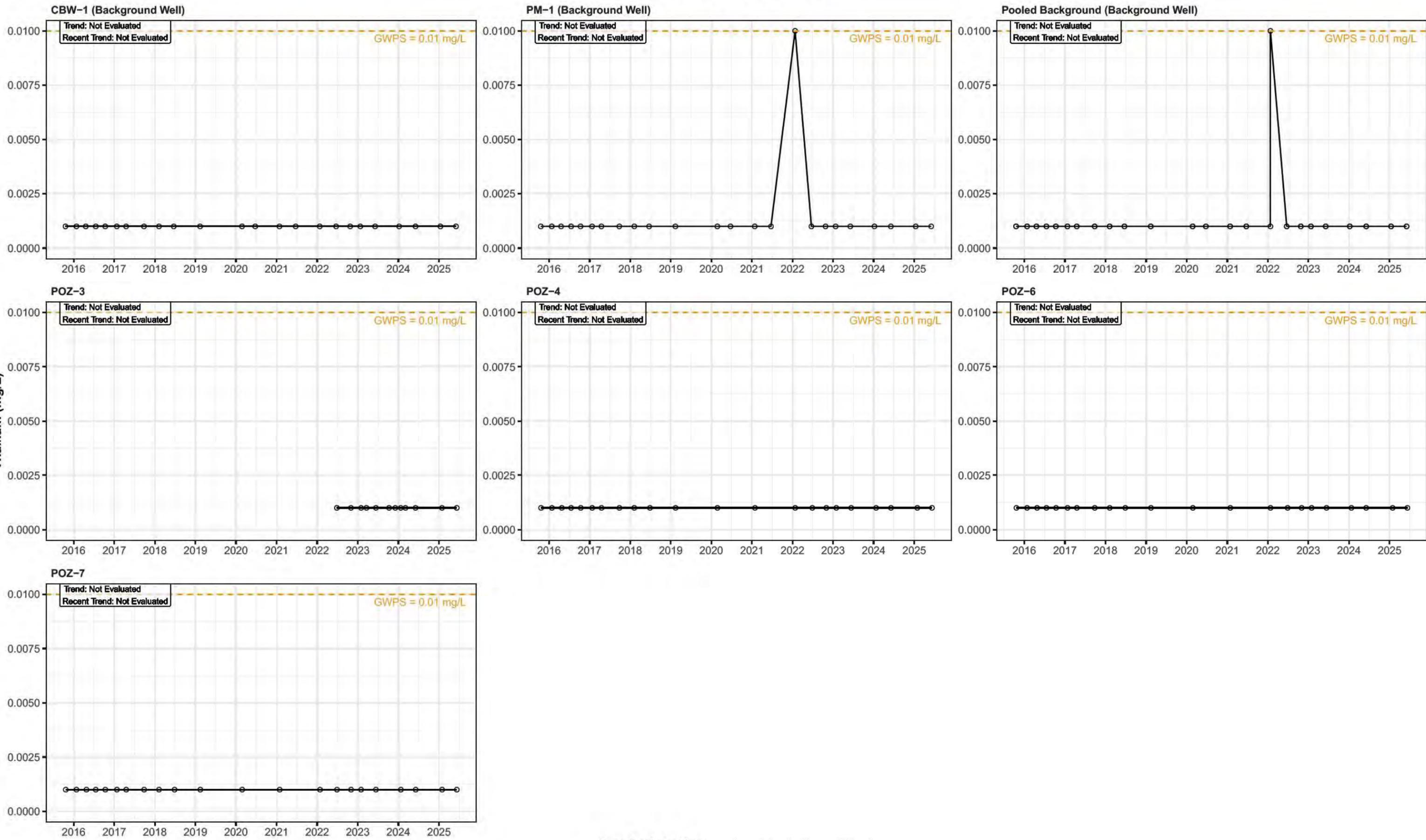


Sample Date (January 1st of the Indicated Year)

Detection Status: ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Trend Analysis for Thallium



Detection Status: ○ Non-Detect

Notes: GWPS = Groundwater Protection Standard (max level between the MCL/RSL and UTL). *Recent data are considered the 8 most recent data points collected for each well/analyte. Trend classifications are based on Aziz (2003) guidance for Mann Kendall trend test results.

Appendix B – Laboratory Analytical Results



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

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

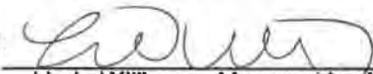
LAB CERTIFICATION #08552

Sample # AG21205 Location: GW Well PM-1 Date: 01/14/2025 Sample Collector: MDG/DCA
Loc. Code PM-1 Time: 10:19

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Barium	84.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Calcium	16.4	mg/L	02/03/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Cobalt	1.6	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Iron	9560	ug/L	02/04/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Antimony	5.6	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Zinc	10.5	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Boron	12.5	ug/L	01/29/2025	SKJACOBS	EPA 6010D
Lithium	5.05	ug/L	01/29/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	01/29/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/04/2025	EUROFINS SAV	EPA 7470
Total Organic Carbon	6.14	mg/L	01/21/2025	GEL	SM 5310B
Fluoride	<0.1	mg/L	01/18/2025	GEL	EPA 300.0
Chloride	11.7	mg/L	01/18/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.07	mg/L	01/18/2025	GEL	EPA 353.2
Sulfate	21.4	mg/L	01/18/2025	GEL	EPA 300.0
Total Dissolved Solids	117.5	mg/L	01/16/2025	SKJACOBS	SM 2540C
Radium 226	0.421	pCi/L	02/11/2025	GEL	EPA 903.1 Mod
Radium 228	0.273	pCi/L	02/14/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.694	pCi/L	02/11/2025	GEL	EPA 903.1 Mod
pH	5.20	SU	01/14/2025	MDG/DCA	

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: 4/11/25
Linda Williams - Manager Analytical Services

Authorized Signature Only- Not Valid Unless Signed



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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

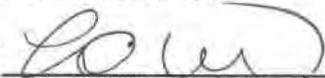
LAB CERTIFICATION #08552

Sample # AG21166 **Location:** GW Well CBW-1 **Date:** 01/14/2025 **Sample Collector:** MDG/DCA
Loc. Code CBW-1 **Time:** 11:54

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Barium	38.3	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/07/2025	SKJACOBS	EPA 6020B
Calcium	23.2	mg/L	01/30/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Cobalt	0.83	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Iron	<50.0	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Lead	2.0	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Antimony	5.9	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/07/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	01/30/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/07/2025	SKJACOBS	EPA 6020B
Boron	21.9	ug/L	01/28/2025	AMSTOCKH	EPA 6010D
Lithium	<5.0	ug/L	01/28/2025	AMSTOCKH	EPA 6010D
Molybdenum	<5.0	ug/L	01/28/2025	AMSTOCKH	EPA 6010D
Mercury	<0.2	ug/L	01/31/2025	EUROFINS SAV	EPA 7470
Total Organic Carbon	1.98	mg/L	01/21/2025	GEL	SM 5310B
Fluoride	0.134	mg/L	01/18/2025	GEL	EPA 300.0
Chloride	3.46	mg/L	01/18/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	0.671	mg/L	01/20/2025	GEL	EPA 353.2
Sulfate	76.9	mg/L	01/18/2025	GEL	EPA 300.0
Total Dissolved Solids	115.0	mg/L	01/16/2025	SKJACOBS	SM 2540C
Radium 226	0.142	pCi/L	02/11/2025	GEL	EPA 903.1 Mod
Radium 228	0.981	pCi/L	02/14/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.12	pCi/L	02/11/2025	GEL	EPA 903.1 Mod
pH	4.68	SU	01/14/2025	MDG/DCA	

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: 4/11/25
 Linda Williams - Manager Analytical Services

Authorized Signature Only- Not Valid Unless Signed



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SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

Sample # AG21206 Location: GW Well POZ-3 Date: 01/28/2025 Sample Collector: ATH/DCA
Loc. Code POZ-3 Time: 14:39

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	106	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Iron	<50.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	11.3	ug/L	02/03/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	2.19	mg/L	02/03/2025	GEL	SM 5310B
Chloride	7.11	mg/L	02/03/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.1	mg/l	02/03/2025	GEL	EPA 353.2
Sulfate	75.4	mg/L	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	592.5	mg/L	02/05/2025	SJLEVY	SM 2540C
Arsenic Dissolved	<5.0	ug/L	02/11/2025	SKJACOBS	EPA 6020B
pH	6.62	SU	01/28/2025	ATH/DCA	

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

Sample Validated:  Final Validation Date: 4/10/25
Linda Williams - Manager, Analytical Services



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 LAB CERTIFICATION #08552

Sample # AG21207 Location: GW Well POZ-4 Date: 01/28/2025 Sample Collector: ATH/DCA
 Loc. Code POZ-4 Time: 10:56

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	77.7	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Iron	297	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Zinc	15.1	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	43.2	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	24.7	ug/L	02/03/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	2.68	mg/L	02/03/2025	GEL	SM 5310B
Chloride	337	mg/L	02/03/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.1	mg/l	02/03/2025	GEL	EPA 353.2
Sulfate	139	mg/L	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	1752	mg/L	02/05/2025	SJLEVY	SM 2540C
Arsenic Dissolved	<5.0	ug/L	02/11/2025	SKJACOBS	EPA 6020B
pH	6.29	SU	01/28/2025	ATH/DCA	

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

Sample Validated:  Final Validation Date: 4/10/25
 Linda Williams - Manager, Analytical Services



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 LAB CERTIFICATION #08552

Sample # AG21209 Location: GW Well POZ-6 Date: 01/28/2025 Sample Collector: ATH/DCA
 Loc. Code POZ-6 Time: 13:39

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	78.7	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Iron	16500	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	3.6	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	39.7	ug/L	02/03/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	2.99	mg/L	02/03/2025	GEL	SM 5310B
Chloride	369	mg/L	02/03/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.1	mg/l	02/03/2025	GEL	EPA 353.2
Sulfate	553	mg/L	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	2405	mg/L	02/05/2025	SJLEVY	SM 2540C
Arsenic Dissolved	<5.0	ug/L	02/11/2025	SKJACOBS	EPA 6020B
pH	6.53	SU	01/28/2025	ATH/DCA	

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

Sample Validated:  Final Validation Date: 4/10/25
 Linda Williams - Manager, Analytical Services



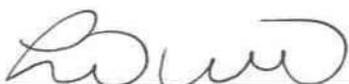
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LAB CERTIFICATION #08552

Sample # AG21210 **Location:** GW Well POZ-7 **Date:** 01/29/2025 **Sample Collector:** ATH/DCA
Loc. Code POZ-7 **Time:** 09:28

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	103	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Iron	<50.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	0.76	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	10.4	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	<1	mg/l	02/03/2025	GEL	SM 5310B
Chloride	20.0	mg/L	02/03/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.1	mg/l	02/03/2025	GEL	EPA 353.2
Sulfate	0.91	mg/l	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	80.00	mg/L	02/03/2025	SKJACOBS	SM 2540C
Arsenic Dissolved	<5.0	ug/L	02/11/2025	SKJACOBS	EPA 6020B
pH	5.21	SU	01/29/2025	ATH/DCA	

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

Sample Validated:  Final Validation Date: 4/10/25
 Linda Williams - Manager, Analytical Services



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SANTEE COOPER ANALYTICAL SERVICES
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LAB CERTIFICATION #08552

Sample # AG21211 Location: GW Well POZ-7 Date: 01/29/2025 Sample Collector: ATH/DCA
Loc. Code POZ-7 DUP Time: 09:33

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	115	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Iron	<50.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	0.78	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	10.5	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	<1	mg/l	02/03/2025	GEL	SM 5310B
Chloride	21.9	mg/L	02/03/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.1	mg/l	02/03/2025	GEL	EPA 353.2
Sulfate	0.87	mg/l	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	97.50	mg/L	02/03/2025	SKJACOBS	SM 2540C
Arsenic Dissolved	<5.0	ug/L	02/11/2025	SKJACOBS	EPA 6020B

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

Sample Validated:  Final Validation Date: 4/10/25
Linda Williams - Manager, Analytical Services



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 LAB CERTIFICATION #08552

Sample # AG21212 Location: GW Well POZ-8 Date: 01/28/2025 Sample Collector: ATH/DCA
 Loc. Code POZ-8 Time: 10:12

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	405	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Iron	13500	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	20.0	ug/L	02/03/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	1.33	mg/L	02/03/2025	GEL	SM 5310B
Chloride	904	mg/L	02/03/2025	GEL	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.1	mg/l	02/03/2025	GEL	EPA 353.2
Sulfate	45.0	mg/L	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	3402	mg/L	02/05/2025	SJLEVY	SM 2540C
Arsenic Dissolved	<5.0	ug/L	02/11/2025	SKJACOBS	EPA 6020B
pH	6.64	SU	01/28/2025	ATH/DCA	

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

Sample Validated:  Final Validation Date: 4/10/25
 Linda Williams - Manager, Analytical Services



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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

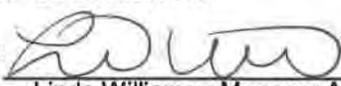
Sample # AG21187 Location: GW Well CCMLF-1 Date: 01/29/2025 Sample Collector: ATH/CDA

Loc. Code CCMLF-1 Time: 12:39

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	65.1	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Calcium	19.4	mg/L	02/06/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	1.1	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Antimony	5.6	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	20.1	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/18/2025	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	02/03/2025	GEL	EPA 300.0
Chloride	8.06	mg/L	02/02/2025	GEL	EPA 300.0
Sulfate	8.40	mg/L	02/02/2025	GEL	EPA 300.0
Total Dissolved Solids	102.5	mg/L	02/03/2025	SKJACOBS	SM 2540C
Radium 226	0.790	pCi/L	03/02/2025	SUB_GEL	EPA 903.1 Mod
Radium 228	0.481	pCi/L	02/26/2025	SUB_GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.27	pCi/L	03/24/2025	SJLEVY	EPA 903.1 Mod
pH	6.19	SU	01/29/2025	ATH/DCA	

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: 4/11/25
 Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

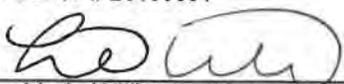
LAB CERTIFICATION #08552

Sample # AG21188 Location: GW Well CCMLF-1D Date: 01/29/2025 Sample Collector: ATH/CDA
 Loc. Code CCMLF-1D Time: 11:39

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Barium	38.8	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Calcium	55.4	mg/L	02/07/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Antimony	5.5	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/06/2025	SKJACOBS	EPA 6020B
Boron	15.2	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/18/2025	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	02/03/2025	GEL	EPA 300.0
Chloride	6.04	mg/L	02/02/2025	GEL	EPA 300.0
Sulfate	3.98	mg/L	02/02/2025	GEL	EPA 300.0
Total Dissolved Solids	172.5	mg/L	02/03/2025	SKJACOBS	SM 2540C
Radium 226	0.381	pCi/L	03/02/2025	SUB_GEL	EPA 903.1 Mod
Radium 228	0.382	pCi/L	02/26/2025	SUB_GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.763	pCi/L	03/24/2025	SJLEVY	EPA 903.1 Mod
pH	7.38	SU	01/29/2025	ATH/DCA	

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: 4/11/25
 Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

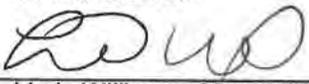
LAB CERTIFICATION #08552

Sample # AG21189 Location: GW Well CCMLF-2 Date: 01/29/2025 Sample Collector: ATH/CDA
 Loc. Code CCMLF-2 Time: 13:43

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Barium	28.0	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/12/2025	SKJACOBS	EPA 6020B
Calcium	9180	mg/L	02/13/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Antimony	6.0	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/12/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/13/2025	SKJACOBS	EPA 6020B
Boron	16.1	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	02/10/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	02/18/2025	EUROFINS SAV	EPA 7470
Fluoride	<0.1	mg/L	02/03/2025	GEL	EPA 300.0
Chloride	5.11	mg/L	02/02/2025	GEL	EPA 300.0
Sulfate	0.44	mg/L	02/03/2025	GEL	EPA 300.0
Total Dissolved Solids	50.00	mg/L	02/03/2025	SKJACOBS	SM 2540C
Radium 226	1.00	pCi/L	03/02/2025	SUB_GEL	EPA 903.1 Mod
Radium 228	0.513	pCi/L	02/26/2025	SUB_GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.51	pCi/L	03/24/2025	SJLEVY	EPA 903.1 Mod
pH	5.66	SU	01/29/2025	ATH/DCA	

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: 4/11/25
 Linda Williams - Manager Analytical Services

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CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG21164 Location: GW Well CAP-13 Date: 01/16/2025 Sample Collector: MDG/DCA
 Loc. Code CAP-13 Time: 14:08

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Barium	119	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	02/04/2025	SKJACOBS	EPA 6020B
Calcium	31.5	mg/L	02/03/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Cobalt	1.1	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Antimony	6.3	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	02/03/2025	SKJACOBS	EPA 6020B
Boron	15.7	ug/L	01/29/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	01/29/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	01/29/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	01/31/2025	EUROFINS SAV	EPA 7470
Fluoride	0.405	mg/L	01/21/2025	GEL	EPA 300.0
Chloride	5.66	mg/L	01/21/2025	GEL	EPA 300.0
Sulfate	75.9	mg/L	01/21/2025	GEL	EPA 300.0
Total Dissolved Solids	155.0	mg/L	01/17/2025	SKJACOBS	SM 2540C
Radium 226	0.835	pCi/L	02/13/2025	GEL	EPA 903.1 Mod
Radium 228	0.632	pCi/L	02/05/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.47	pCi/L	03/04/2025	SJL	EPA 903.1 Mod
pH	4.81	SU	01/16/2025	MDG/DCA	

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: 4/11/25
 Linda Williams - Manager Analytical Services

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

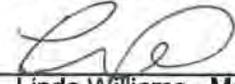
LAB CERTIFICATION #08552

Sample # AG34934 **Location:** GW Well PM-1 **Date:** 06/02/2025 **Sample Collector:** AGP/EA
Loc. Code PM-1 **Time:** 10:34

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Barium	86.9	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Cobalt	1.7	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Iron	11100	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Boron	13.4	ug/L	06/11/2025	SKJACOBS	EPA 6010D
Total Organic Carbon	5.36	mg/L	06/13/2025	GEL	SM 5310B
Chloride	11.2	mg/L	06/13/2025	AMSTOCKH	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.07	mg/L	06/18/2025	GEL	EPA 353.2
Sulfate	16.8	mg/L	06/13/2025	AMSTOCKH	EPA 300.0
Total Dissolved Solids	175.0	mg/L	06/06/2025	GJKOCENI	SM 2540C
pH	5.21	SU	06/02/2025	AGP/EA	

Comments:

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

Analysis Validated:  Validation date: 8/1/25
Linda Williams - Manager Analytical Services

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SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552

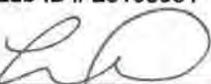
Sample # AG34895 **Location:** GW Well CBW-1 **Date:** 06/03/2025 **Sample Collector:** AGP/EA
Loc. Code CBW-1 **Time:** 10:21

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Barium	37.9	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Calcium	21.7	mg/L	06/10/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Cobalt	1.1	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Iron	166	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Lead	2.4	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Antimony	6.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Zinc	13.7	ug/L	06/10/2025	SKJACOBS	EPA 6020B
Boron	21.2	ug/L	06/11/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/11/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/11/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/12/2025	EUROFINS ATL	EPA 7470
Total Organic Carbon	1.23	mg/L	06/13/2025	GEL	SM 5310B
Fluoride	0.11	mg/L	06/04/2025	AMSTOCKH	EPA 300.0
Chloride	3.65	mg/L	06/13/2025	AMSTOCKH	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	1.76	mg/L	06/18/2025	GEL	EPA 353.2
Sulfate	83.9	mg/L	06/13/2025	AMSTOCKH	EPA 300.0
Total Dissolved Solids	167.5	mg/L	06/06/2025	GJKOCENI	SM 2540C
Radium 226	0.401	pCi/L	06/24/2025	GEL	EPA 903.1 Mod
Radium 228	0.590	pCi/L	06/26/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.991	pCi/L	07/14/2025	SJLEVY	EPA 903.1 Mod
pH	4.69	SU	06/03/2025	AGP/EA	

Comments:

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

Analysis Validated:



Linda Williams - Manager Analytical Services

Validation date:

8/1/25

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34935 Location: GW Well POZ-3 Date: 06/10/2025 Sample Collector: AGP/EA
Loc. Code POZ-3 Time: 13:14

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Barium	91.4	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cobalt	2.3	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Iron	100	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Boron	13.3	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Arsenic Dissolved	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6020B
Total Organic Carbon	1.98	mg/L	06/18/2025	GEL	SM 5310B
Chloride	6.54	mg/L	06/11/2025	RWMIMS	EPA 300.0
Nitrate	<0.10	mg/L	06/11/2025	RWMIMS	EPA 300.0
Sulfate	70.5	mg/L	06/11/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	555.0	mg/L	06/13/2025	TDHARRIS	SM 2540C
pH	6.52	SU	06/10/2025	AGP/EA	

Comments:

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

Analysis Validated:



Linda Williams - Manager Analytical Services

Validation date: 8/1/25

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34936 **Location:** GW Well POZ-4 **Date:** 06/09/2025 **Sample Collector:** AGP/EA
Loc. Code POZ-4 **Time:** 16:33

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Barium	69.1	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cobalt	122	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Iron	1260	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Boron	28.1	ug/L	06/13/2025	SKJACOBS	EPA 6010D
Arsenic Dissolved	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6020B
Total Organic Carbon	2.25	mg/L	06/19/2025	GEL	SM 5310B
Chloride	368	mg/L	06/19/2025	RWMIMS	EPA 300.0
Nitrate-Nitrite Cadmium Reduction	<0.2	mg/L	06/18/2025	GEL	EPA 353.2
Sulfate	145	mg/L	06/19/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	1615	mg/L	06/10/2025	JRLOTITO	SM 2540C
pH	6.20	SU	06/09/2025	AGP/EA	

Comments:

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

Analysis Validated:



Linda Williams - Manager Analytical Services

Validation date:

8/1/25

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34938 **Location:** GW Well POZ-6 **Date:** 06/10/2025 **Sample Collector:** AGP/EA
Loc. Code POZ-6 **Time:** 12:10

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Barium	78.7	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cobalt	1.7	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Iron	18200	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Boron	26.1	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Arsenic Dissolved	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6020B
Total Organic Carbon	2.63	mg/L	06/18/2025	GEL	SM 5310B
Chloride	421	mg/L	06/11/2025	RWMIMS	EPA 300.0
Nitrate	<0.10	mg/L	06/11/2025	RWMIMS	EPA 300.0
Sulfate	652	mg/L	06/11/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	2340	mg/L	06/11/2025	JRLOTITO	SM 2540C
pH	6.49	SU	06/10/2025	AGP/EA	

Comments:

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

Analysis Validated:

Linda Williams - Manager Analytical Services

Validation date:

8/1/25

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34939 **Location:** GW Well POZ-7 **Date:** 06/10/2025 **Sample Collector:** AGP/EA
Loc. Code POZ-7 **Time:** 14:17

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Barium	92.4	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cobalt	1.1	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Iron	59.1	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Boron	10.8	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Arsenic Dissolved	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6020B
Total Organic Carbon	<1.00	mg/L	06/19/2025	GEL	SM 5310B
Chloride	20.4	mg/L	06/11/2025	RWMIMS	EPA 300.0
Nitrate	<0.10	mg/L	06/11/2025	RWMIMS	EPA 300.0
Sulfate	<2.00	mg/L	06/11/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	82.50	mg/L	06/11/2025	JRLOTITO	SM 2540C
pH	4.88	SU	06/10/2025	AGP/EA	

Comments:

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

Analysis Validated:



Linda Williams - Manager Analytical Services

Validation date:

8/1/25

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34940 **Location:** GW Well POZ-7 **Date:** 06/10/2025 **Sample Collector:** AGP/EA

Loc. Code POZ-7 **DUP** **Time:** 14:22

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Barium	95.7	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cobalt	0.56	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Iron	<50.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Zinc	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Boron	<10.0	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Arsenic Dissolved	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6020B
Total Organic Carbon	<1.00	mg/L	06/19/2025	GEL	SM 5310B
Chloride	22.2	mg/L	06/11/2025	RWMIMS	EPA 300.0
Nitrate	<0.10	mg/L	06/11/2025	RWMIMS	EPA 300.0
Sulfate	<2.00	mg/L	06/11/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	100.0	mg/L	06/11/2025	JRLOTITO	SM 2540C

Comments:

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

Analysis Validated:

Linda Williams - Manager Analytical Services

Validation date: 8/1/25

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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34941 Location: GW Well POZ-8 Date: 06/10/2025 Sample Collector: AGP/EA

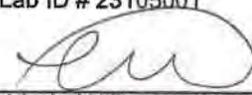
Loc. Code POZ-8 Time: 09:53

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Barium	409	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Calcium	558	mg/L	06/17/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Cobalt	<0.5	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	06/17/2025	SKJACOBS	EPA 6020B
Boron	19.6	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Lithium	67.8	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/30/2025	EUROFINS ATL	EPA 7470
Fluoride	<0.10	mg/L	06/11/2025	RWMIMS	EPA 300.0
Chloride	1030	mg/L	06/11/2025	RWMIMS	EPA 300.0
Sulfate	48.0	mg/L	06/11/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	3325	mg/L	06/11/2025	JRLOTITO	SM 2540C
Radium 226	0.849	pCi/L	07/03/2025	GEL	EPA 903.1 Mod
Radium 228	0.318	pCi/L	07/08/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.17	pCi/L	07/14/2025	SJLEVY	EPA 903.1 Mod
pH	6.60	SU	06/10/2025	AGP/EA	

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: 7/28/25

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AG34916 Location: GW Well CCMLF-1 Date: 06/17/2025 Sample Collector: AGP/EA

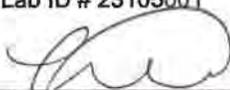
Loc. Code CCMLF-1 Time: 09:41

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Barium	75.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Calcium	21.0	mg/L	06/25/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Cobalt	2.1	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Boron	18.9	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/30/2025	EUROFINS ATL	EPA 7470
Fluoride	<0.10	mg/L	06/23/2025	RWMIMS	EPA 300.0
Chloride	8.57	mg/L	06/23/2025	RWMIMS	EPA 300.0
Sulfate	11.5	mg/L	06/23/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	97.50	mg/L	06/18/2025	JRLOTITO	SM 2540C
Radium 226	0.716	pCi/L	07/09/2025	GEL	EPA 903.1 Mod
Radium 228	0.813	pCi/L	07/09/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.53	pCi/L	07/22/2025	SJLEVY	EPA 903.1 Mod
pH	5.83	SU	06/17/2025	AGP/EA	

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: 7/28/25

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552
Sample # AG34917 **Location:** GW Well CCMLF-1D **Date:** 06/17/2025 **Sample Collector:** AGP/EA

Loc. Code CCMLF-1D **Time:** 10:33

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Barium	39.5	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	06/26/2025	SKJACOBS	EPA 6020B
Calcium	55.1	mg/L	06/26/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Cobalt	0.51	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/26/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Boron	14.5	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/30/2025	EUROFINS ATL	EPA 7470
Fluoride	<0.10	mg/L	06/23/2025	RWMIMS	EPA 300.0
Chloride	6.43	mg/L	06/23/2025	RWMIMS	EPA 300.0
Sulfate	4.06	mg/L	06/23/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	180.0	mg/L	06/18/2025	JRLOTITO	SM 2540C
Radium 226	0.636	pCi/L	07/09/2025	GEL	EPA 903.1 Mod
Radium 228	1.00	pCi/L	07/09/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.64	pCi/L	07/22/2025	SJLEVY	EPA 903.1 Mod
pH	7.04	SU	06/17/2025	AGP/EA	

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: 7/28/25

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES
CERTIFICATE OF ANALYSIS
LAB CERTIFICATION #08552
Sample # AG34918 **Location:** GW Well CCMLF-2 **Date:** 06/16/2025 **Sample Collector:** AGP/EA

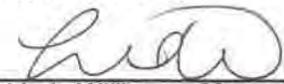
Loc. Code CCMLF-2 **Time:** 15:52

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Barium	32.4	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Calcium	14.5	mg/L	06/25/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Cobalt	0.98	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Antimony	7.3	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	06/25/2025	SKJACOBS	EPA 6020B
Boron	14.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/24/2025	SKJACOBS	EPA 6010D
Mercury	<0.2	ug/L	06/30/2025	EUROFINS ATL	EPA 7470
Fluoride	<0.10	mg/L	06/23/2025	RWMIMS	EPA 300.0
Chloride	6.18	mg/L	06/23/2025	RWMIMS	EPA 300.0
Sulfate	<2.0	mg/L	06/23/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	62.50	mg/L	06/17/2025	JRLOTITO	SM 2540C
Radium 226	0.534	pCi/L	07/09/2025	GEL	EPA 903.1 Mod
Radium 228	0.896	pCi/L	07/09/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	1.43	pCi/L	07/22/2025	SJLEVY	EPA 903.1 Mod
pH	5.41	SU	06/16/2025	AGP/EA	

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:

7/28/25

Authorized Signature Only- Not Valid Unless Signed

SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

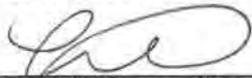
LAB CERTIFICATION #08552

Sample # AG34893 Location: GW Well CAP-13 Date: 06/05/2025 Sample Collector: AGP/EA
Loc. Code CAP-13 Time: 09:37

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Barium	130	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Beryllium	<0.5	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Calcium	32.5	mg/L	06/13/2025	SKJACOBS	EPA 6020B
Cadmium	<0.5	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Cobalt	1.1	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Chromium	<5.0	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Lead	<1.0	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Antimony	<5.0	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Selenium	<10.0	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Thallium	<1.0	ug/L	06/13/2025	SKJACOBS	EPA 6020B
Boron	20.8	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Lithium	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Molybdenum	<5.0	ug/L	06/16/2025	SKJACOBS	EPA 6010D
Mercury	<0.200	ug/L	06/12/2025	EUROFINS	EPA 7470
Fluoride	<0.10	mg/L	06/19/2025	RWMIMS	EPA 300.0
Chloride	6.36	mg/L	06/19/2025	RWMIMS	EPA 300.0
Sulfate	84.8	mg/L	06/19/2025	RWMIMS	EPA 300.0
Total Dissolved Solids	212.5	mg/L	06/06/2025	GJKOCENI	SM 2540C
Radium 226	0.210	pCi/L	06/24/2025	GEL	EPA 903.1 Mod
Radium 228	0.736	pCi/L	06/26/2025	GEL	EPA 904.0
Radium 226/228 Combined Calculation	0.946	pCi/L	07/14/2025	SJLEVY	EPA 903.1 Mod
pH	4.94	SU	06/05/2025	AGP/EA	

Comments:

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

Analysis Validated:  Validation date: 8/1/25
Linda Williams - Manager Analytical Services

Authorized Signature Only- Not Valid Unless Signed



santee cooper

Chain of Custody

Cross
CCR/Class 2 LF
(POZ-3, POZ-4, POZ-6,
POZ-7, POZ-8, and
Duplicate POZ-7)

Customer/Send Report To: Melanie Goings/A203

Need Results By (Date Needed): 3 Weeks

Project/Task/Unit #: 125915 JIM02.09.G01.1 / 36500

36115

Contract Lab Due Date (Lab Only): _____

Labworks ID Number	Sample Location / Description	Collection		By
		Date	Time	
AG34936	POZ-4	6/9/25	1633	AGP/EA

Preservative	Sample Analysis Requested (Method)				
	Bottle Type (Glass/Plastic)	Number of Containers	Fill in the Number of Containers for each Test	Sample Type: (G) Glass (P) Plastic	Sample Type: (G) Grab (C) Composite
As, Ba, Be, Ca, Cd, Cr, Fe, Pb, Se, Si, Zn	As, Ba, Be, Ca, Cd, Cr, Fe, Pb, Se, Si, Zn	1	1	1/3	1
B, Li, Hg, Mo	B, Li, Hg, Mo	P	P	G	P
TOC	TOC	P	P	G	P
F, Cl, NO3, SO4, TDS	F, Cl, NO3, SO4, TDS	P	P	G	P
Ra 226, Ra 228	Ra 226, Ra 228	P	P	G	P
disolved As	disolved As	P	P	G	P

Temperature Checks: Internal Use Only

TEMP (°C)	INIT
5.8	SJL

Comments

-EDITED CONTAINER AMOUNTS
-ADDED PARAMETERS
-SENDING N03 -> GEL

FLUOREN IN LAB
SRL
Spectrum Lot # 1124081
Batch # 20250213-01
1:1 Nitric Acid (HNO3) RL
6/10/25 @ 12:58
Lot # Thermo Sci U23K034
Batch # 20250213-1
1:1 Sulfuric Acid (H2SO4)
6/10/25 @ 12:05 SJL

Composite Sampler:
Start Date/Time:
End Date/Time:

Preservative Record	Compos. Lab	Yes	No	If preserved, Lot#	Date/Time/Int		Date/Time/Int	
					Received by: From Person / Lockbox	Employee #	Received by: From Person / Lockbox	Employee #
Reinforced by: (G) Person / Lockbox	38361				6/10/25	800	AGP/EA	35594
Reinforced by: (P) Person / Lockbox								
Reinforced by: (T) Person / Lockbox								

Available Analyses: Metals: Ag, Al, As, B, Be, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Se, Sh, Ti, V, Zn, P, S, SiO2, Sr, Tl, CrVI
 TOC / DOC
 TP, TPO4, NH3-N
 F, Cl, NO2, Br, NO3, SO4, OPO4
 TDS, TSS
 Sulfide
 BTEX, Naphthalene, MTBE, VOC
 Rad 226, Rad 228
 Oil & Grease
 E.coli, Total Coliform

Wellhead Gyr: ADM, TOC, Total and Soluble Metals, Purity, % Moisture, Sulfides, pH, Chloride, Particle Size
Daily Gyr: Free Moisture, Purity (CaSO4)
Limestone Analysis: Acid Insoluble Matter, Total Metals, LOI, Purity (CaCO3), % Moisture
Flyash: Ammonia, LOI, % Carbon, Free CaO, Mineral Analysis
Coal Short Prox: % Moisture, Ash, Sulfur, BTUs
Coal Ultimate: % Moisture, Ash, Sulfur, BTUs, Volatile Matter, CEN
XRF Scan
Sieve Analysis
Pulverizer Fitness
Particulate Matter Analysis

Dissolved Metals: As, Fe
 pH
Oil Quality: % Moisture, Color, Acidity
 Dielectric Strength, Interfacial Tension
 Density
 Traps: Dissolved Gases in Oil
 Metals (OJ): As, Cl, Cr, Ni, Pb, Hg
 Flash point, Total Halogens, PCB
 GOFER Oil# GOFER Used Oil# USED OIL

TOC 220325000/4618744 GEL 5/27/25

RAD 243272/0117801J 5/25/25

107130 Groundwater 00 GW and Waste00 GW Chain of Custodes



Chain of Custody

Cross
CCR CMA

(CCMLF-1, CCMLF-1D,
CCMLF-2, and CCMAP-1, 2,
3, 4, 5, 6, 7, 8, 9, 10, 11, 12,
13, 14 with duplicate at
CCMAP-4)

Customer/Send Report To: **Melanie Goings/A203**

Need Results By (Date Needed): **3 Weeks**

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

36110

Contract Lab Due Date (Lab Only):

Labworks ID Number	Sample Location / Description	Collection		Sample Analysis Requested (Method)	Preservative	Number of Containers		Temperature Checks: Internal Use Only											
		Date	Time			By	Matrix		TEMP (°C)	INIT									
AG34896	CCMAP-1	6/16/25	943	AGP/EA	G	GW	7	2	1	1	1 1/2								
AG34907	CCMAP-11	6/16/25	1117	AGP/EA	G	GW	7	2	1	1	2								
AG34904	CCMAP-8	6/16/25	1225	AGP/EA	G	GW	7	2	1	1	2								
AG34906	CCMAP-10	6/16/25	1329	AGP/EA	G	GW	7	2	1	1	2								
AG34905	CCMAP-9	6/16/25	1425	AGP/EA	G	GW	7	2	1	1	2								
AG34918	CCMLF-2	6/16/25	1552	AGP/EA	G	GW	7	2	1	1	2								
<p>Matrix Code: GW-Groundwater, DW-Drinking Water, SW-Surface Water, WW-Wastewater, BW-Boiler Water, LA-Limezone, O-Oil, S-Soil, SL-Solid, C-Cool, G-Gypsum, FA-Fly Ash, BA-Bottom Ash, M-Minerals (Specify)</p> <p>Preservation used: 1-<4°C, 2-HNO₃, 3-H₂SO₄, 4-HCl, 5-Na₂S₂O₅, 6-Other (Specify)</p>										<p>Composite Samples: Start Date/Time: End Date/Time:</p>		<p>Spectrum Lot # 1124081 Batch # 20250213-01 1:1 Nitric Acid (HNO3) Santee Cooper</p>							
<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>		<p>Relinquished by: (To Person / Lockbox)</p>	

Available Analyses:
 TOC / DOC
 TP, TPO4, NH3-N
 F, Cl, NO2, Br, NO3, SO4, OPO4
 TDS, TSS
 Sulfide
 BTEX, Naphthalene, MTBE, VOC
 Rad 226, Rad 228
 Oil & Grease
 E.coli, Total Coliform

Metals: Ag, Al, As, B, Be, Bi, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Ti, V, Zn, P, S, SiO2, Sr, Tl, CrVI
Dissolved Metals: As, Fe, pH
Coal Ultimate: % Moisture, Ash, Sulfur, BTUs, Volatile Matter, CHN
XRF Scan
 Sieve Analysis
 Pulverizer Fineness
 Particulate Matter Analysis

Coal Short Prox: % Moisture, Ash, Sulfur, BTUs
Coal Ultimate: % Moisture, Ash, Sulfur, BTUs, Volatile Matter, CHN
XRF Scan
 Sieve Analysis
 Pulverizer Fineness
 Particulate Matter Analysis

Oil Quality: % Moisture, Color, Acidity
 Dielectric Strength, Interfacial Tension
 Density
Togas: Dissolved Gases in Oil
Metals (OH): As, Cd, Cr, Ni, Pb, Hg
 Flash point, Total Halogens, PCB
Gofer Oil:#GOFER Used OH:#USED OIL.

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/13/2025 9:22:47 AM

JOB DESCRIPTION

125915/JM02.09.G01/36500

JOB NUMBER

705-33233-1

Eurofins Atlanta

Job Notes

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

Authorization



Generated
6/13/2025 9:22:47 AM

Authorized for release by
Tiffany Heifferon, Project Manager I
Tiffany.Heifferon@et.eurofinsus.com
(770)457-8177

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Case Narrative

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

Job ID: 705-33233-1

Job ID: 705-33233-1

Eurofins Atlanta

Job Narrative 705-33233-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/11/2025 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Metals

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

Eurofins Atlanta

Detection Summary

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

Job ID: 705-33233-1

Client Sample ID: AG34934

Lab Sample ID: 705-33233-1

No Detections.

Client Sample ID: AG34930

Lab Sample ID: 705-33233-2

No Detections.

Client Sample ID: AG34929

Lab Sample ID: 705-33233-3

No Detections.

Client Sample ID: AG34911

Lab Sample ID: 705-33233-4

No Detections.

Client Sample ID: AG34927

Lab Sample ID: 705-33233-5

No Detections.

Client Sample ID: AG34928

Lab Sample ID: 705-33233-6

No Detections.

Client Sample ID: AG34933

Lab Sample ID: 705-33233-7

No Detections.

Client Sample ID: AG34926

Lab Sample ID: 705-33233-8

No Detections.

Client Sample ID: AG34895

Lab Sample ID: 705-33233-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Atlanta

Sample Summary

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

Job ID: 705-33233-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
705-33233-1	AG34934	Water	06/02/25 10:34	06/11/25 10:00
705-33233-2	AG34930	Water	06/05/25 10:47	06/11/25 10:00
705-33233-3	AG34929	Water	06/05/25 11:45	06/11/25 10:00
705-33233-4	AG34911	Water	06/05/25 12:44	06/11/25 10:00
705-33233-5	AG34927	Water	06/05/25 13:39	06/11/25 10:00
705-33233-6	AG34928	Water	06/05/25 13:44	06/11/25 10:00
705-33233-7	AG34933	Water	06/05/25 14:50	06/11/25 10:00
705-33233-8	AG34926	Water	06/05/25 15:48	06/11/25 10:00
705-33233-9	AG34895	Water	06/03/25 10:21	06/11/25 10:00



Method Summary

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

Job ID: 705-33233-1

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

Protocol References:

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

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177



Definitions/Glossary

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

Job ID: 705-33233-1

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

Client Sample Results

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

Job ID: 705-33233-1

Client Sample ID: AG34934

Lab Sample ID: 705-33233-1

Date Collected: 06/02/25 10:34

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:18	1

Client Sample ID: AG34930

Lab Sample ID: 705-33233-2

Date Collected: 06/05/25 10:47

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:30	1

Client Sample ID: AG34929

Lab Sample ID: 705-33233-3

Date Collected: 06/05/25 11:45

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:34	1

Client Sample ID: AG34911

Lab Sample ID: 705-33233-4

Date Collected: 06/05/25 12:44

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:38	1

Client Sample ID: AG34927

Lab Sample ID: 705-33233-5

Date Collected: 06/05/25 13:39

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:42	1

Client Sample ID: AG34928

Lab Sample ID: 705-33233-6

Date Collected: 06/05/25 13:44

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:45	1

Client Sample ID: AG34933

Lab Sample ID: 705-33233-7

Date Collected: 06/05/25 14:50

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:24	1

Client Sample Results

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

Job ID: 705-33233-1

Client Sample ID: AG34926

Lab Sample ID: 705-33233-8

Date Collected: 06/05/25 15:48

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:28	1

Client Sample ID: AG34895

Lab Sample ID: 705-33233-9

Date Collected: 06/03/25 10:21

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:32	1

QC Association Summary

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

Job ID: 705-33233-1

Metals

Prep Batch: 61050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-33233-1	AG34934	Total/NA	Water	7470A	
705-33233-2	AG34930	Total/NA	Water	7470A	
705-33233-3	AG34929	Total/NA	Water	7470A	
705-33233-4	AG34911	Total/NA	Water	7470A	
705-33233-5	AG34927	Total/NA	Water	7470A	
705-33233-6	AG34928	Total/NA	Water	7470A	
705-33233-7	AG34933	Total/NA	Water	7470A	
705-33233-8	AG34926	Total/NA	Water	7470A	
705-33233-9	AG34895	Total/NA	Water	7470A	
MB 705-61050/1-A	Method Blank	Total/NA	Water	7470A	
LCS 705-61050/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-33233-1 MS	AG34934	Total/NA	Water	7470A	
705-33233-1 MSD	AG34934	Total/NA	Water	7470A	

Analysis Batch: 61272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-33233-1	AG34934	Total/NA	Water	7470A	61050
705-33233-2	AG34930	Total/NA	Water	7470A	61050
705-33233-3	AG34929	Total/NA	Water	7470A	61050
705-33233-4	AG34911	Total/NA	Water	7470A	61050
705-33233-5	AG34927	Total/NA	Water	7470A	61050
705-33233-6	AG34928	Total/NA	Water	7470A	61050
705-33233-7	AG34933	Total/NA	Water	7470A	61050
705-33233-8	AG34926	Total/NA	Water	7470A	61050
705-33233-9	AG34895	Total/NA	Water	7470A	61050
MB 705-61050/1-A	Method Blank	Total/NA	Water	7470A	61050
LCS 705-61050/2-A	Lab Control Sample	Total/NA	Water	7470A	61050
705-33233-1 MS	AG34934	Total/NA	Water	7470A	61050
705-33233-1 MSD	AG34934	Total/NA	Water	7470A	61050

QC Sample Results

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

Job ID: 705-33233-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 705-61050/1-A
Matrix: Water
Analysis Batch: 61272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:10	1

Lab Sample ID: LCS 705-61050/2-A
Matrix: Water
Analysis Batch: 61272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00400	0.004078		mg/L		102	80 - 120

Lab Sample ID: 705-33233-1 MS
Matrix: Water
Analysis Batch: 61272

Client Sample ID: AG34934
Prep Type: Total/NA
Prep Batch: 61050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000200	U	0.00400	0.003985		mg/L		100	75 - 125

Lab Sample ID: 705-33233-1 MSD
Matrix: Water
Analysis Batch: 61272

Client Sample ID: AG34934
Prep Type: Total/NA
Prep Batch: 61050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000200	U	0.00400	0.004035		mg/L		101	75 - 125	1	20

Lab Chronicle

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

Job ID: 705-33233-1

Client Sample ID: AG34934

Lab Sample ID: 705-33233-1

Date Collected: 06/02/25 10:34

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 18:18

Client Sample ID: AG34930

Lab Sample ID: 705-33233-2

Date Collected: 06/05/25 10:47

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 18:30

Client Sample ID: AG34929

Lab Sample ID: 705-33233-3

Date Collected: 06/05/25 11:45

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 18:34

Client Sample ID: AG34911

Lab Sample ID: 705-33233-4

Date Collected: 06/05/25 12:44

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 18:38

Client Sample ID: AG34927

Lab Sample ID: 705-33233-5

Date Collected: 06/05/25 13:39

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 18:42

Client Sample ID: AG34928

Lab Sample ID: 705-33233-6

Date Collected: 06/05/25 13:44

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 18:45

Lab Chronicle

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

Job ID: 705-33233-1

Client Sample ID: AG34933

Lab Sample ID: 705-33233-7

Date Collected: 06/05/25 14:50

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:24

Client Sample ID: AG34926

Lab Sample ID: 705-33233-8

Date Collected: 06/05/25 15:48

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:28

Client Sample ID: AG34895

Lab Sample ID: 705-33233-9

Date Collected: 06/03/25 10:21

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:32

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 705-33233-1

Login Number: 33233

List Number: 1

Creator: Myndresku, Victor

List Source: Eurofins Atlanta

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
The cooler does not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
COC present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Sample custody seals, if present, are intact.	True	
Sample collection date/times are provided.	True	
The samples do not appear to have been compromised or tampered with.	True	
Containers are not broken or leaking.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Appropriate sample containers were rec'd and sufficient volume for all analyses.	True	
Samples are received within Holding Time (excluding tests with immediate HTs).	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Is there sufficient air space in bottle for bacteriological analysis.	True	

Accreditation/Certification Summary

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

Job ID: 705-33233-1

Laboratory: Eurofins Atlanta

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87582	06-30-25
South Carolina	State	98016	06-30-25

- 1
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- 6
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- 14
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- 1
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END OF REPORT

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/7/2025 5:52:45 PM

JOB DESCRIPTION

125915/JM02.09.G01/36500

JOB NUMBER

680-261276-1

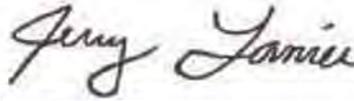
Eurofins Savannah

Job Notes

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

Authorization



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Authorized for release by
Jerry Lanier, Project Manager I
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(912)250-0281

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Case Narrative

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

Job ID: 680-261276-1

Job ID: 680-261276-1

Eurofins Savannah

Job Narrative 680-261276-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 1/29/2025 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 11.1°C.

Metals

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

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Sample Summary

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

Job ID: 680-261276-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-261276-1	AG21159	Water	01/16/25 09:54	01/29/25 11:00
680-261276-2	AG21160	Water	01/16/25 09:59	01/29/25 11:00
680-261276-3	AG21164	Water	01/16/25 14:08	01/29/25 11:00
680-261276-4	AG21205	Water	01/14/25 10:19	01/29/25 11:00
680-261276-5	AG21166	Water	01/14/25 11:54	01/29/25 11:00
680-261276-6	AG21169	Water	01/21/25 10:10	01/29/25 11:00
680-261276-7	AG21174	Water	01/21/25 11:19	01/29/25 11:00
680-261276-8	AG21181	Water	01/21/25 12:17	01/29/25 11:00

Method Summary

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

Job ID: 680-261276-1

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

Protocol References:

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

Laboratory References:

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



Definitions/Glossary

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

Job ID: 680-261276-1

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.G01/36500

Job ID: 680-261276-1

Client Sample ID: AG21159

Lab Sample ID: 680-261276-1

No Detections.

Client Sample ID: AG21160

Lab Sample ID: 680-261276-2

No Detections.

Client Sample ID: AG21164

Lab Sample ID: 680-261276-3

No Detections.

Client Sample ID: AG21205

Lab Sample ID: 680-261276-4

No Detections.

Client Sample ID: AG21166

Lab Sample ID: 680-261276-5

No Detections.

Client Sample ID: AG21169

Lab Sample ID: 680-261276-6

No Detections.

Client Sample ID: AG21174

Lab Sample ID: 680-261276-7

No Detections.

Client Sample ID: AG21181

Lab Sample ID: 680-261276-8

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21159

Lab Sample ID: 680-261276-1

Date Collected: 01/16/25 09:54

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/04/25 14:09	02/04/25 19:20	1

- 1
- 2
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Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21160

Lab Sample ID: 680-261276-2

Date Collected: 01/16/25 09:59

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		01/30/25 12:20	01/31/25 10:16	1

- 1
- 2
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Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21164

Lab Sample ID: 680-261276-3

Date Collected: 01/16/25 14:08

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		01/30/25 12:20	01/31/25 10:30	1

- 1
- 2
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Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21205

Lab Sample ID: 680-261276-4

Date Collected: 01/14/25 10:19

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/04/25 14:09	02/04/25 19:29	1

- 1
- 2
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- 13
- 14

Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21166

Lab Sample ID: 680-261276-5

Date Collected: 01/14/25 11:54

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		01/30/25 12:20	01/31/25 10:11	1

- 1
- 2
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- 13
- 14

Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21169

Lab Sample ID: 680-261276-6

Date Collected: 01/21/25 10:10

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U F1	0.200		ug/L		02/04/25 14:09	02/04/25 19:13	1
Mercury	0.200	U	0.200		ug/L		02/06/25 09:32	02/06/25 15:08	1

Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21174

Lab Sample ID: 680-261276-7

Date Collected: 01/21/25 11:19

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/04/25 14:09	02/04/25 19:27	1

Client Sample Results

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

Job ID: 680-261276-1

Client Sample ID: AG21181

Lab Sample ID: 680-261276-8

Date Collected: 01/21/25 12:17

Matrix: Water

Date Received: 01/29/25 11:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/04/25 14:09	02/04/25 19:32	1

QC Sample Results

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

Job ID: 680-261276-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-873869/1-A
Matrix: Water
Analysis Batch: 874046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 873869

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		01/30/25 12:20	01/31/25 09:34	1

Lab Sample ID: LCS 680-873869/2-A
Matrix: Water
Analysis Batch: 874046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 873869

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.469		ug/L		99	80 - 120

Lab Sample ID: 705-18469-M-2-D MS
Matrix: Water
Analysis Batch: 874046

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 873869

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U	1.00	1.053		ug/L		105	80 - 120

Lab Sample ID: 705-18469-M-2-E MSD
Matrix: Water
Analysis Batch: 874046

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 873869

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	1.043		ug/L		104	80 - 120	1	20

Lab Sample ID: MB 680-874409/1-A
Matrix: Water
Analysis Batch: 874508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 874409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/04/25 14:09	02/04/25 19:08	1

Lab Sample ID: LCS 680-874409/2-A
Matrix: Water
Analysis Batch: 874508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 874409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.747		ug/L		110	80 - 120

Lab Sample ID: 680-261276-6 MS
Matrix: Water
Analysis Batch: 874508

Client Sample ID: AG21169
Prep Type: Total/NA
Prep Batch: 874409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U F1	1.00	0.4607	F1	ug/L		46	80 - 120

Lab Sample ID: 680-261276-6 MSD
Matrix: Water
Analysis Batch: 874508

Client Sample ID: AG21169
Prep Type: Total/NA
Prep Batch: 874409

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	0.4203	F1	ug/L		42	80 - 120	9	20

Eurofins Savannah

QC Sample Results

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

Job ID: 680-261276-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-874685/1-A
Matrix: Water
Analysis Batch: 874867

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 874685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/06/25 09:32	02/06/25 14:21	1

Lab Sample ID: LCS 680-874685/2-A
Matrix: Water
Analysis Batch: 874867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 874685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.572		ug/L		103	80 - 120

Lab Sample ID: 400-270127-C-5-H MS
Matrix: Water
Analysis Batch: 874867

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 874685

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U	1.00	1.012		ug/L		101	80 - 120

Lab Sample ID: 400-270127-C-5-I MSD
Matrix: Water
Analysis Batch: 874867

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 874685

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	U	1.00	1.033		ug/L		103	80 - 120	2	20

QC Association Summary

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

Job ID: 680-261276-1

Metals

Prep Batch: 873869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261276-2	AG21160	Total/NA	Water	7470A	
680-261276-3	AG21164	Total/NA	Water	7470A	
680-261276-5	AG21166	Total/NA	Water	7470A	
MB 680-873869/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-873869/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-18469-M-2-D MS	Matrix Spike	Total/NA	Water	7470A	
705-18469-M-2-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 874046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261276-2	AG21160	Total/NA	Water	7470A	873869
680-261276-3	AG21164	Total/NA	Water	7470A	873869
680-261276-5	AG21166	Total/NA	Water	7470A	873869
MB 680-873869/1-A	Method Blank	Total/NA	Water	7470A	873869
LCS 680-873869/2-A	Lab Control Sample	Total/NA	Water	7470A	873869
705-18469-M-2-D MS	Matrix Spike	Total/NA	Water	7470A	873869
705-18469-M-2-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	873869

Prep Batch: 874409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261276-1	AG21159	Total/NA	Water	7470A	
680-261276-4	AG21205	Total/NA	Water	7470A	
680-261276-6	AG21169	Total/NA	Water	7470A	
680-261276-7	AG21174	Total/NA	Water	7470A	
680-261276-8	AG21181	Total/NA	Water	7470A	
MB 680-874409/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-874409/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-261276-6 MS	AG21169	Total/NA	Water	7470A	
680-261276-6 MSD	AG21169	Total/NA	Water	7470A	

Analysis Batch: 874508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261276-1	AG21159	Total/NA	Water	7470A	874409
680-261276-4	AG21205	Total/NA	Water	7470A	874409
680-261276-6	AG21169	Total/NA	Water	7470A	874409
680-261276-7	AG21174	Total/NA	Water	7470A	874409
680-261276-8	AG21181	Total/NA	Water	7470A	874409
MB 680-874409/1-A	Method Blank	Total/NA	Water	7470A	874409
LCS 680-874409/2-A	Lab Control Sample	Total/NA	Water	7470A	874409
680-261276-6 MS	AG21169	Total/NA	Water	7470A	874409
680-261276-6 MSD	AG21169	Total/NA	Water	7470A	874409

Prep Batch: 874685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261276-6	AG21169	Total/NA	Water	7470A	
MB 600-074605/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-874685/2-A	Lab Control Sample	Total/NA	Water	7470A	
400-270127-C-5-H MS	Matrix Spike	Total/NA	Water	7470A	
400-270127-C-5-I MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

QC Association Summary

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

Job ID: 680-261276-1

Metals

Analysis Batch: 874867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261276-6	AG21169	Total/NA	Water	7470A	874685
MB 680-874685/1-A	Method Blank	Total/NA	Water	7470A	874685
LCS 680-874685/2-A	Lab Control Sample	Total/NA	Water	7470A	874685
400-270127-C-5-H MS	Matrix Spike	Total/NA	Water	7470A	874685
400-270127-C-5-I MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	874685

Lab Chronicle

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

Job ID: 680-261276-1

Client Sample ID: AG21159

Lab Sample ID: 680-261276-1

Date Collected: 01/16/25 09:54

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			874409	MG	EET SAV	02/04/25 14:09
Total/NA	Analysis	7470A		1	874508	BCB	EET SAV	02/04/25 19:20

Client Sample ID: AG21160

Lab Sample ID: 680-261276-2

Date Collected: 01/16/25 09:59

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			873869	MG	EET SAV	01/30/25 12:20
Total/NA	Analysis	7470A		1	874046	BCB	EET SAV	01/31/25 10:16

Client Sample ID: AG21164

Lab Sample ID: 680-261276-3

Date Collected: 01/16/25 14:08

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			873869	MG	EET SAV	01/30/25 12:20
Total/NA	Analysis	7470A		1	874046	BCB	EET SAV	01/31/25 10:30

Client Sample ID: AG21205

Lab Sample ID: 680-261276-4

Date Collected: 01/14/25 10:19

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			874409	MG	EET SAV	02/04/25 14:09
Total/NA	Analysis	7470A		1	874508	BCB	EET SAV	02/04/25 19:29

Client Sample ID: AG21166

Lab Sample ID: 680-261276-5

Date Collected: 01/14/25 11:54

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			873869	MG	EET SAV	01/30/25 12:20
Total/NA	Analysis	7470A		1	874046	BCB	EET SAV	01/31/25 10:11

Client Sample ID: AG21169

Lab Sample ID: 680-261276-6

Date Collected: 01/21/25 10:10

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			874409	MG	EET SAV	02/04/25 14:09
Total/NA	Analysis	7470A		1	874508	BCB	EET SAV	02/04/25 19:13
Total/NA	Prep	7470A			874685	MG	EET SAV	02/06/25 09:32
Total/NA	Analysis	7470A		1	874867	BCB	EET SAV	02/06/25 15:08

Lab Chronicle

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

Job ID: 680-261276-1

Client Sample ID: AG21174

Lab Sample ID: 680-261276-7

Date Collected: 01/21/25 11:19

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			874409	MG	EET SAV	02/04/25 14:09
Total/NA	Analysis	7470A		1	874508	BCB	EET SAV	02/04/25 19:27

Client Sample ID: AG21181

Lab Sample ID: 680-261276-8

Date Collected: 01/21/25 12:17

Matrix: Water

Date Received: 01/29/25 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			874409	MG	EET SAV	02/04/25 14:09
Total/NA	Analysis	7470A		1	874508	BCB	EET SAV	02/04/25 19:32

Laboratory References:

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

Chain of Custody



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

LINDA WILLIAMS @santeecooper.com _____ / _____ / _____ 125915 / JMB2.09.G#1 / 36500

Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	MERCURY
AG 21159	CAP-9	1/6/25	0954	MDG DOA	1	P	G	GW	2		X
60	CAP-9 DUP		0957								
64	CAP-13		1408								
AG21205	FM-1	1/14/25	1019								
AG21166	CBW-1		1154								
AG21167	CCMAP-3	1/21/25	1010								
74	CCMAP-7		1117								
81	CCMAP-14		1217								



Nutrients TOC DOC TP/TP04 NH3-N F Cl NO2 Br NO3 SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIML <input type="checkbox"/> FOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> SDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Ba Be Ca Cd Co Cr Cu Fe K Li Mg Mn Mo Na Ni Pb Sb Se Sn Sr Ti Tl V Zn Hg CrVI XRF scan RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
--	--	---	--	---	---

Relinquished by: <u>S. Levy</u>	Employee #: <u>35574</u>	Received by: <u>R. Caldona</u>	Employee #: <u>COURIER</u>	Date: <u>1/29/25</u>	Time: <u>0814</u>	Sample Receiving (Internal Use Only) TEMP (°C): <u>11.1/11.1</u> Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
Relinquished by: <u>R. Caldona</u>	Employee #:	Received by:	Employee #:	Date:	Time:	
Relinquished by:	Employee #:	Received by:	Employee #:	Date:	Time:	
Relinquished by:	Employee #:	Received by:	Employee #:	Date:	Time:	
Relinquished by:	Employee #:	Received by:	Employee #:	Date:	Time:	
Relinquished by:	Employee #:	Received by: <u>C. M...</u>	Employee #:	Date: <u>1/29/25</u>	Time: <u>1100</u>	

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=C4C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-261276-1

Login Number: 261276

List Source: Eurofins Savannah

List Number: 1

Creator: Munro, Caroline

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

Accreditation/Certification Summary

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

Job ID: 680-261276-1

Laboratory: Eurofins Savannah

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

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

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

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

1
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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 2/19/2025 8:47:59 AM

JOB DESCRIPTION

125915/JM02.09-G01.1/36500

JOB NUMBER

680-261808-1

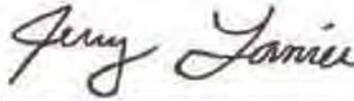
Eurofins Savannah

Job Notes

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

Authorization



Generated
2/19/2025 8:47:59 AM

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

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Case Narrative

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

Job ID: 680-261808-1

Job ID: 680-261808-1

Eurofins Savannah

Job Narrative 680-261808-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 2/12/2025 10:15 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.

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Sample Summary

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

Job ID: 680-261808-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-261808-1	AG21180	GW	02/03/25 09:30	02/12/25 10:15
680-261808-2	AG21179	GW	02/03/25 10:33	02/12/25 10:15
680-261808-3	AG21170	GW	02/03/25 11:54	02/12/25 10:15
680-261808-4	AG21171	GW	02/03/25 11:59	02/12/25 10:15
680-261808-5	AG21172	GW	02/03/25 13:51	02/12/25 10:15
680-261808-6	AG21190	GW	02/05/25 14:44	02/12/25 10:15
680-261808-7	AG21193	GW	02/05/25 13:28	02/12/25 10:15
680-261808-8	AG21194	GW	02/05/25 12:33	02/12/25 10:15
680-261808-9	AG21195	GW	02/05/25 11:32	02/12/25 10:15
680-261808-10	AG21196	GW	02/05/25 10:36	02/12/25 10:15
680-261808-11	AG21188	GW	01/29/25 11:39	02/12/25 10:15
680-261808-12	AG21187	GW	01/29/25 12:39	02/12/25 10:15
680-261808-13	AG21189	GW	01/29/25 13:43	02/12/25 10:15
680-261808-14	AG21176	GW	01/29/25 14:47	02/12/25 10:15
680-261808-15	AG21173	GW	01/29/25 15:29	02/12/25 10:15
680-261808-16	AG21177	GW	01/30/25 09:20	02/12/25 10:15
680-261808-17	AG21175	GW	01/30/25 10:11	02/12/25 10:15
680-261808-18	AG21178	GW	01/30/25 11:16	02/12/25 10:15
680-261808-19	AG21167	GW	01/30/25 12:40	02/12/25 10:15
680-261808-20	AG21168	GW	01/30/25 13:47	02/12/25 10:15
680-261808-21	AG21191	GW	02/04/25 13:08	02/12/25 10:15
680-261808-22	AG21192	GW	02/04/25 13:13	02/12/25 10:15
680-261808-23	AG21197	GW	02/04/25 11:57	02/12/25 10:15
680-261808-24	AG21182	GW	02/04/25 14:23	02/12/25 10:15
680-261808-25	AG21184	GW	02/04/25 10:43	02/12/25 10:15
680-261808-26	AG21185	GW	02/04/25 09:44	02/12/25 10:15

Method Summary

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

Job ID: 680-261808-1

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

Protocol References:

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

Laboratory References:

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



Definitions/Glossary

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

Job ID: 680-261808-1

Qualifiers

Metals

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

Glossary

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

Detection Summary

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

Job ID: 680-261808-1

Client Sample ID: AG21180 **Lab Sample ID: 680-261808-1**

No Detections.

Client Sample ID: AG21179 **Lab Sample ID: 680-261808-2**

No Detections.

Client Sample ID: AG21170 **Lab Sample ID: 680-261808-3**

No Detections.

Client Sample ID: AG21171 **Lab Sample ID: 680-261808-4**

No Detections.

Client Sample ID: AG21172 **Lab Sample ID: 680-261808-5**

No Detections.

Client Sample ID: AG21190 **Lab Sample ID: 680-261808-6**

No Detections.

Client Sample ID: AG21193 **Lab Sample ID: 680-261808-7**

No Detections.

Client Sample ID: AG21194 **Lab Sample ID: 680-261808-8**

No Detections.

Client Sample ID: AG21195 **Lab Sample ID: 680-261808-9**

No Detections.

Client Sample ID: AG21196 **Lab Sample ID: 680-261808-10**

No Detections.

Client Sample ID: AG21188 **Lab Sample ID: 680-261808-11**

No Detections.

Client Sample ID: AG21187 **Lab Sample ID: 680-261808-12**

No Detections.

Client Sample ID: AG21189 **Lab Sample ID: 680-261808-13**

No Detections.

Client Sample ID: AG21176 **Lab Sample ID: 680-261808-14**

No Detections.

Client Sample ID: AG21173 **Lab Sample ID: 680-261808-15**

No Detections.

Client Sample ID: AG21177 **Lab Sample ID: 680-261808-16**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Detection Summary

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

Job ID: 680-261808-1

Client Sample ID: AG21175

Lab Sample ID: 680-261808-17

No Detections.

Client Sample ID: AG21178

Lab Sample ID: 680-261808-18

No Detections.

Client Sample ID: AG21167

Lab Sample ID: 680-261808-19

No Detections.

Client Sample ID: AG21168

Lab Sample ID: 680-261808-20

No Detections.

Client Sample ID: AG21191

Lab Sample ID: 680-261808-21

No Detections.

Client Sample ID: AG21192

Lab Sample ID: 680-261808-22

No Detections.

Client Sample ID: AG21197

Lab Sample ID: 680-261808-23

No Detections.

Client Sample ID: AG21182

Lab Sample ID: 680-261808-24

No Detections.

Client Sample ID: AG21184

Lab Sample ID: 680-261808-25

No Detections.

Client Sample ID: AG21185

Lab Sample ID: 680-261808-26

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21180

Lab Sample ID: 680-261808-1

Date Collected: 02/03/25 09:30

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:25	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21179

Lab Sample ID: 680-261808-2

Date Collected: 02/03/25 10:33

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:46	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21170

Lab Sample ID: 680-261808-3

Date Collected: 02/03/25 11:54

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:13	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21171

Lab Sample ID: 680-261808-4

Date Collected: 02/03/25 11:59

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:04	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21172

Lab Sample ID: 680-261808-5

Date Collected: 02/03/25 13:51

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 18:59	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21190

Lab Sample ID: 680-261808-6

Date Collected: 02/05/25 14:44

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 18:55	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21193

Lab Sample ID: 680-261808-7

Date Collected: 02/05/25 13:28

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:20	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21194

Lab Sample ID: 680-261808-8

Date Collected: 02/05/25 12:33

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:22	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21195

Lab Sample ID: 680-261808-9

Date Collected: 02/05/25 11:32

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:37	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21196

Lab Sample ID: 680-261808-10

Date Collected: 02/05/25 10:36

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:30	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21188

Lab Sample ID: 680-261808-11

Date Collected: 01/29/25 11:39

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:27	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21187

Lab Sample ID: 680-261808-12

Date Collected: 01/29/25 12:39

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:25	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21189

Lab Sample ID: 680-261808-13

Date Collected: 01/29/25 13:43

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 18:57	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21176

Lab Sample ID: 680-261808-14

Date Collected: 01/29/25 14:47

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:14	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21173

Lab Sample ID: 680-261808-15

Date Collected: 01/29/25 15:29

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:44	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21177

Lab Sample ID: 680-261808-16

Date Collected: 01/30/25 09:20

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:28	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21175

Lab Sample ID: 680-261808-17

Date Collected: 01/30/25 10:11

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:06	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21178

Lab Sample ID: 680-261808-18

Date Collected: 01/30/25 11:16

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:41	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21167

Lab Sample ID: 680-261808-19

Date Collected: 01/30/25 12:40

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:23	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21168

Lab Sample ID: 680-261808-20

Date Collected: 01/30/25 13:47

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 17:09	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21191

Lab Sample ID: 680-261808-21

Date Collected: 02/04/25 13:08

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:09	1

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21192

Lab Sample ID: 680-261808-22

Date Collected: 02/04/25 13:13

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:16	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21197

Lab Sample ID: 680-261808-23

Date Collected: 02/04/25 11:57

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:48	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21182

Lab Sample ID: 680-261808-24

Date Collected: 02/04/25 14:23

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 18:48	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21184

Lab Sample ID: 680-261808-25

Date Collected: 02/04/25 10:43

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:02	1

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

Client Sample Results

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

Job ID: 680-261808-1

Client Sample ID: AG21185

Lab Sample ID: 680-261808-26

Date Collected: 02/04/25 09:44

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 19:11	1

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

QC Sample Results

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

Job ID: 680-261808-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-876179/1-A
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 876179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:08	1

Lab Sample ID: LCS 680-876179/2-A
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 876179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.731		ug/L		109	80 - 120

Lab Sample ID: 680-261808-3 MS
Matrix: GW
Analysis Batch: 876271

Client Sample ID: AG21170
Prep Type: Total/NA
Prep Batch: 876179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U	1.00	0.9697		ug/L		97	80 - 120

Lab Sample ID: 680-261808-3 MSD
Matrix: GW
Analysis Batch: 876271

Client Sample ID: AG21170
Prep Type: Total/NA
Prep Batch: 876179

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	0.9459		ug/L		95	80 - 120	2	20

Lab Sample ID: MB 680-876211/1-A
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 876211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 12:55	02/18/25 18:27	1

Lab Sample ID: LCS 680-876211/2-A
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 876211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	2.50	2.570		ug/L		103	80 - 120

Lab Sample ID: 680-261710-D-6-C MS
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 876211

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	U	1.00	0.9707		ug/L		97	80 - 120

Lab Sample ID: 680-261710-D-6-D MSD
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 876211

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	0.9438		ug/L		94	80 - 120	3	20

Eurofins Savannah

QC Association Summary

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

Job ID: 680-261808-1

Metals

Prep Batch: 876179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261808-2	AG21179	Total/NA	GW	7470A	
680-261808-3	AG21170	Total/NA	GW	7470A	
680-261808-7	AG21193	Total/NA	GW	7470A	
680-261808-8	AG21194	Total/NA	GW	7470A	
680-261808-9	AG21195	Total/NA	GW	7470A	
680-261808-11	AG21188	Total/NA	GW	7470A	
680-261808-12	AG21187	Total/NA	GW	7470A	
680-261808-15	AG21173	Total/NA	GW	7470A	
680-261808-18	AG21178	Total/NA	GW	7470A	
680-261808-20	AG21168	Total/NA	GW	7470A	
680-261808-23	AG21197	Total/NA	GW	7470A	
MB 680-876179/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-876179/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-261808-3 MS	AG21170	Total/NA	GW	7470A	
680-261808-3 MSD	AG21170	Total/NA	GW	7470A	

Prep Batch: 876211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261808-1	AG21180	Total/NA	GW	7470A	
680-261808-4	AG21171	Total/NA	GW	7470A	
680-261808-5	AG21172	Total/NA	GW	7470A	
680-261808-6	AG21190	Total/NA	GW	7470A	
680-261808-10	AG21196	Total/NA	GW	7470A	
680-261808-13	AG21189	Total/NA	GW	7470A	
680-261808-14	AG21176	Total/NA	GW	7470A	
680-261808-16	AG21177	Total/NA	GW	7470A	
680-261808-17	AG21175	Total/NA	GW	7470A	
680-261808-19	AG21167	Total/NA	GW	7470A	
680-261808-21	AG21191	Total/NA	GW	7470A	
680-261808-22	AG21192	Total/NA	GW	7470A	
680-261808-24	AG21182	Total/NA	GW	7470A	
680-261808-25	AG21184	Total/NA	GW	7470A	
680-261808-26	AG21185	Total/NA	GW	7470A	
MB 680-876211/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-876211/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-261710-D-6-C MS	Matrix Spike	Dissolved	Water	7470A	
680-261710-D-6-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 876271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261808-1	AG21180	Total/NA	GW	7470A	876211
680-261808-2	AG21179	Total/NA	GW	7470A	876179
680-261808-3	AG21170	Total/NA	GW	7470A	876179
680-261808-4	AG21171	Total/NA	GW	7470A	876211
680-261808-5	AG21172	Total/NA	GW	7470A	876211
680-261808-6	AG21190	Total/NA	GW	7470A	876211
680-261808-7	AG21193	Total/NA	GW	7470A	876179
680-261808-8	AG21194	Total/NA	GW	7470A	876179
680-261808-9	AG21195	Total/NA	GW	7470A	876179
680-261808-10	AG21196	Total/NA	GW	7470A	876211
680-261808-11	AG21188	Total/NA	GW	7470A	876179

QC Association Summary

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

Job ID: 680-261808-1

Metals (Continued)

Analysis Batch: 876271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261808-12	AG21187	Total/NA	GW	7470A	876179
680-261808-13	AG21189	Total/NA	GW	7470A	876211
680-261808-14	AG21176	Total/NA	GW	7470A	876211
680-261808-15	AG21173	Total/NA	GW	7470A	876179
680-261808-16	AG21177	Total/NA	GW	7470A	876211
680-261808-17	AG21175	Total/NA	GW	7470A	876211
680-261808-18	AG21178	Total/NA	GW	7470A	876179
680-261808-19	AG21167	Total/NA	GW	7470A	876211
680-261808-20	AG21168	Total/NA	GW	7470A	876179
680-261808-21	AG21191	Total/NA	GW	7470A	876211
680-261808-22	AG21192	Total/NA	GW	7470A	876211
680-261808-23	AG21197	Total/NA	GW	7470A	876179
680-261808-24	AG21182	Total/NA	GW	7470A	876211
680-261808-25	AG21184	Total/NA	GW	7470A	876211
680-261808-26	AG21185	Total/NA	GW	7470A	876211
MB 680-876179/1-A	Method Blank	Total/NA	Water	7470A	876179
MB 680-876211/1-A	Method Blank	Total/NA	Water	7470A	876211
LCS 680-876179/2-A	Lab Control Sample	Total/NA	Water	7470A	876179
LCS 680-876211/2-A	Lab Control Sample	Total/NA	Water	7470A	876211
680-261710-D-6-C MS	Matrix Spike	Dissolved	Water	7470A	876211
680-261710-D-6-D MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	876211
680-261808-3 MS	AG21170	Total/NA	GW	7470A	876179
680-261808-3 MSD	AG21170	Total/NA	GW	7470A	876179

Lab Chronicle

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

Job ID: 680-261808-1

Client Sample ID: AG21180

Lab Sample ID: 680-261808-1

Date Collected: 02/03/25 09:30

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:25

Client Sample ID: AG21179

Lab Sample ID: 680-261808-2

Date Collected: 02/03/25 10:33

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:46

Client Sample ID: AG21170

Lab Sample ID: 680-261808-3

Date Collected: 02/03/25 11:54

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:13

Client Sample ID: AG21171

Lab Sample ID: 680-261808-4

Date Collected: 02/03/25 11:59

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:04

Client Sample ID: AG21172

Lab Sample ID: 680-261808-5

Date Collected: 02/03/25 13:51

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 18:59

Client Sample ID: AG21190

Lab Sample ID: 680-261808-6

Date Collected: 02/05/25 14:44

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 18:55

Lab Chronicle

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

Job ID: 680-261808-1

Client Sample ID: AG21193

Lab Sample ID: 680-261808-7

Date Collected: 02/05/25 13:28

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:20

Client Sample ID: AG21194

Lab Sample ID: 680-261808-8

Date Collected: 02/05/25 12:33

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:22

Client Sample ID: AG21195

Lab Sample ID: 680-261808-9

Date Collected: 02/05/25 11:32

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:37

Client Sample ID: AG21196

Lab Sample ID: 680-261808-10

Date Collected: 02/05/25 10:36

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:30

Client Sample ID: AG21188

Lab Sample ID: 680-261808-11

Date Collected: 01/29/25 11:39

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:27

Client Sample ID: AG21187

Lab Sample ID: 680-261808-12

Date Collected: 01/29/25 12:39

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:25

Lab Chronicle

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

Job ID: 680-261808-1

Client Sample ID: AG21189

Lab Sample ID: 680-261808-13

Date Collected: 01/29/25 13:43

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 18:57

Client Sample ID: AG21176

Lab Sample ID: 680-261808-14

Date Collected: 01/29/25 14:47

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:14

Client Sample ID: AG21173

Lab Sample ID: 680-261808-15

Date Collected: 01/29/25 15:29

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:44

Client Sample ID: AG21177

Lab Sample ID: 680-261808-16

Date Collected: 01/30/25 09:20

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:28

Client Sample ID: AG21175

Lab Sample ID: 680-261808-17

Date Collected: 01/30/25 10:11

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:06

Client Sample ID: AG21178

Lab Sample ID: 680-261808-18

Date Collected: 01/30/25 11:16

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:41

Lab Chronicle

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

Job ID: 680-261808-1

Client Sample ID: AG21167

Lab Sample ID: 680-261808-19

Date Collected: 01/30/25 12:40

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:23

Client Sample ID: AG21168

Lab Sample ID: 680-261808-20

Date Collected: 01/30/25 13:47

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 17:09

Client Sample ID: AG21191

Lab Sample ID: 680-261808-21

Date Collected: 02/04/25 13:08

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:09

Client Sample ID: AG21192

Lab Sample ID: 680-261808-22

Date Collected: 02/04/25 13:13

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:16

Client Sample ID: AG21197

Lab Sample ID: 680-261808-23

Date Collected: 02/04/25 11:57

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:48

Client Sample ID: AG21182

Lab Sample ID: 680-261808-24

Date Collected: 02/04/25 14:23

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 18:48

Lab Chronicle

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

Job ID: 680-261808-1

Client Sample ID: AG21184

Lab Sample ID: 680-261808-25

Date Collected: 02/04/25 10:43

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:02

Client Sample ID: AG21185

Lab Sample ID: 680-261808-26

Date Collected: 02/04/25 09:44

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876211	MG	EET SAV	02/18/25 12:55
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 19:11

Laboratory References:

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

Chain of Custody



Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM62.09.G81.1 / 36500 Rerun request for any flagged QC: Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments	HS
AG-21180	CCMAP-13	2/3/25	0930	ATH DCA	1	P	G	GW	2	7470 RL < 0.2 ug/L	X
79	CCMAP-12		1033								
70	CCMAP-4		1154								
71	CCMAP-4 DUP		1159								
72	CCMAP-5		1351								
AG-21190	CGYP-1	2/5/25	1444	MDG DCA							
93	CGYP-3		1328								
94	CGYP-4		1233								
95	CGYP-5		1132								
96	CGYP-6		1036								



Nutrients TOC DOC TP/1PO4 NH3-N F Cl NO2 B1 NO3 SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AEM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Finesness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> Grease <input type="checkbox"/> Fuel <input type="checkbox"/> Unrefined Gas Used Oil <input type="checkbox"/> Motor Oil <input type="checkbox"/> Hydraulic Oil <input type="checkbox"/> Grease <input type="checkbox"/> Other	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) Ag Al As B Ba Be Ca Cd Co Cr Cu Fe K Li Mg Mn Mo Na Ni Sb Se Sn Sr Ti Tl V Zn Hg CrV XRF scan RCRs (As, Ba, Cd, Cr, Pb, Hg, Se, As)
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Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: _____ Date/Time/Init for preservative: <u>14.8/14.8</u>
<u>S. Levy</u>	<u>35594</u>	<u>FED-EX</u>	<u> </u>	<u>2/11/25</u>	<u>1000</u>	
		<u>C. M. M...</u>		<u>2/11/25</u>	<u>1015</u>	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Chain of Custody



Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged QC Yes No

LINDA WILLIAMS @santecooper.com _____ / _____ / _____ 125915 / JM02.09.GP(1) / 36500

Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	HS
AG21188	CCMLF-ID	1/29/25	1139	ATH LDA	1	P	G	GW	2	7470 RL < 0.2 ug/L	X
87	CCMLF-1		1239								
89	CCMLF-2		1343								
76	CCMAP-9		1447								
73	CCMAP-6		1529								
AG21177	CCMAP-10	1/30/25	0920	ATH DCA							
75	CCMAP-8		1011								
78	CCMAP-11		1116								
67	CCMAP-1		1240								
68	CCMAP-2		1347								

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfides <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality Moisture Color Acidity Oxidation Stability Dissolved Solids Used Oil Treatment Metals (As, Cd, Cr, Ni, Pb, Se)	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) Ag Al As B Ba Be Ca Cd Co Cr Cu Fe K Li Mg Mn Na Ni Pb Sb Se Sn Sr Ti Tl V Zn Hg CrVI XRF scan RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
--	---	---	--	---	---	--

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: <u>14.8/14.8</u> Date/Time/Init for preservative:
<u>S. Levy</u>	35894	FED-EX	-	2/11/25	1000	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	
		<u>C. M...</u>		<u>2/11/25</u>	<u>1015</u>	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Chain of Custody



Customer Email/Report Recipient: LINDA.WILLIAMS@santecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02.09.G81.1 / 36500 Rerun request for any flagged QC Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	Hg			
AG 21191	CGYP-2	2/4/25	1308	MDG DA	1	P	G	GW	2	7470 RL < 6.2 ug/L	X			
92	CGYP-2 DUP		1313											
97	CGYP-7		1157											
82	CCMGP-1		1423											
84	CCMGP-3		1043											
85	CCMGP-4		0944											

Nutrients TOC DAK TP/PO4 NH3-N F Cl NO2 Br NO3 SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> ESDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality Moisture Color Acidity Diesel's Sulfur FTI Dissolved Gases Used Oil Flashpoint Metals (As, Hg, Cr, Ni, Pb, Hg) COOP	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) Ag Al As B Ba Be Ca Cd Co Cr Cu Fe K Li Mg Mn Mo Na Ni Pb Sb Se Sn Sr Ti Tl V Zn Hg CrVI XRF scan RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
---	--	---	--	---	---	---

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: _____ 14.8/14.8 Date/Time/Init for preservative: _____
<i>S. Levy</i>	35594	FED-EX	—	2/11/25	1000	
		<i>C. M...</i>		2/12/25	1015	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code: 1=<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-261808-1

Login Number: 261808

List Source: Eurofins Savannah

List Number: 1

Creator: Munro, Caroline

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

Accreditation/Certification Summary

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

Job ID: 680-261808-1

Laboratory: Eurofins Savannah

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

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-26

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

1
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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 2/19/2025 8:47:45 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

680-261801-1

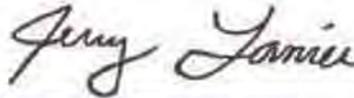
Eurofins Savannah

Job Notes

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

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

Authorization



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Authorized for release by
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Case Narrative

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

Job ID: 680-261801-1

Job ID: 680-261801-1

Eurofins Savannah

Job Narrative 680-261801-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 2/12/2025 10:15 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 14.3°C.

Metals

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

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Sample Summary

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

Job ID: 680-261801-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-261801-1	AG21212	GW	01/28/25 10:12	02/12/25 10:15
680-261801-2	AG21207	GW	01/28/25 10:56	02/12/25 10:15
680-261801-3	AG21209	GW	01/28/25 13:39	02/12/25 10:15
680-261801-4	AG21206	GW	01/28/25 14:39	02/12/25 10:15
680-261801-5	AG21210	GW	01/29/25 09:28	02/12/25 10:15
680-261801-6	AG21211	GW	01/29/25 09:33	02/12/25 10:15
680-261801-7	AG21183	GW	02/06/25 09:13	02/12/25 10:15
680-261801-8	AG21186	GW	02/03/25 15:09	02/12/25 10:15



Method Summary

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

Job ID: 680-261801-1

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

Protocol References:

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

Laboratory References:

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



Definitions/Glossary

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

Job ID: 680-261801-1

Qualifiers

Metals

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

Glossary

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

Detection Summary

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

Job ID: 680-261801-1

Client Sample ID: AG21212

Lab Sample ID: 680-261801-1

No Detections.

Client Sample ID: AG21207

Lab Sample ID: 680-261801-2

No Detections.

Client Sample ID: AG21209

Lab Sample ID: 680-261801-3

No Detections.

Client Sample ID: AG21206

Lab Sample ID: 680-261801-4

No Detections.

Client Sample ID: AG21210

Lab Sample ID: 680-261801-5

No Detections.

Client Sample ID: AG21211

Lab Sample ID: 680-261801-6

No Detections.

Client Sample ID: AG21183

Lab Sample ID: 680-261801-7

No Detections.

Client Sample ID: AG21186

Lab Sample ID: 680-261801-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Savannah

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21212

Lab Sample ID: 680-261801-1

Date Collected: 01/28/25 10:12

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:39	1

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

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21207

Lab Sample ID: 680-261801-2

Date Collected: 01/28/25 10:56

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:29	1

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

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21209

Lab Sample ID: 680-261801-3

Date Collected: 01/28/25 13:39

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:55	1

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

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21206

Lab Sample ID: 680-261801-4

Date Collected: 01/28/25 14:39

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 17:07	1

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21210

Lab Sample ID: 680-261801-5

Date Collected: 01/29/25 09:28

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:53	1

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

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21211

Lab Sample ID: 680-261801-6

Date Collected: 01/29/25 09:33

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:58	1

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

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21183

Lab Sample ID: 680-261801-7

Date Collected: 02/06/25 09:13

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 17:05	1

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

Client Sample Results

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

Job ID: 680-261801-1

Client Sample ID: AG21186

Lab Sample ID: 680-261801-8

Date Collected: 02/03/25 15:09

Matrix: GW

Date Received: 02/12/25 10:15

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:51	1

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

QC Sample Results

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

Job ID: 680-261801-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-876179/1-A
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 876179

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.200	U	0.200		ug/L		02/18/25 10:53	02/18/25 16:08	1

Lab Sample ID: LCS 680-876179/2-A
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 876179

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Mercury	2.50	2.731		ug/L		109	80 - 120

Lab Sample ID: 680-261808-A-3-B MS
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 876179

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Mercury	0.200	U	1.00	0.9697		ug/L		97	80 - 120

Lab Sample ID: 680-261808-A-3-C MSD
Matrix: Water
Analysis Batch: 876271

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 876179

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
Mercury	0.200	U	1.00	0.9459		ug/L		95	80 - 120	2	20

QC Association Summary

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

Job ID: 680-261801-1

Metals

Prep Batch: 876179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261801-1	AG21212	Total/NA	GW	7470A	
680-261801-2	AG21207	Total/NA	GW	7470A	
680-261801-3	AG21209	Total/NA	GW	7470A	
680-261801-4	AG21206	Total/NA	GW	7470A	
680-261801-5	AG21210	Total/NA	GW	7470A	
680-261801-6	AG21211	Total/NA	GW	7470A	
680-261801-7	AG21183	Total/NA	GW	7470A	
680-261801-8	AG21186	Total/NA	GW	7470A	
MB 680-876179/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-876179/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-261808-A-3-B MS	Matrix Spike	Total/NA	Water	7470A	
680-261808-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 876271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-261801-1	AG21212	Total/NA	GW	7470A	876179
680-261801-2	AG21207	Total/NA	GW	7470A	876179
680-261801-3	AG21209	Total/NA	GW	7470A	876179
680-261801-4	AG21206	Total/NA	GW	7470A	876179
680-261801-5	AG21210	Total/NA	GW	7470A	876179
680-261801-6	AG21211	Total/NA	GW	7470A	876179
680-261801-7	AG21183	Total/NA	GW	7470A	876179
680-261801-8	AG21186	Total/NA	GW	7470A	876179
MB 680-876179/1-A	Method Blank	Total/NA	Water	7470A	876179
LCS 680-876179/2-A	Lab Control Sample	Total/NA	Water	7470A	876179
680-261808-A-3-B MS	Matrix Spike	Total/NA	Water	7470A	876179
680-261808-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	876179

Lab Chronicle

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

Job ID: 680-261801-1

Client Sample ID: AG21212

Lab Sample ID: 680-261801-1

Date Collected: 01/28/25 10:12

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:39

Client Sample ID: AG21207

Lab Sample ID: 680-261801-2

Date Collected: 01/28/25 10:56

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:29

Client Sample ID: AG21209

Lab Sample ID: 680-261801-3

Date Collected: 01/28/25 13:39

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:55

Client Sample ID: AG21206

Lab Sample ID: 680-261801-4

Date Collected: 01/28/25 14:39

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 17:07

Client Sample ID: AG21210

Lab Sample ID: 680-261801-5

Date Collected: 01/29/25 09:28

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:53

Client Sample ID: AG21211

Lab Sample ID: 680-261801-6

Date Collected: 01/29/25 09:33

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:58

Lab Chronicle

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

Job ID: 680-261801-1

Client Sample ID: AG21183

Lab Sample ID: 680-261801-7

Date Collected: 02/06/25 09:13

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 17:05

Client Sample ID: AG21186

Lab Sample ID: 680-261801-8

Date Collected: 02/03/25 15:09

Matrix: GW

Date Received: 02/12/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			876179	MG	EET SAV	02/18/25 10:53
Total/NA	Analysis	7470A		1	876271	BJB	EET SAV	02/18/25 16:51

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 / 21 / 25 Send report to kwilling@santeecooper.com & sherrillevy@santeecooper.com

Chain of Custody



Customer Email/Report Recipient: LINDA WILLIAMS @santeecooper.com Date Results Needed by: 2/21/25 Project/Task/Unit #: 125715 / JMO2.07.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
AG 2/12/2	POZ-8	1/23/25	1012	ATH DCA	1	P	G	GW	2	7470 RL < 0.2 ug/L
01	POZ-4		1056							
09	POZ-6		1339							
06	POZ-3		1439							
AG 2/12/10	POZ-1	1/29/25	0925							
1.11	POZ-7 MJP	1	0933							
AG 2/11/93	CCMGP-2	2/6/25	0713							
AG 2/11/96	CCMGP-5	2/3/25	1509							



Nutrients	Gypsum	Coal	Flvash	Oil	MISC.	Metals (All)
<input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPM4 <input type="checkbox"/> NH3-N <input type="checkbox"/> TP <input type="checkbox"/> CI <input type="checkbox"/> NO2 <input type="checkbox"/> NH <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	<input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Partly (CSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	<input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Trans. Oil Quality % Bitumen Color Acidity Residue (Stanol) WTI Dissolved Gases Lead Oil Hydrogen Mercaptan Ni (ppm) COFER	<input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOASemi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) AR AI T AS DB BA Be CA Cd Co Cr Cu Fe K Li Mg Mn Mo Na Ni Ni Pb Sb Se Si Sn Sr Ti Tl V Zn Hg Cr VI Cd Ni Cu RCRCA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only)
Relinquished by: <u>8 Gary</u>	35574	Received by: <u>FED-EX</u>	—	2/11/25	1000	TEMP (°C): <u>19.3/19.3</u>
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Initials: _____
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Correct pH: Yes No
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Preservative Lot #: _____
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Date/Time/unit for preservative: _____

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, O-oil, S-Soil, Sl-solids, C-coal, G-gypsum, FA-flvash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1-<4°C 2-HNO3 3-H2SO4 4-HCl 5-Na2S2O3 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 680-261801-1

Login Number: 261801

List Source: Eurofins Savannah

List Number: 1

Creator: Sims, Robert D

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

Accreditation/Certification Summary

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

Job ID: 680-261801-1

Laboratory: Eurofins Savannah

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

Authority	Program	Identification Number	Expiration Date
South Carolina	State	98001	06-30-26

- 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 6/19/2025 5:20:16 PM

JOB DESCRIPTION

125915/JM02.08.G02.3/36500

JOB NUMBER

705-33242-1

Eurofins Atlanta

Job Notes

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
Tiffany Heifferon, Project Manager I
Tiffany.Heifferon@et.eurofinsus.com
(770)457-8177

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Case Narrative

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

Job ID: 705-33242-1

Job ID: 705-33242-1

Eurofins Atlanta

Job Narrative 705-33242-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/11/2025 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

Metals

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

Eurofins Atlanta

Detection Summary

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

Job ID: 705-33242-1

Client Sample ID: AG-34893 **Lab Sample ID: 705-33242-1**

No Detections.

Client Sample ID: AG-34885 **Lab Sample ID: 705-33242-2**

No Detections.

Client Sample ID: AG-34886 **Lab Sample ID: 705-33242-3**

No Detections.

Client Sample ID: AG-34887 **Lab Sample ID: 705-33242-4**

No Detections.

Client Sample ID: AG-34888 **Lab Sample ID: 705-33242-5**

No Detections.

Client Sample ID: AG-34889 **Lab Sample ID: 705-33242-6**

No Detections.

Client Sample ID: AG-34890 **Lab Sample ID: 705-33242-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Atlanta



Sample Summary

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

Job ID: 705-33242-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
705-33242-1	AG-34893	Water	06/05/25 09:37	06/11/25 10:00
705-33242-2	AG-34885	Water	06/04/25 09:37	06/11/25 10:00
705-33242-3	AG-34886	Water	06/04/25 10:38	06/11/25 10:00
705-33242-4	AG-34887	Water	06/04/25 11:39	06/11/25 10:00
705-33242-5	AG-34888	Water	06/04/25 12:38	06/11/25 10:00
705-33242-6	AG-34889	Water	06/04/25 12:43	06/11/25 10:00
705-33242-7	AG-34890	Water	06/04/25 14:03	06/11/25 10:00



Method Summary

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

Job ID: 705-33242-1

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

Protocol References:

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

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177



Definitions/Glossary

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

Job ID: 705-33242-1

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

Client Sample Results

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

Job ID: 705-33242-1

Client Sample ID: AG-34893

Lab Sample ID: 705-33242-1

Date Collected: 06/05/25 09:37

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/18/25 13:25	06/18/25 21:08	1

Client Sample ID: AG-34885

Lab Sample ID: 705-33242-2

Date Collected: 06/04/25 09:37

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:01	1

Client Sample ID: AG-34886

Lab Sample ID: 705-33242-3

Date Collected: 06/04/25 10:38

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:05	1

Client Sample ID: AG-34887

Lab Sample ID: 705-33242-4

Date Collected: 06/04/25 11:39

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:09	1

Client Sample ID: AG-34888

Lab Sample ID: 705-33242-5

Date Collected: 06/04/25 12:38

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:13	1

Client Sample ID: AG-34889

Lab Sample ID: 705-33242-6

Date Collected: 06/04/25 12:43

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:17	1

Client Sample ID: AG-34890

Lab Sample ID: 705-33242-7

Date Collected: 06/04/25 14:03

Matrix: Water

Date Received: 06/11/25 10:00

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 19:21	1

QC Association Summary

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

Job ID: 705-33242-1

Metals

Prep Batch: 61050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-33242-2	AG-34885	Total/NA	Water	7470A	
705-33242-3	AG-34886	Total/NA	Water	7470A	
705-33242-4	AG-34887	Total/NA	Water	7470A	
705-33242-5	AG-34888	Total/NA	Water	7470A	
705-33242-6	AG-34889	Total/NA	Water	7470A	
705-33242-7	AG-34890	Total/NA	Water	7470A	
MB 705-61050/1-A	Method Blank	Total/NA	Water	7470A	
LCS 705-61050/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-33233-A-1-B MS	Matrix Spike	Total/NA	Water	7470A	
705-33233-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 61272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-33242-2	AG-34885	Total/NA	Water	7470A	61050
705-33242-3	AG-34886	Total/NA	Water	7470A	61050
705-33242-4	AG-34887	Total/NA	Water	7470A	61050
705-33242-5	AG-34888	Total/NA	Water	7470A	61050
705-33242-6	AG-34889	Total/NA	Water	7470A	61050
705-33242-7	AG-34890	Total/NA	Water	7470A	61050
MB 705-61050/1-A	Method Blank	Total/NA	Water	7470A	61050
LCS 705-61050/2-A	Lab Control Sample	Total/NA	Water	7470A	61050
705-33233-A-1-B MS	Matrix Spike	Total/NA	Water	7470A	61050
705-33233-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	61050

Prep Batch: 62329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-33242-1	AG-34893	Total/NA	Water	7470A	
MB 705-62329/1-A	Method Blank	Total/NA	Water	7470A	
LCS 705-62329/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-33229-M-4-C MS	Matrix Spike	Total/NA	Water	7470A	
705-33229-M-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 62508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-33242-1	AG-34893	Total/NA	Water	7470A	62329
MB 705-62329/1-A	Method Blank	Total/NA	Water	7470A	62329
LCS 705-62329/2-A	Lab Control Sample	Total/NA	Water	7470A	62329
705-33229-M-4-C MS	Matrix Spike	Total/NA	Water	7470A	62329
705-33229-M-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	62329

QC Sample Results

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

Job ID: 705-33242-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 705-61050/1-A
Matrix: Water
Analysis Batch: 61272

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/12/25 13:30	06/12/25 18:10	1

Lab Sample ID: LCS 705-61050/2-A
Matrix: Water
Analysis Batch: 61272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00400	0.004078		mg/L		102	80 - 120

Lab Sample ID: 705-33233-A-1-B MS
Matrix: Water
Analysis Batch: 61272

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000200	U	0.00400	0.003985		mg/L		100	75 - 125

Lab Sample ID: 705-33233-A-1-C MSD
Matrix: Water
Analysis Batch: 61272

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 61050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000200	U	0.00400	0.004035		mg/L		101	75 - 125	1	20

Lab Sample ID: MB 705-62329/1-A
Matrix: Water
Analysis Batch: 62508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62329

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/18/25 13:25	06/18/25 20:41	1

Lab Sample ID: LCS 705-62329/2-A
Matrix: Water
Analysis Batch: 62508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62329

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00400	0.004237		mg/L		106	80 - 120

Lab Sample ID: 705-33229-M-4-C MS
Matrix: Water
Analysis Batch: 62508

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62329

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000200	U F1	0.00400	0.001959	F1	mg/L		49	75 - 125

Lab Sample ID: 705-33229-M-4-D MSD
Matrix: Water
Analysis Batch: 62508

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62329

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000200	U F1	0.00400	0.001931	F1	mg/L		48	75 - 125	1	20

Eurofins Atlanta

Lab Chronicle

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

Job ID: 705-33242-1

Client Sample ID: AG-34893

Lab Sample ID: 705-33242-1

Date Collected: 06/05/25 09:37

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			62329	GR	EET ATL	06/18/25 13:25
Total/NA	Analysis	7470A		1	62508	GR	EET ATL	06/18/25 21:08

Client Sample ID: AG-34885

Lab Sample ID: 705-33242-2

Date Collected: 06/04/25 09:37

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:01

Client Sample ID: AG-34886

Lab Sample ID: 705-33242-3

Date Collected: 06/04/25 10:38

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:05

Client Sample ID: AG-34887

Lab Sample ID: 705-33242-4

Date Collected: 06/04/25 11:39

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:09

Client Sample ID: AG-34888

Lab Sample ID: 705-33242-5

Date Collected: 06/04/25 12:38

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:13

Client Sample ID: AG-34889

Lab Sample ID: 705-33242-6

Date Collected: 06/04/25 12:43

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:17

Lab Chronicle

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

Job ID: 705-33242-1

Client Sample ID: AG-34890

Lab Sample ID: 705-33242-7

Date Collected: 06/04/25 14:03

Matrix: Water

Date Received: 06/11/25 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			61050	GR	EET ATL	06/12/25 13:30
Total/NA	Analysis	7470A		1	61272	GR	EET ATL	06/12/25 19:21

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177

Chain of Custody



Customer Email/Report Recipient: _____ Date Results Needed by: _____ Project/Task/Unit #: _____ Rerun request for any flagged Yes No

LINDA WILLIAMS @santecooper.com _____ / _____ / _____ 125915 / JM02.08.G02.3 / 36500

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
AG 34893	CAP-13	6/5/25	0937	AGP EA	1	P	G	GW	2	7470 RL= 0.2 ug/L	X
AG 34885	CAP-6	6/4/25	0937								
AG 34886	CAP-7		1038								
AG 34887	CAP-8		1139								
AG 34888	CAP-9		1238								
AG 34889	CAP-9 DUP		1243								
AG 34890	CAP-10		1403								



705-33242 COC

Nutrients	Gypsum	Coal	Flyash	Oil	MISC.	Metals (All)
<input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP TOC4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	<input type="checkbox"/> Wallboard <input type="checkbox"/> ash <input type="checkbox"/> ZOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	<input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI <input type="checkbox"/> Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture <input type="checkbox"/> NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Trans. Oil Quality Color Acidity Dissolved Solids pH Dissolved Oxygen Used Oil Turbidity Metals (Al, Cu, V, Pb, Hg) GOFER	<input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Si <input type="checkbox"/> Sn <input type="checkbox"/> Ti <input type="checkbox"/> V <input type="checkbox"/> Zn <input checked="" type="checkbox"/> Hg <input type="checkbox"/> YRF scan <input type="checkbox"/> Cr <input type="checkbox"/> Hg <input type="checkbox"/> Se <input type="checkbox"/> Ag

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only)
<i>S. Levy</i>	35594	FED-EX		6/18/25	1100	TEMP (°C): _____
		<i>Andrew Steen</i>		6/18/25	1100	Initials: _____
						Correct pH: Yes No
						Preservative Lot #: _____
						Date/Time/Init for preservative: _____

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O5 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 705-33242-1

Login Number: 33242

List Number: 1

Creator: Myndresku, Victor

List Source: Eurofins Atlanta

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
The cooler does 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 present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Sample custody seals, if present, are intact.	True	
Sample collection date/times are provided.	True	
The samples do not appear to have been compromised or tampered with.	True	
Containers are not broken or leaking.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Appropriate sample containers were rec'd and sufficient volume for all analyses.	True	
Samples are received within Holding Time (excluding tests with immediate HTs).	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Is there sufficient air space in bottle for bacteriological analysis.	True	

Accreditation/Certification Summary

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

Job ID: 705-33242-1

Laboratory: Eurofins Atlanta

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87582	06-30-25
South Carolina	State	98016	06-30-25



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

END OF REPORT

ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/2/2025 9:55:10 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/3610

JOB NUMBER

705-34172-1

Eurofins Atlanta

Job Notes

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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7/2/2025 9:55:10 AM

Authorized for release by
Tiffany Heifferon, Project Manager I
Tiffany.Heifferon@et.eurofinsus.com
(770)457-8177

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Case Narrative

Client: South Carolina Public Service Authority
Project: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Job ID: 705-34172-1

Eurofins Atlanta

Job Narrative 705-34172-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/19/2025 12:44 PM. 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 24.0°C.

Metals

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

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Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Client Sample ID: AG34941

Lab Sample ID: 705-34172-1

No Detections.

Client Sample ID: AG34938

Lab Sample ID: 705-34172-2

No Detections.

Client Sample ID: AG34935

Lab Sample ID: 705-34172-3

No Detections.

Client Sample ID: AG34934

Lab Sample ID: 705-34172-4

No Detections.

Client Sample ID: AZ34940

Lab Sample ID: 705-34172-5

No Detections.

Client Sample ID: AZ34912

Lab Sample ID: 705-34172-6

No Detections.

Client Sample ID: AZ34936

Lab Sample ID: 705-34172-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Atlanta

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
705-34172-1	AG34941	Water	06/10/25 09:53	06/19/25 12:44
705-34172-2	AG34938	Water	06/10/25 12:10	06/19/25 12:44
705-34172-3	AG34935	Water	06/10/25 13:14	06/19/25 12:44
705-34172-4	AG34934	Water	06/10/25 14:17	06/19/25 12:44
705-34172-5	AZ34940	Water	06/10/25 14:22	06/19/25 12:44
705-34172-6	AZ34912	Water	06/10/25 16:02	06/19/25 12:44
705-34172-7	AZ34936	Water	06/09/25 16:33	06/19/25 12:44



Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

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

Protocol References:

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

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177



Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

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

Client Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Client Sample ID: AG34941

Lab Sample ID: 705-34172-1

Date Collected: 06/10/25 09:53

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:11	1

Client Sample ID: AG34938

Lab Sample ID: 705-34172-2

Date Collected: 06/10/25 12:10

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:14	1

Client Sample ID: AG34935

Lab Sample ID: 705-34172-3

Date Collected: 06/10/25 13:14

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:18	1

Client Sample ID: AG34934

Lab Sample ID: 705-34172-4

Date Collected: 06/10/25 14:17

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:22	1

Client Sample ID: AZ34940

Lab Sample ID: 705-34172-5

Date Collected: 06/10/25 14:22

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:26	1

Client Sample ID: AZ34912

Lab Sample ID: 705-34172-6

Date Collected: 06/10/25 16:02

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:30	1

Client Sample ID: AZ34936

Lab Sample ID: 705-34172-7

Date Collected: 06/09/25 16:33

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:46	1

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Metals

Prep Batch: 64872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-34172-1	AG34941	Total/NA	Water	7470A	
705-34172-2	AG34938	Total/NA	Water	7470A	
705-34172-3	AG34935	Total/NA	Water	7470A	
705-34172-4	AG34934	Total/NA	Water	7470A	
705-34172-5	AZ34940	Total/NA	Water	7470A	
705-34172-6	AZ34912	Total/NA	Water	7470A	
705-34172-7	AZ34936	Total/NA	Water	7470A	
MB 705-64872/1-A	Method Blank	Total/NA	Water	7470A	
LCS 705-64872/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-34417-F-25-C MS	Matrix Spike	Total/NA	Water	7470A	
705-34417-F-25-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 64962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-34172-1	AG34941	Total/NA	Water	7470A	64872
705-34172-2	AG34938	Total/NA	Water	7470A	64872
705-34172-3	AG34935	Total/NA	Water	7470A	64872
705-34172-4	AG34934	Total/NA	Water	7470A	64872
705-34172-5	AZ34940	Total/NA	Water	7470A	64872
705-34172-6	AZ34912	Total/NA	Water	7470A	64872
705-34172-7	AZ34936	Total/NA	Water	7470A	64872
MB 705-64872/1-A	Method Blank	Total/NA	Water	7470A	64872
LCS 705-64872/2-A	Lab Control Sample	Total/NA	Water	7470A	64872
705-34417-F-25-C MS	Matrix Spike	Total/NA	Water	7470A	64872
705-34417-F-25-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	64872

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 705-64872/1-A
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 15:24	1

Lab Sample ID: LCS 705-64872/2-A
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00400	0.003210		mg/L		80	80 - 120

Lab Sample ID: 705-34417-F-25-C MS
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000200	U	0.00400	0.003303		mg/L		83	75 - 125

Lab Sample ID: 705-34417-F-25-D MSD
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000200	U	0.00400	0.003219		mg/L		80	75 - 125	3	20

Lab Chronicle

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Client Sample ID: AG34941

Lab Sample ID: 705-34172-1

Date Collected: 06/10/25 09:53

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:11

Client Sample ID: AG34938

Lab Sample ID: 705-34172-2

Date Collected: 06/10/25 12:10

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:14

Client Sample ID: AG34935

Lab Sample ID: 705-34172-3

Date Collected: 06/10/25 13:14

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:18

Client Sample ID: AG34934

Lab Sample ID: 705-34172-4

Date Collected: 06/10/25 14:17

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:22

Client Sample ID: AZ34940

Lab Sample ID: 705-34172-5

Date Collected: 06/10/25 14:22

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:26

Client Sample ID: AZ34912

Lab Sample ID: 705-34172-6

Date Collected: 06/10/25 16:02

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:30

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Client Sample ID: AZ34936

Lab Sample ID: 705-34172-7

Date Collected: 06/09/25 16:33

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:46

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177

Chain of Custody



7/2/2025

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JM02.09.GW1.1 / 36110 Rerun request for any flagged Q (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			
AG 34941	POZ-8	6/10/25	0953	ASP EA	1	P	G	GW	2	7470 RL < 0.2 mg/l	X		
AG 34938	POZ-6		1210										
AG 34935	POZ-3		1314										
AG 34934	POZ-7		1417										
AG 34940	POZ-7 DUP		1422										
AG 34912	CCMGP-2	6/10/25	1602							 705-34172 COC			
AG 34936	POZ-4	6/9/25	1633										

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Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/THO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Dissolved Gas <input type="checkbox"/> Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> (W. 10-11) GOFER	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) <input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
--	---	---	--	---	---	---

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): <u>24.0 # 2665</u> Initials: _____ Correct pH: Yes No Preservative Lot #: _____ Date/Time/Init for preservative: _____
<u>Shery</u>	<u>35594</u>	<u>FED-EX</u>	<u> </u>	<u>6/18/25</u>	<u>1000</u>	
		<u> </u>		<u>6/19/25</u>	<u>9:44</u>	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1-<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 705-34172-1

Login Number: 34172

List Number: 1

Creator: Ceclu, Rodica

List Source: Eurofins Atlanta

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
The cooler does not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Sample custody seals, if present, are intact.	True	
Sample collection date/times are provided.	True	
The samples do not appear to have been compromised or tampered with.	True	
Containers are not broken or leaking.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Appropriate sample containers were rec'd and sufficient volume for all analyses.	True	
Samples are received within Holding Time (excluding tests with immediate HTs).	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Is there sufficient air space in bottle for bacteriological analysis.	True	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/3610

Job ID: 705-34172-1

Laboratory: Eurofins Atlanta

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87582	06-30-25
South Carolina	State	98016	06-30-25



- 1
- 2
- 3
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- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

END OF REPORT

 **ANALYTICAL REPORT****PREPARED FOR**

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

Generated 7/2/2025 9:50:15 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36500

JOB NUMBER

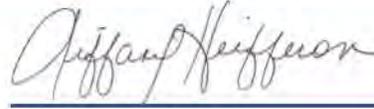
705-34160-1

Eurofins Atlanta

Job Notes

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
Tiffany Heifferon, Project Manager I
Tiffany.Heifferon@et.eurofinsus.com
(770)457-8177

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Case Narrative

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

Job ID: 705-34160-1

Job ID: 705-34160-1

Eurofins Atlanta

Job Narrative 705-34160-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/19/2025 9:44 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 24.0°C.

Metals

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

Eurofins Atlanta

Detection Summary

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

Job ID: 705-34160-1

Client Sample ID: AG34902

Lab Sample ID: 705-34160-1

No Detections.

Client Sample ID: AG34898

Lab Sample ID: 705-34160-2

No Detections.

Client Sample ID: AG34903

Lab Sample ID: 705-34160-3

No Detections.

Client Sample ID: AG34910

Lab Sample ID: 705-34160-4

No Detections.

Client Sample ID: AG34897

Lab Sample ID: 705-34160-5

No Detections.

Client Sample ID: AG34908

Lab Sample ID: 705-34160-6

No Detections.

Client Sample ID: AG34909

Lab Sample ID: 705-34160-7

No Detections.

Client Sample ID: AG34916

Lab Sample ID: 705-34160-8

No Detections.

Client Sample ID: AG34917

Lab Sample ID: 705-34160-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Atlanta

Sample Summary

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

Job ID: 705-34160-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
705-34160-1	AG34902	Water	06/12/25 10:03	06/19/25 09:44
705-34160-2	AG34898	Water	06/12/25 11:13	06/19/25 09:44
705-34160-3	AG34903	Water	06/12/25 12:11	06/19/25 09:44
705-34160-4	AG34910	Water	06/12/25 13:08	06/19/25 09:44
705-34160-5	AG34897	Water	06/12/25 14:14	06/19/25 09:44
705-34160-6	AG34908	Water	06/12/25 15:13	06/19/25 09:44
705-34160-7	AG34909	Water	06/12/25 16:16	06/19/25 09:44
705-34160-8	AG34916	Water	06/17/25 09:41	06/19/25 09:44
705-34160-9	AG34917	Water	06/17/25 10:33	06/19/25 09:44

Method Summary

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

Job ID: 705-34160-1

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

Protocol References:

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

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177



Definitions/Glossary

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

Job ID: 705-34160-1

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

Client Sample Results

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

Job ID: 705-34160-1

Client Sample ID: AG34902

Lab Sample ID: 705-34160-1

Date Collected: 06/12/25 10:03

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 16:56	1

Client Sample ID: AG34898

Lab Sample ID: 705-34160-2

Date Collected: 06/12/25 11:13

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 16:59	1

Client Sample ID: AG34903

Lab Sample ID: 705-34160-3

Date Collected: 06/12/25 12:11

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 17:03	1

Client Sample ID: AG34910

Lab Sample ID: 705-34160-4

Date Collected: 06/12/25 13:08

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 17:07	1

Client Sample ID: AG34897

Lab Sample ID: 705-34160-5

Date Collected: 06/12/25 14:14

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 17:11	1

Client Sample ID: AG34908

Lab Sample ID: 705-34160-6

Date Collected: 06/12/25 15:13

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 17:55	1

Client Sample ID: AG34909

Lab Sample ID: 705-34160-7

Date Collected: 06/12/25 16:16

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 17:59	1

Client Sample Results

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

Job ID: 705-34160-1

Client Sample ID: AG34916

Lab Sample ID: 705-34160-8

Date Collected: 06/17/25 09:41

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:03	1

Client Sample ID: AG34917

Lab Sample ID: 705-34160-9

Date Collected: 06/17/25 10:33

Matrix: Water

Date Received: 06/19/25 09:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 18:07	1

QC Association Summary

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

Job ID: 705-34160-1

Metals

Prep Batch: 64872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-34160-1	AG34902	Total/NA	Water	7470A	
705-34160-2	AG34898	Total/NA	Water	7470A	
705-34160-3	AG34903	Total/NA	Water	7470A	
705-34160-4	AG34910	Total/NA	Water	7470A	
705-34160-5	AG34897	Total/NA	Water	7470A	
705-34160-6	AG34908	Total/NA	Water	7470A	
705-34160-7	AG34909	Total/NA	Water	7470A	
705-34160-8	AG34916	Total/NA	Water	7470A	
705-34160-9	AG34917	Total/NA	Water	7470A	
MB 705-64872/1-A	Method Blank	Total/NA	Water	7470A	
LCS 705-64872/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-34417-F-25-C MS	Matrix Spike	Total/NA	Water	7470A	
705-34417-F-25-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 64962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-34160-1	AG34902	Total/NA	Water	7470A	64872
705-34160-2	AG34898	Total/NA	Water	7470A	64872
705-34160-3	AG34903	Total/NA	Water	7470A	64872
705-34160-4	AG34910	Total/NA	Water	7470A	64872
705-34160-5	AG34897	Total/NA	Water	7470A	64872
705-34160-6	AG34908	Total/NA	Water	7470A	64872
705-34160-7	AG34909	Total/NA	Water	7470A	64872
705-34160-8	AG34916	Total/NA	Water	7470A	64872
705-34160-9	AG34917	Total/NA	Water	7470A	64872
MB 705-64872/1-A	Method Blank	Total/NA	Water	7470A	64872
LCS 705-64872/2-A	Lab Control Sample	Total/NA	Water	7470A	64872
705-34417-F-25-C MS	Matrix Spike	Total/NA	Water	7470A	64872
705-34417-F-25-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	64872

QC Sample Results

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

Job ID: 705-34160-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 705-64872/1-A
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 15:24	1

Lab Sample ID: LCS 705-64872/2-A
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00400	0.003210		mg/L		80	80 - 120

Lab Sample ID: 705-34417-F-25-C MS
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64872

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000200	U	0.00400	0.003303		mg/L		83	75 - 125

Lab Sample ID: 705-34417-F-25-D MSD
Matrix: Water
Analysis Batch: 64962

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64872

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000200	U	0.00400	0.003219		mg/L		80	75 - 125	3	20

Lab Chronicle

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

Job ID: 705-34160-1

Client Sample ID: AG34902

Lab Sample ID: 705-34160-1

Date Collected: 06/12/25 10:03

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 16:56

Client Sample ID: AG34898

Lab Sample ID: 705-34160-2

Date Collected: 06/12/25 11:13

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 16:59

Client Sample ID: AG34903

Lab Sample ID: 705-34160-3

Date Collected: 06/12/25 12:11

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 17:03

Client Sample ID: AG34910

Lab Sample ID: 705-34160-4

Date Collected: 06/12/25 13:08

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 17:07

Client Sample ID: AG34897

Lab Sample ID: 705-34160-5

Date Collected: 06/12/25 14:14

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 17:11

Client Sample ID: AG34908

Lab Sample ID: 705-34160-6

Date Collected: 06/12/25 15:13

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 17:55

Lab Chronicle

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

Job ID: 705-34160-1

Client Sample ID: AG34909

Lab Sample ID: 705-34160-7

Date Collected: 06/12/25 16:16

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 17:59

Client Sample ID: AG34916

Lab Sample ID: 705-34160-8

Date Collected: 06/17/25 09:41

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:03

Client Sample ID: AG34917

Lab Sample ID: 705-34160-9

Date Collected: 06/17/25 10:33

Matrix: Water

Date Received: 06/19/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64872	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64962	GR	EET ATL	06/30/25 18:07

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177

Chain of Custody



7/2/2025

Customer Email/Report Recipient: LINDA.WILLIAMS@santeecooper.com Date Results Needed by: Project/Task/Unit #: 125915 / JMO2.07.G81.1 / 36500 Rerun request for any flagged Q Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments	HG
AG34902	CCMAP-6	6/12/25	1003	AGP EA	1	P	G	GW	2	7470 RL < 0.2 ug/L	X
AG34898	CCMAP-3		1113								
AG34903	CCMAP-7		1211								
AG34910	CCMAP-14		1308								
AG34897	CCMAP-2		1414								
AG34908	CCMAP-12		1513								
AG34909	CCMAP-13		1616								
AG34916	CCMLF-1	6/17/25	0941								
AG34917	CCMLF-1D		1033								



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Nutrients	Gypsum	Coal	Flyash	Oil	MISC.	Metals (All)
<input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	<input type="checkbox"/> Wallboard <input type="checkbox"/> A/M <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	<input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Trans. Oil Quality <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Deloicite strength <input type="checkbox"/> IP1 <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	<input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Bi <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): <u>M.O #2665</u> Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
<u>S. Levy</u>	35594	FEG-EX	—	6/18/25	1000	
		<u>S. Levy</u>		6/19/25	9:44	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code: 1=<4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O3 6-Other (Specify)

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 705-34160-1

Login Number: 34160

List Source: Eurofins Atlanta

List Number: 1

Creator: Ceclu, Rodica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
The cooler does not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Sample custody seals, if present, are intact.	True	
Sample collection date/times are provided.	True	
The samples do not appear to have been compromised or tampered with.	True	
Containers are not broken or leaking.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Appropriate sample containers were rec'd and sufficient volume for all analyses.	True	
Samples are received within Holding Time (excluding tests with immediate HTs).	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Is there sufficient air space in bottle for bacteriological analysis.	True	

Accreditation/Certification Summary

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

Job ID: 705-34160-1

Laboratory: Eurofins Atlanta

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87582	06-30-25
South Carolina	State	98016	06-30-25



- 1
- 2
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- 12
- 13
- 14
- 15

END OF REPORT

 **ANALYTICAL REPORT****PREPARED FOR**

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

Generated 7/2/2025 10:05:30 AM

JOB DESCRIPTION

125915/JM02.09.G01.1/36110

JOB NUMBER

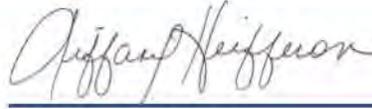
705-34179-1

Eurofins Atlanta

Job Notes

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
Tiffany Heifferon, Project Manager I
Tiffany.Heifferon@et.eurofinsus.com
(770)457-8177

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Case Narrative

Client: South Carolina Public Service Authority
Project: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Job ID: 705-34179-1

Eurofins Atlanta

Job Narrative 705-34179-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 6/19/2025 12:44 PM. 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 24.0°C.

Metals

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

Eurofins Atlanta

Detection Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Client Sample ID: AG34896 **Lab Sample ID: 705-34179-1**

No Detections.

Client Sample ID: AG34907 **Lab Sample ID: 705-34179-2**

No Detections.

Client Sample ID: AG34904 **Lab Sample ID: 705-34179-3**

No Detections.

Client Sample ID: AG34906 **Lab Sample ID: 705-34179-4**

No Detections.

Client Sample ID: AG34905 **Lab Sample ID: 705-34179-5**

No Detections.

Client Sample ID: AG34918 **Lab Sample ID: 705-34179-6**

No Detections.

Client Sample ID: AG34899 **Lab Sample ID: 705-34179-7**

No Detections.

Client Sample ID: AG34900 **Lab Sample ID: 705-34179-8**

No Detections.

Client Sample ID: AG34901 **Lab Sample ID: 705-34179-9**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Atlanta

Sample Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
705-34179-1	AG34896	Water	06/16/25 09:43	06/19/25 12:44
705-34179-2	AG34907	Water	06/16/25 11:17	06/19/25 12:44
705-34179-3	AG34904	Water	06/16/25 12:25	06/19/25 12:44
705-34179-4	AG34906	Water	06/16/25 13:29	06/19/25 12:44
705-34179-5	AG34905	Water	06/16/25 14:25	06/19/25 12:44
705-34179-6	AG34918	Water	06/16/25 15:52	06/19/25 12:44
705-34179-7	AG34899	Water	06/11/25 15:03	06/19/25 12:44
705-34179-8	AG34900	Water	06/11/25 15:08	06/19/25 12:44
705-34179-9	AG34901	Water	06/11/25 16:20	06/19/25 12:44

Method Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

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

Protocol References:

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

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177



Definitions/Glossary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

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

Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Client Sample ID: AG34896

Lab Sample ID: 705-34179-1

Date Collected: 06/16/25 09:43

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 19:56	1

Client Sample ID: AG34907

Lab Sample ID: 705-34179-2

Date Collected: 06/16/25 11:17

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:00	1

Client Sample ID: AG34904

Lab Sample ID: 705-34179-3

Date Collected: 06/16/25 12:25

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:04	1

Client Sample ID: AG34906

Lab Sample ID: 705-34179-4

Date Collected: 06/16/25 13:29

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:08	1

Client Sample ID: AG34905

Lab Sample ID: 705-34179-5

Date Collected: 06/16/25 14:25

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:11	1

Client Sample ID: AG34918

Lab Sample ID: 705-34179-6

Date Collected: 06/16/25 15:52

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:27	1

Client Sample ID: AG34899

Lab Sample ID: 705-34179-7

Date Collected: 06/11/25 15:03

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:31	1

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Client Sample Results

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Client Sample ID: AG34900

Lab Sample ID: 705-34179-8

Date Collected: 06/11/25 15:08

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:35	1

Client Sample ID: AG34901

Lab Sample ID: 705-34179-9

Date Collected: 06/11/25 16:20

Matrix: Water

Date Received: 06/19/25 12:44

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 20:39	1

QC Association Summary

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Metals

Prep Batch: 64885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-34179-1	AG34896	Total/NA	Water	7470A	
705-34179-2	AG34907	Total/NA	Water	7470A	
705-34179-3	AG34904	Total/NA	Water	7470A	
705-34179-4	AG34906	Total/NA	Water	7470A	
705-34179-5	AG34905	Total/NA	Water	7470A	
705-34179-6	AG34918	Total/NA	Water	7470A	
705-34179-7	AG34899	Total/NA	Water	7470A	
705-34179-8	AG34900	Total/NA	Water	7470A	
705-34179-9	AG34901	Total/NA	Water	7470A	
MB 705-64885/1-A	Method Blank	Total/NA	Water	7470A	
LCS 705-64885/2-A	Lab Control Sample	Total/NA	Water	7470A	
705-34375-A-4-B MS	Matrix Spike	Total/NA	Water	7470A	
705-34375-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 64963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
705-34179-1	AG34896	Total/NA	Water	7470A	64885
705-34179-2	AG34907	Total/NA	Water	7470A	64885
705-34179-3	AG34904	Total/NA	Water	7470A	64885
705-34179-4	AG34906	Total/NA	Water	7470A	64885
705-34179-5	AG34905	Total/NA	Water	7470A	64885
705-34179-6	AG34918	Total/NA	Water	7470A	64885
705-34179-7	AG34899	Total/NA	Water	7470A	64885
705-34179-8	AG34900	Total/NA	Water	7470A	64885
705-34179-9	AG34901	Total/NA	Water	7470A	64885
MB 705-64885/1-A	Method Blank	Total/NA	Water	7470A	64885
LCS 705-64885/2-A	Lab Control Sample	Total/NA	Water	7470A	64885
705-34375-A-4-B MS	Matrix Spike	Total/NA	Water	7470A	64885
705-34375-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	64885

QC Sample Results

Client: South Carolina Public Service Authority
 Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 705-64885/1-A
Matrix: Water
Analysis Batch: 64963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000200	U	0.000200		mg/L		06/30/25 12:10	06/30/25 19:01	1

Lab Sample ID: LCS 705-64885/2-A
Matrix: Water
Analysis Batch: 64963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00400	0.003347		mg/L		84	80 - 120

Lab Sample ID: 705-34375-A-4-B MS
Matrix: Water
Analysis Batch: 64963

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.000200	U	0.00400	0.003369		mg/L		84	75 - 125

Lab Sample ID: 705-34375-A-4-C MSD
Matrix: Water
Analysis Batch: 64963

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.000200	U	0.00400	0.003229		mg/L		81	75 - 125	4	20

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Client Sample ID: AG34896

Lab Sample ID: 705-34179-1

Date Collected: 06/16/25 09:43

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 19:56

Client Sample ID: AG34907

Lab Sample ID: 705-34179-2

Date Collected: 06/16/25 11:17

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:00

Client Sample ID: AG34904

Lab Sample ID: 705-34179-3

Date Collected: 06/16/25 12:25

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:04

Client Sample ID: AG34906

Lab Sample ID: 705-34179-4

Date Collected: 06/16/25 13:29

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:08

Client Sample ID: AG34905

Lab Sample ID: 705-34179-5

Date Collected: 06/16/25 14:25

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:11

Client Sample ID: AG34918

Lab Sample ID: 705-34179-6

Date Collected: 06/16/25 15:52

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:27

Lab Chronicle

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Client Sample ID: AG34899

Lab Sample ID: 705-34179-7

Date Collected: 06/11/25 15:03

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:31

Client Sample ID: AG34900

Lab Sample ID: 705-34179-8

Date Collected: 06/11/25 15:08

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:35

Client Sample ID: AG34901

Lab Sample ID: 705-34179-9

Date Collected: 06/11/25 16:20

Matrix: Water

Date Received: 06/19/25 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			64885	GR	EET ATL	06/30/25 12:10
Total/NA	Analysis	7470A		1	64963	GR	EET ATL	06/30/25 20:39

Laboratory References:

EET ATL = Eurofins Atlanta, 3080 Presidential Dr, Atlanta, GA 30340, TEL (770)457-8177

Login Sample Receipt Checklist

Client: South Carolina Public Service Authority

Job Number: 705-34179-1

Login Number: 34179

List Number: 1

Creator: Ceclu, Rodica

List Source: Eurofins Atlanta

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
The cooler does not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Sample custody seals, if present, are intact.	True	
Sample collection date/times are provided.	True	
The samples do not appear to have been compromised or tampered with.	True	
Containers are not broken or leaking.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Appropriate sample containers were rec'd and sufficient volume for all analyses.	True	
Samples are received within Holding Time (excluding tests with immediate HTs).	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Is there sufficient air space in bottle for bacteriological analysis.	True	

Accreditation/Certification Summary

Client: South Carolina Public Service Authority
Project/Site: 125915/JM02.09.G01.1/36110

Job ID: 705-34179-1

Laboratory: Eurofins Atlanta

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

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87582	06-30-25
South Carolina	State	98016	06-30-25



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

END OF REPORT

July 09, 2025

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

Re: ABS Lab Analytical
Work Order: 729220

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 17, 2025. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

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

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures



GEL LABORATORIES LLC

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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 729220 GEL Work Order: 729220

The Qualifiers in this report are defined as follows:

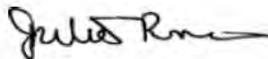
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

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

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

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 9, 2025

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

Client Sample ID: AG34941	Project: SOOP00119
Sample ID: 729220001	Client ID: SOOP001
Matrix: GW	
Collect Date: 10-JUN-25 09:53	
Receive Date: 17-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.318	+/-0.356	0.596	1.00	pCi/L			JE1	07/08/25	0835	2815379	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.849	+/-0.426	0.382	1.00	pCi/L			RS2	07/03/25	1049	2817558	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"			73.1	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: July 9, 2025

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

Client Sample ID: AG34938	Project: SOOP00119
Sample ID: 729220002	Client ID: SOOP001
Matrix: GW	
Collect Date: 10-JUN-25 12:10	
Receive Date: 17-JUN-25	
Collector: Client	

Parameter	Qualifier	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	0.849	+/-0.551	0.854	1.00	pCi/L		JE1	07/08/25	0835	2815379		1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.885	+/-0.421	0.494	1.00	pCi/L		RS2	07/03/25	1049	2817558		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"			67.6	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 9, 2025

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

Client Sample ID: AG34935 Project: SOOP00119
Sample ID: 729220003 Client ID: SOOP001
Matrix: GW
Collect Date: 10-JUN-25 13:14
Receive Date: 17-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"													
Radium-228		0.915	+/-0.468	0.673	1.00	pCi/L			JE1	07/08/25	0835	2815379	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	-0.198	+/-0.238	0.665	1.00	pCi/L			RS2	07/03/25	1049	2817558	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"			75.8	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 9, 2025

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

Client Sample ID: AG34939	Project: SOOP00119
Sample ID: 729220004	Client ID: SOOP001
Matrix: GW	
Collect Date: 10-JUN-25 14:17	
Receive Date: 17-JUN-25	
Collector: Client	

Parameter	Qualifier	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	0.495	+/-0.361	0.552	1.00	pCi/L		JE1	07/08/25	0835	2815379		1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.294	+/-0.228	0.281	1.00	pCi/L		RS2	07/03/25	1049	2817558		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"			63.7	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: July 9, 2025

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

Client Sample ID: AG34940	Project: SOOP00119
Sample ID: 729220005	Client ID: SOOP001
Matrix: GW	
Collect Date: 10-JUN-25 14:22	
Receive Date: 17-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"													
Radium-228		0.923	+/-0.468	0.662	1.00	pCi/L			JE1	07/08/25	0835	2815379	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.243	+/-0.317	0.542	1.00	pCi/L			RS2	07/03/25	1049	2817558	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"			71.9	(15%-125%)

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 9, 2025

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

Client Sample ID: AG34912	Project: SOOP00119
Sample ID: 729220006	Client ID: SOOP001
Matrix: GW	
Collect Date: 10-JUN-25 16:02	
Receive Date: 17-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.349	+/-0.416	0.702	1.00	pCi/L		JE1	07/08/25	0836	2815379		1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		2.48	+/-0.621	0.365	1.00	pCi/L		RS2	07/03/25	1049	2817558		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"			76.2	(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: July 9, 2025

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

Client Sample ID: AG34936	Project: SOOP00119
Sample ID: 729220007	Client ID: SOOP001
Matrix: GW	
Collect Date: 09-JUN-25 16:33	
Receive Date: 17-JUN-25	
Collector: Client	

Parameter	Qualifier	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	0.200	+/-0.273	0.468	1.00	pCi/L		JE1	07/08/25	0836	2815379		1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.799	+/-0.414	0.491	1.00	pCi/L		RS2	07/03/25	1049	2817558		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"			86.7	(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

QC Summary

Report Date: July 9, 2025

Page 1 of 2

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

Contact:
Workorder: 729220

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2815379										
QC1206144183	729220001	DUP									
Radium-228	U	0.318	U	0.348	pCi/L	N/A		N/A	JE1	07/08/25	08:33
	Uncertainty	+/-0.356		+/-0.358							
QC1206144184	LCS										
Radium-228	27.6			21.4	pCi/L		77.5	(75%-125%)		07/08/25	10:20
	Uncertainty			+/-1.49							
QC1206144182	MB										
Radium-228			U	0.219	pCi/L					07/08/25	10:20
	Uncertainty			+/-0.362							
Rad Ra-226											
Batch	2817558										
QC1206148449	729220002	DUP									
Radium-226		0.885		1.12	pCi/L	23.2		(0% - 100%)	RS2	07/03/25	12:24
	Uncertainty	+/-0.421		+/-0.425							
QC1206148451	LCS										
Radium-226	27.2			27.9	pCi/L		102	(75%-125%)		07/03/25	13:34
	Uncertainty			+/-2.33							
QC1206148448	MB										
Radium-226			U	0.249	pCi/L					07/03/25	12:24
	Uncertainty			+/-0.230							
QC1206148450	729220002	MS									
Radium-226	129	0.885		149	pCi/L		115	(75%-125%)		07/03/25	14:40
	Uncertainty	+/-0.421		+/-11.8							

- 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

GEL LABORATORIES LLC

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QC Summary

Workorder: 729220

Page 2 of 2

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

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 #: 729220**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

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

Analytical Batch: 2815379

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
729220001	AG34941
729220002	AG34938
729220003	AG34935
729220004	AG34939
729220005	AG34940
729220006	AG34912
729220007	AG34936
1206144182	Method Blank (MB)
1206144183	729220001(AG34941) Sample Duplicate (DUP)
1206144184	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 1206144184 (LCS) was recounted due to low recovery. The recount is reported.

Sample 1206144182 (MB) was recounted due to a suspected blank 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: 2817558

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
729220001	AG34941
729220002	AG34938
729220003	AG34935
729220004	AG34939
729220005	AG34940

729220006	AG34912
729220007	AG34936
1206148448	Method Blank (MB)
1206148449	729220002(AG34938) Sample Duplicate (DUP)
1206148450	729220002(AG34938) Matrix Spike (MS)
1206148451	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 1206148450 (AG34938MS) was recounted due to high recovery. The recount is reported.

Miscellaneous Information

Additional Comments

The matrix spike, 1206148450 (AG34938MS), aliquot was reduced to conserve sample volume.

Certification Statement

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

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP SDG/IA/COC/Work Order: 729220 GEL PMI:

Received By: KE Date Received at GEL: 6/17/25

Carrier (Circle Applicable) FedEx Express FedEx Ground UPS Field Services Courier Client Other: IR Temp gun # IR1-24 Daily Calibration Performed? Y/N

Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radiochem only).	Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radiochem only).
	<u>23</u>	<input checked="" type="checkbox"/>			

Suspected Hazard Information

Yes No *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Hazard Class Shipped: FUN2910 UN#: Is the Radioactive Shipment Survey Compliant? Yes No

B) Did the client designate the samples are to be received as radioactive? COC notation or radioactive stickers on containers equal client designation.

C) Did the RSO classify the samples as radioactive? Maximum Net Counts Observed* (Observed Counts - Area Background Counts): CPM / mR/Hr
Classified as: Rad 1 Rad 2 Rad 3
If yes, select Hazards below.

D) Are there any sample hazards to document? PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Corrosive Other:

E) Was a SDS received and reviewed by Lab Safety? Circle Applicable: See additional Comments below. No additional comments needed after review.

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Direct client dropoff Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Client contacted and provided COC COC created upon receipt
3 If there are samples requiring cold preservation, did they arrive within (0 < 6 °C)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Preservation Method: Wet Ice Ice Packs Dry Ice <u>None</u> Other: *all temperatures recorded next to tracking numbers are in Celsius
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Preserved per COC request or list Sample IDs and Containers Affected:
6 Do any samples require Volatile Analysis? (If yes, answer all three additional questions.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		If Preservation added, Lot#: <u> </u> If Yes, are Encores or Soil Kits present? Yes No (If yes, take to VOA Preczer) 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 IDs and containers affected:
7 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		IDs and tests affected:
8 Sample IDs on COC match IDs on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		IDs and containers affected:
9 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: No container count on COC Missing Container (provide details) Other (describe)
11 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
12 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Circle Applicable: Not relinquished Other (describe)

Comments:

PM (or PMA) review: initials JKW Date 6/18/25

Continuation Form Required when selected

List of current GEL Certifications as of 09 July 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

June 18, 2025

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

Re: ABS Lab Analytical
Work Order: 728138

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 10, 2025. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

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

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 125915/JM02.09.G01/36500
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: 728138 GEL Work Order: 728138

The Qualifiers in this report are defined as follows:

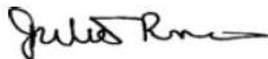
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

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

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

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 18, 2025

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

Client Sample ID: AG34934 Project: SOOP00119
Sample ID: 728138001 Client ID: SOOP001
Matrix: GW
Collect Date: 02-JUN-25 10:34
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		5.36	0.330	1.00	mg/L		1	KB3	06/13/25	1948	2812600	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	SM 5310 B		

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 18, 2025

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

Client Sample ID: AG34895 Project: SOOP00119
Sample ID: 728138002 Client ID: SOOP001
Matrix: GW
Collect Date: 02-JUN-25 10:21
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.23	0.330	1.00	mg/L		1	KB3	06/13/25	2100	2812600	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	SM 5310 B		

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: June 18, 2025

Page 1 of 2

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

Contact: Ms. Jeanette Gilmetti

Workorder: 728138

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis											
Batch	2812600										
QC1206138574	728138001	DUP									
Total Organic Carbon Average		5.36		5.44	mg/L	1.48		(0%-20%)	KB3	06/13/25	20:12
QC1206138573	LCS										
Total Organic Carbon Average	10.0			9.92	mg/L		99.2	(80%-120%)		06/13/25	19:36
QC1206138572	MB										
Total Organic Carbon Average			U	0.330	mg/L					06/13/25	19:28
QC1206138575	728138001	PS									
Total Organic Carbon Average	10.0	5.36		14.5	mg/L		91.6	(65%-120%)		06/13/25	20:36

Notes:

The Qualifiers in this report are defined as follows:

- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- J Value is estimated
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- H Analytical holding time was exceeded
- < Result is less than value reported
- > Result is greater than value reported
- h Preparation or preservation holding time was exceeded
- R Sample results are rejected
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range

**General Chemistry
Technical Case Narrative
Santee Cooper
SDG #: 728138**

Product: Carbon, Total Organic

Analytical Method: SM 5310 B

Analytical Procedure: GL-GC-E-093 REV# 22

Analytical Batch: 2812600

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
728138001	AG34934
728138002	AG34895
1206138572	Method Blank (MB)
1206138573	Laboratory Control Sample (LCS)
1206138574	728138001(AG34934) Sample Duplicate (DUP)
1206138575	728138001(AG34934) Post Spike (PS)

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

Data Summary:

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

Certification Statement

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

Chain of Custody

728138



TOC

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 Q

LINDA WILLIAMS @santecooper.com

125915 / JMO2.09.G01 / 36500

Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite(C)	Matrix(see below)	Preservative (see below)	Comments	TOC
AG-34734	FM-1	6/2/25	1034	AGP EA	1	G	G	GW	1		X
AG-34895	CBW-1	6/3/25	1021	I	1	G	G	GW	1		X

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> BOD <input type="checkbox"/> COD <input type="checkbox"/> NH3-N <input type="checkbox"/> NO2-N <input type="checkbox"/> NO3-N <input type="checkbox"/> TP <input type="checkbox"/> TSS <input type="checkbox"/> Chloride <input type="checkbox"/> Sulfate <input type="checkbox"/> Silica	Gypsum <input type="checkbox"/> Calcium <input type="checkbox"/> Magnesium <input type="checkbox"/> Total Hardness <input type="checkbox"/> Sulfate <input type="checkbox"/> Chloride <input type="checkbox"/> Silica	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB
---	--	---	--	---

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
<i>S. Levy</i>	36594	<i>[Signature]</i>	GEL	6/10/25	1015	
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	GEL	6-12-25	1015	

SAMPLE RECEIPT & REVIEW FORM

Client: SCOP SDG/AR/COC/Work Order: 728138 GEL PN: J.R.

Received By: Thyasia Tatum Date Received at GEL: 6/10/25

Carrier (Circle Applicable): FedEx Express FedEx Ground UPS Field Services Courier Client Other: IR Temp gun # IR2-23 Daily Calibration Performed Y

Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie. radionuclides only)	Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie. radionuclides only)
<u>COOL1</u>	<u>10</u>		<u>COOL2</u>	<u>10</u>	

Suspected Hazard Information

Yes No *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Y Hazard Class Shipped: UN#:
If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___

B) Did the client designate the samples as to be received as radioactive? Y ~~See additional information on containers and client designation~~

C) Did the RSO classify the samples as radioactive? Y Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 4 CPM mR/Hr
Classified as: Rad 1 Rad 2 Rad 3
If yes, select Hazards below: PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Corrosive Other:

D) Are there any sample hazards to document? Y Circle Applicable: See additional Comments below. No additional comments needed after review.

E) Was a SDS received and reviewed by Lab Safety? Y

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<u>Y</u>	<u>Y</u>		Circle Applicable: Direct client dropoff Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<u>Y</u>	<u>Y</u>		Circle Applicable: Client contacted and provided COC COC created upon receipt
3 If there are samples requiring cold preservation, did they arrive within (0 < 6 °C)?	<u>Y</u>	<u>Y</u>		Preservation Method: <u>Wet Ice</u> Ice Packs Dry Ice None Other: *all temperatures recorded next to tracking numbers are in Celsius
4 Sample containers intact and sealed?	<u>Y</u>	<u>Y</u>		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<u>Y</u>	<u>Y</u>		Preserved per COC request of the Sample IDs and Containers Affected: If Preservation added, Lot#:
6 Do any samples require Volatile Analysis? (if yes, answer all three additional questions.)	<u>Y</u>	<u>Y</u>		If Yes, are Encores or Soil Kits present? Yes ___ No ___ (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 IDs and containers affected:
7 Samples received within holding time?	<u>Y</u>	<u>Y</u>		IDs and tests affected:
8 Sample IDs on COC match IDs on bottles?	<u>Y</u>	<u>Y</u>		IDs and containers affected:
9 Date & time on COC match date & time on bottles?	<u>Y</u>	<u>Y</u>		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Number of containers received match number indicated on COC?	<u>Y</u>	<u>Y</u>		Circle Applicable: No container count on COC Missing Container (provide details) Other (describe)
11 Are sample containers identifiable as GEL provided by use of GEL labels?	<u>Y</u>	<u>Y</u>		
12 COC form is properly signed in relinquished/received sections?	<u>Y</u>	<u>Y</u>		Circle Applicable: Not relinquished Other (describe)

Comments:

PM (or PMA) review: Initials JW Date 6/11/25

Continuation Form Required when selected

List of current GEL Certifications as of 18 June 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

March 02, 2025

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

Re: ABS Lab Analytical
Work Order: 706875

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 31, 2025. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

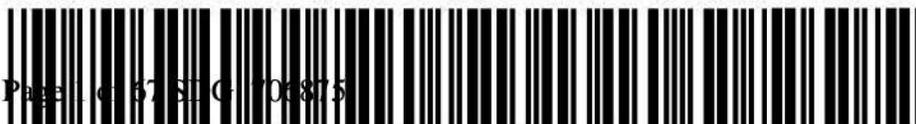
Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,



Julie Robinson
Project Manager

Purchase Order: 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: 706875 GEL Work Order: 706875

The Qualifiers in this report are defined as follows:

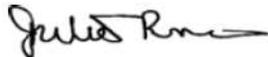
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

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

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

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21210 Project: SOOP00119
Sample ID: 706875001 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 09:28
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.394	0.330	1.00	mg/L		1	KB3	02/03/25	1846	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0679	0.0330	0.100	mg/L		1	CH6	02/01/25	2306	2743199	2
Sulfate		0.912	0.133	0.400	mg/L		1					
Chloride		20.0	0.335	1.00	mg/L		5	CH6	02/03/25	1140	2743199	3
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	0937	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

Company : Santee Cooper
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 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG21211	Project: SOOP00119
Sample ID: 706875002	Client ID: SOOP001
Matrix: GW	
Collect Date: 29-JAN-25 09:33	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.413	0.330	1.00	mg/L		1	KB3	02/03/25	1957	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0709	0.0330	0.100	mg/L		1	CH6	02/02/25	0039	2743199	2
Sulfate		0.873	0.133	0.400	mg/L		1					
Chloride		21.9	0.335	1.00	mg/L		5	CH6	02/03/25	1313	2743199	3
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	0938	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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

Client Sample ID: AG21177 Project: SOOP00119
Sample ID: 706875003 Client ID: SOOP001
Matrix: GW
Collect Date: 30-JAN-25 09:20
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		4.98	0.0670	0.200	mg/L		1	CH6	02/02/25	0211	2743199	1
Fluoride	J	0.0528	0.0330	0.100	mg/L		1					
Sulfate		1.11	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG21175	Project: SOOP00119
Sample ID: 706875004	Client ID: SOOP001
Matrix: GW	
Collect Date: 30-JAN-25 10:11	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		4.73	0.0670	0.200	mg/L		1	CH6	02/02/25	0242	2743199	1
Fluoride	U	0.0330	0.0330	0.100	mg/L		1					
Sulfate		0.492	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	

Notes:

Column headers are defined as follows:

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

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

Client Sample ID: AG21178 Project: SOOP00119
Sample ID: 706875005 Client ID: SOOP001
Matrix: GW
Collect Date: 30-JAN-25 11:16
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		6.00	0.0670	0.200	mg/L		1	CH6	02/02/25	0415	2743199	1
Fluoride	J	0.0559	0.0330	0.100	mg/L		1					
Sulfate		1.14	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG21167 Project: SOOP00119
Sample ID: 706875006 Client ID: SOOP001
Matrix: GW
Collect Date: 30-JAN-25 12:40
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		5.61	0.0670	0.200	mg/L		1	CH6	02/02/25	0446	2743199	1
Fluoride	J	0.0674	0.0330	0.100	mg/L		1					
Sulfate		1.33	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG21168 Project: SOOP00119
Sample ID: 706875007 Client ID: SOOP001
Matrix: GW
Collect Date: 30-JAN-25 13:47
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		5.91	0.0670	0.200	mg/L		1	CH6	02/02/25	0516	2743199	1
Fluoride	U	0.0330	0.0330	0.100	mg/L		1					
Sulfate		0.893	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG21204 Project: SOOP00119
Sample ID: 706875008 Client ID: SOOP001
Matrix: GW
Collect Date: 27-JAN-25 15:35
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.392	0.330	1.00	mg/L		1	KB3	02/03/25	2021	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		5.08	0.0670	0.200	mg/L		1	CH6	02/02/25	0547	2743199	2
Fluoride	J	0.0708	0.0330	0.100	mg/L		1					
Sulfate		1.73	0.133	0.400	mg/L		1					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	0940	2743403	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG21208 Project: SOOP00119
Sample ID: 706875009 Client ID: SOOP001
Matrix: GW
Collect Date: 28-JAN-25 12:16
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.66	0.330	1.00	mg/L		1	KB3	02/03/25	2044	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0955	0.0330	0.100	mg/L		1	CH6	02/02/25	0618	2743199	2
Chloride		699	13.4	40.0	mg/L		200	CH6	02/03/25	1445	2743199	3
Sulfate		613	26.6	80.0	mg/L		200					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	0941	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG21212	Project: SOOP00119
Sample ID: 706875010	Client ID: SOOP001
Matrix: GW	
Collect Date: 28-JAN-25 10:12	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.33	0.330	1.00	mg/L		1	KB3	02/03/25	2108	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0668	0.0330	0.100	mg/L		1	CH6	02/02/25	0649	2743199	2
Chloride		904	13.4	40.0	mg/L		200	CH6	02/03/25	1516	2743199	3
Sulfate		45.0	1.33	4.00	mg/L		10	CH6	02/03/25	1547	2743199	4
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	0942	2743403	5

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 300.0	
5	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21207 Project: SOOP00119
Sample ID: 706875011 Client ID: SOOP001
Matrix: GW
Collect Date: 28-JAN-25 10:56
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.68	0.330	1.00	mg/L		1	KB3	02/03/25	2132	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		0.169	0.0330	0.100	mg/L		1	CH6	02/02/25	0720	2743199	2
Chloride		337	6.70	20.0	mg/L		100	CH6	02/03/25	1618	2743199	3
Sulfate		139	13.3	40.0	mg/L		100					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	0943	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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

Client Sample ID: AG21209	Project: SOOP00119
Sample ID: 706875012	Client ID: SOOP001
Matrix: GW	
Collect Date: 28-JAN-25 13:39	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.99	0.330	1.00	mg/L		1	KB3	02/03/25	2156	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0813	0.0330	0.100	mg/L		1	CH6	02/02/25	0751	2743199	2
Chloride		369	6.70	20.0	mg/L		100	CH6	02/03/25	1750	2743199	3
Sulfate		553	13.3	40.0	mg/L		100					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1044	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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

Client Sample ID: AG21206	Project: SOOP00119
Sample ID: 706875013	Client ID: SOOP001
Matrix: GW	
Collect Date: 28-JAN-25 14:39	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.19	0.330	1.00	mg/L		1	KB3	02/03/25	2220	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		0.151	0.0330	0.100	mg/L		1	CH6	02/02/25	0822	2743199	2
Chloride		7.11	0.0670	0.200	mg/L		1	CH6	02/03/25	1821	2743199	3
Sulfate		75.4	1.33	4.00	mg/L		10	CH6	02/03/25	1852	2743199	4
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1045	2743403	5

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 300.0	
5	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG21188 Project: SOOP00119
Sample ID: 706875014 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 11:39
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		6.04	0.0670	0.200	mg/L		1	CH6	02/02/25	0853	2743199	1
Fluoride	J	0.0782	0.0330	0.100	mg/L		1					
Sulfate		3.98	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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

Client Sample ID: AG21187 Project: SOOP00119
Sample ID: 706875015 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 12:39
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		8.06	0.0670	0.200	mg/L		1	CH6	02/02/25	1025	2743199	1
Fluoride	J	0.0608	0.0330	0.100	mg/L		1					
Sulfate		8.40	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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

Client Sample ID: AG21189 Project: SOOP00119
Sample ID: 706875016 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 13:43
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		5.11	0.0670	0.200	mg/L		1	CH6	02/02/25	1056	2743199	1
Fluoride	U	0.0330	0.0330	0.100	mg/L		1					
Sulfate		0.436	0.133	0.400	mg/L		1					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21176 Project: SOOP00119
Sample ID: 706875017 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 14:47
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0605	0.0330	0.100	mg/L		1	CH6	02/02/25	1127	2743199	1
Sulfate		0.729	0.133	0.400	mg/L		1					
Chloride		12.2	0.670	2.00	mg/L		10	CH6	02/03/25	1923	2743199	2

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		
2	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21173 Project: SOOP00119
Sample ID: 706875018 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 15:29
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		1.28	0.0670	0.200	mg/L		1	CH6	02/02/25	1158	2743199	1
Fluoride		0.364	0.0330	0.100	mg/L		1					
Sulfate		57.1	1.33	4.00	mg/L		10	CH6	02/03/25	1954	2743199	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21169 Project: SOOP00119
Sample ID: 706875019 Client ID: SOOP001
Matrix: GW
Collect Date: 21-JAN-25 10:10
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0736	0.0330	0.100	mg/L		1	CH6	02/02/25	1229	2743199	1
Chloride		1190	13.4	40.0	mg/L		200	CH6	02/03/25	2025	2743199	2
Sulfate		1330	26.6	80.0	mg/L		200					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		
2	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21174	Project: SOOP00119
Sample ID: 706875020	Client ID: SOOP001
Matrix: GW	
Collect Date: 21-JAN-25 11:19	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		8.71	0.134	0.400	mg/L		2	CH6	02/03/25	2056	2743199	1
Fluoride	J	0.162	0.0660	0.200	mg/L		2					
Sulfate		1.62	0.266	0.800	mg/L		2					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		

Notes:

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21181 Project: SOOP00119
Sample ID: 706875021 Client ID: SOOP001
Matrix: GW
Collect Date: 21-JAN-25 12:17
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0692	0.0330	0.100	mg/L		1	CH6	02/02/25	0058	2743200	1
Sulfate		1.87	0.133	0.400	mg/L		1					
Chloride		13.0	0.134	0.400	mg/L		2	CH6	02/03/25	1154	2743200	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	

Notes:

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21198 Project: SOOP00119
Sample ID: 706875022 Client ID: SOOP001
Matrix: GW
Collect Date: 27-JAN-25 09:19
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.36	0.330	1.00	mg/L		1	KB3	02/03/25	2303	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		0.117	0.0330	0.100	mg/L		1	CH6	02/02/25	0129	2743200	2
Chloride		29.4	1.34	4.00	mg/L		20	CH6	02/03/25	1225	2743200	3
Sulfate		191	2.66	8.00	mg/L		20					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1047	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21199 Project: SOOP00119
Sample ID: 706875023 Client ID: SOOP001
Matrix: GW
Collect Date: 27-JAN-25 09:24
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.62	0.330	1.00	mg/L		1	KB3	02/03/25	2327	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		0.112	0.0330	0.100	mg/L		1	CH6	02/02/25	0200	2743200	2
Chloride		29.3	1.34	4.00	mg/L		20	CH6	02/03/25	1255	2743200	3
Sulfate		190	2.66	8.00	mg/L		20					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1050	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21200 Project: SOOP00119
Sample ID: 706875024 Client ID: SOOP001
Matrix: GW
Collect Date: 27-JAN-25 10:39
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.36	0.330	1.00	mg/L		1	KB3	02/03/25	2351	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0488	0.0330	0.100	mg/L		1	CH6	02/02/25	0231	2743200	2
Chloride		93.9	1.34	4.00	mg/L		20	CH6	02/03/25	1326	2743200	3
Sulfate		22.0	2.66	8.00	mg/L		20					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1051	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21201	Project: SOOP00119
Sample ID: 706875025	Client ID: SOOP001
Matrix: GW	
Collect Date: 27-JAN-25 12:12	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		2.25	0.330	1.00	mg/L		1	KB3	02/04/25	0015	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		0.194	0.0330	0.100	mg/L		1	CH6	02/02/25	0404	2743200	2
Chloride		22.5	1.34	4.00	mg/L		20	CH6	02/03/25	1357	2743200	3
Sulfate		205	2.66	8.00	mg/L		20					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1053	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21202	Project: SOOP00119
Sample ID: 706875026	Client ID: SOOP001
Matrix: GW	
Collect Date: 27-JAN-25 13:35	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.63	0.330	1.00	mg/L		1	KB3	02/04/25	0038	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0538	0.0330	0.100	mg/L		1	CH6	02/02/25	0434	2743200	2
Chloride		93.3	1.34	4.00	mg/L		20	CH6	02/03/25	1428	2743200	3
Sulfate		31.9	2.66	8.00	mg/L		20					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1054	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21203 Project: SOOP00119
Sample ID: 706875027 Client ID: SOOP001
Matrix: GW
Collect Date: 27-JAN-25 14:54
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.69	0.330	1.00	mg/L		1	KB3	02/04/25	0102	2743526	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	U	0.0330	0.0330	0.100	mg/L		1	CH6	02/02/25	0505	2743200	2
Chloride		167	3.35	10.0	mg/L		50	CH6	02/03/25	1459	2743200	3
Sulfate		254	6.65	20.0	mg/L		50					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0350	0.0350	0.100	mg/L		5	JLD1	02/03/25	1055	2743403	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

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QC Summary

Report Date: March 2, 2025

Page 1 of 5

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

Contact: Ms. Jeanette Gilmetti

Workorder: 706875

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis											
Batch	2743526										
QC1205993096	706875001	DUP									
Total Organic Carbon Average	J	0.394	J	0.369	mg/L	6.55	^	(+/-1.00)	KB3	02/03/25	19:09
QC1205993093	LCS										
Total Organic Carbon Average	10.0			9.96	mg/L			(80%-120%)		02/03/25	14:20
QC1205993092	MB										
Total Organic Carbon Average			U	0.330	mg/L					02/03/25	14:12
QC1205993097	706875001	PS									
Total Organic Carbon Average	10.0	J	0.394	10.4	mg/L			(65%-120%)		02/03/25	19:33
Ion Chromatography											
Batch	2743199										
QC1205992458	706875001	DUP									
Chloride		20.0		20.0	mg/L	0.23		(0%-20%)	CH6	02/03/25	12:11
Fluoride	J	0.0679	J	0.0672	mg/L	1.04	^	(+/-0.100)		02/01/25	23:37
Sulfate		0.912		0.867	mg/L	5.04	^	(+/-0.400)			
QC1205992460	706875002	DUP									
Chloride		21.9		21.9	mg/L	0.0638		(0%-20%)		02/03/25	13:43
Fluoride	J	0.0709	J	0.0667	mg/L	6.1	^	(+/-0.100)		02/02/25	01:10
Sulfate		0.873		0.882	mg/L	1.03	^	(+/-0.400)			

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QC Summary

Workorder: 706875

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2743199										
QC1205992457	LCS										
Chloride	5.00			4.57	mg/L		91.4	(90%-110%)	CH6	02/01/25	22:35
Fluoride	2.50			2.36	mg/L		94.5	(90%-110%)			
Sulfate	10.0			9.33	mg/L		93.3	(90%-110%)			
QC1205992456	MB										
Chloride			U	0.0670	mg/L					02/01/25	22:04
Fluoride			U	0.0330	mg/L						
Sulfate			U	0.133	mg/L						
QC1205992459	706875001 PS										
Chloride	5.00	4.01		9.14	mg/L		103	(90%-110%)		02/03/25	12:42
Fluoride	2.50	J 0.0679		2.55	mg/L		99.2	(90%-110%)		02/02/25	00:08
Sulfate	10.0	0.912		10.3	mg/L		94.2	(90%-110%)			
QC1205992461	706875002 PS										
Chloride	5.00	4.39		9.51	mg/L		102	(90%-110%)		02/03/25	14:14
Fluoride	2.50	J 0.0709		2.61	mg/L		101	(90%-110%)		02/02/25	01:40
Sulfate	10.0	0.873		10.7	mg/L		98.3	(90%-110%)			
Batch	2743200										
QC1205992466	706875027 DUP										
Chloride		167		167	mg/L	0.009		(0%-20%)	CH6	02/03/25	15:30

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QC Summary

Workorder: 706875

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2743200										
Fluoride	U	0.0330	U	0.0330	mg/L	N/A			CH6	02/02/25	05:36
Sulfate		254		253	mg/L	0.437		(0%-20%)		02/03/25	15:30
QC1205992463	LCS										
Chloride	5.00			4.70	mg/L		94	(90%-110%)		02/01/25	15:09
Fluoride	2.50			2.37	mg/L		95	(90%-110%)			
Sulfate	10.0			9.63	mg/L		96.3	(90%-110%)			
QC1205992462	MB										
Chloride			U	0.0670	mg/L					02/01/25	14:38
Fluoride			U	0.0330	mg/L						
Sulfate			U	0.133	mg/L						
QC1205992467	706875027 PS										
Chloride	5.00	3.33		8.47	mg/L		103	(90%-110%)		02/03/25	16:01
Fluoride	2.50	U	0.000	2.49	mg/L		99.5	(90%-110%)		02/02/25	06:07
Sulfate	10.0	5.09		15.1	mg/L		99.8	(90%-110%)		02/03/25	16:01
Nutrient Analysis											
Batch	2743403										
QC1205992913	706875022 DUP										
Nitrogen, Nitrate/Nitrite	U	0.0350	U	0.0350	mg/L	N/A			JLD1	02/03/25	10:48

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QC Summary

Workorder: 706875

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis											
Batch	2743403										
QC1205992910	LCS										
Nitrogen, Nitrate/Nitrite	1.00			0.986	mg/L		98.6	(90%-110%)	JLD1	02/03/25	09:36
QC1205992909	MB										
Nitrogen, Nitrate/Nitrite			U	0.00700	mg/L					02/03/25	08:58
QC1205992914	706875022	PS									
Nitrogen, Nitrate/Nitrite	1.00	U	-0.00174	0.991	mg/L		99.1	(90%-110%)		02/03/25	10:49

Notes:

The Qualifiers in this report are defined as follows:

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

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QC Summary

Workorder: 706875

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

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

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

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

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

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21210	Project: SOOP00119
Sample ID: 706875001	Client ID: SOOP001
Matrix: GW	
Collect Date: 29-JAN-25 09:28	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	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	0.715	+/-0.718	1.17	1.00	pCi/L			DH1	02/26/25	1448	2743620	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.01	+/-0.484	0.483	1.00	pCi/L			MJ2	03/02/25	0723	2743208	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"			44.1	(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 2, 2025

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

Client Sample ID: AG21211	Project: SOOP00119
Sample ID: 706875002	Client ID: SOOP001
Matrix: GW	
Collect Date: 29-JAN-25 09:33	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.09	+/-0.614	0.866	1.00	pCi/L		DH1	02/26/25	1448	2743620	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.614	+/-0.298	0.323	1.00	pCi/L		MJ2	03/02/25	0723	2743208	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"			48.4	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21177 Project: SOOP00119
Sample ID: 706875003 Client ID: SOOP001
Matrix: GW
Collect Date: 30-JAN-25 09:20
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		1.10	+/-0.643	0.922	1.00	pCi/L			DH1	02/26/25	1448 2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.338	+/-0.310	0.468	1.00	pCi/L			MJ2	03/02/25	0723 2743208	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"			45.8	(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 2, 2025

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

Client Sample ID: AG21175	Project: SOOP00119
Sample ID: 706875004	Client ID: SOOP001
Matrix: GW	
Collect Date: 30-JAN-25 10:11	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.261	+/-0.479	0.853	1.00	pCi/L		DH1	02/26/25	1452	2743620		1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.286	+/-0.194	0.219	1.00	pCi/L		MJ2	03/02/25	0722	2743208		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"			51.8	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21178	Project: SOOP00119
Sample ID: 706875005	Client ID: SOOP001
Matrix: GW	
Collect Date: 30-JAN-25 11:16	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	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	0.364	+/-0.541	0.938	1.00	pCi/L		DH1	02/26/25	1448	2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.456	+/-0.406	0.634	1.00	pCi/L		MJ2	03/02/25	0722	2743208	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"			49.5	(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 2, 2025

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

Client Sample ID: AG21167	Project: SOOP00119
Sample ID: 706875006	Client ID: SOOP001
Matrix: GW	
Collect Date: 30-JAN-25 12:40	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		1.10	+/-0.634	0.919	1.00	pCi/L		DH1	02/26/25	1448	2743620		1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.04	+/-0.383	0.367	1.00	pCi/L		MJ2	03/02/25	0722	2743208		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"			52.3	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21168	Project: SOOP00119
Sample ID: 706875007	Client ID: SOOP001
Matrix: GW	
Collect Date: 30-JAN-25 13:47	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	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	-0.115	+/-0.409	0.828	1.00	pCi/L			DH1	02/26/25	1448	2743620	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.554	+/-0.270	0.235	1.00	pCi/L			MJ2	03/02/25	0722	2743208	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"			58.8	(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 2, 2025

Company : Santee Cooper
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Moncks Corner, South Carolina 29461
Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG21212 Project: SOOP00119
Sample ID: 706875010 Client ID: SOOP001
Matrix: GW
Collect Date: 28-JAN-25 10:12
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	0.614	+/-0.573	0.934	1.00	pCi/L			DH1	02/26/25	1452 2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.446	+/-0.327	0.448	1.00	pCi/L			MJ2	03/02/25	0722 2743208	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"			56	(15%-125%)

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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 2, 2025

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

Client Sample ID: AG21207	Project: SOOP00119
Sample ID: 706875011	Client ID: SOOP001
Matrix: GW	
Collect Date: 28-JAN-25 10:56	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.524	+/-0.721	1.24	1.00	pCi/L		DH1	02/26/25	1452	2743620		1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		1.31	+/-0.429	0.265	1.00	pCi/L		MJ2	03/02/25	0755	2743208		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"			42.4	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21209 Project: SOOP00119
Sample ID: 706875012 Client ID: SOOP001
Matrix: GW
Collect Date: 28-JAN-25 13:39
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	0.942	+/-0.741	1.17	1.00	pCi/L			DH1	02/26/25	1452	2743620	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.847	+/-0.370	0.375	1.00	pCi/L			MJ2	03/02/25	0755	2743208	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"			45.2	(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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Report Date: March 2, 2025

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

Client Sample ID: AG21206 Project: SOOP00119
Sample ID: 706875013 Client ID: SOOP001
Matrix: GW
Collect Date: 28-JAN-25 14:39
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	0.523	+/-0.561	0.934	1.00	pCi/L		DH1	02/26/25	1448	2743620	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.472	+/-0.303	0.328	1.00	pCi/L		MJ2	03/02/25	0755	2743208	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"			57.2	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21188	Project: SOOP00119
Sample ID: 706875014	Client ID: SOOP001
Matrix: GW	
Collect Date: 29-JAN-25 11:39	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	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	0.382	+/-0.569	0.984	1.00	pCi/L			DH1	02/26/25	1452	2743620	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.381	+/-0.249	0.304	1.00	pCi/L			MJ2	03/02/25	0755	2743208	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"			55.4	(15%-125%)

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

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21187 Project: SOOP00119
Sample ID: 706875015 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 12:39
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	0.481	+/-0.684	1.17	1.00	pCi/L			DH1	02/26/25	1448 2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.790	+/-0.424	0.542	1.00	pCi/L			MJ2	03/02/25	0755 2743208	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"			49.7	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Report Date: March 2, 2025

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

Client Sample ID: AG21189 Project: SOOP00119
Sample ID: 706875016 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 13:43
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	0.513	+/-0.720	1.24	1.00	pCi/L			DH1	02/26/25	1452 2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		1.00	+/-0.391	0.408	1.00	pCi/L			MJ2	03/02/25	0755 2743208	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"			48.3	(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 2, 2025

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

Client Sample ID: AG21176 Project: SOOP00119
Sample ID: 706875017 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 14:47
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	1.00	+/-0.806	1.30	1.00	pCi/L			DH1	02/26/25	1448 2743620	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.609	+/-0.301	0.307	1.00	pCi/L			MJ2	03/02/25	0755 2743208	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"			43.3	(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 2, 2025

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

Client Sample ID: AG21173 Project: SOOP00119
Sample ID: 706875018 Client ID: SOOP001
Matrix: GW
Collect Date: 29-JAN-25 15:29
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.83	+/-0.722	1.01	1.00	pCi/L			DH1	02/26/25	1448 2743620	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.278	+/-0.281	0.440	1.00	pCi/L			MJ2	03/02/25	0755 2743208	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"			55.6	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21169 Project: SOOP00119
Sample ID: 706875019 Client ID: SOOP001
Matrix: GW
Collect Date: 21-JAN-25 10:10
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		1.24	+/-0.733	1.12	1.00	pCi/L			DH1	02/26/25	1452 2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.714	+/-0.324	0.311	1.00	pCi/L			MJ2	03/02/25	0834 2743208	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"			51.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21174 Project: SOOP00119
Sample ID: 706875020 Client ID: SOOP001
Matrix: GW
Collect Date: 21-JAN-25 11:19
Receive Date: 31-JAN-25
Collector: Client

Parameter	Qualifier	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	0.958	+/-0.692	1.11	1.00	pCi/L			DH1	02/26/25	1448 2743620	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.516	+/-0.259	0.232	1.00	pCi/L			MJ2	03/02/25	0834 2743208	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"			52.4	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: March 2, 2025

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

Client Sample ID: AG21181	Project: SOOP00119
Sample ID: 706875021	Client ID: SOOP001
Matrix: GW	
Collect Date: 21-JAN-25 12:17	
Receive Date: 31-JAN-25	
Collector: Client	

Parameter	Qualifier	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	0.731	+/-0.708	1.17	1.00	pCi/L		DH1	02/26/25	1448	2743620	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.823	+/-0.424	0.479	1.00	pCi/L		MJ2	03/02/25	0834	2743208	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"			48.7	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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QC Summary

Report Date: March 2, 2025

Page 1 of 2

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

Contact: Ms. Jeanette Gilmetti

Workorder: 706875

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2743620										
QC1205993350	706875001	DUP									
Radium-228	U	0.715	U	0.468	pCi/L	N/A		N/A	DH1	02/26/25	14:47
	Uncertainty	+/-0.718		+/-0.631							
QC1205993351	LCS										
Radium-228	28.5			22.0	pCi/L		77	(75%-125%)		02/26/25	14:52
	Uncertainty			+/-1.74							
QC1205993349	MB										
Radium-228			U	-0.0909	pCi/L					02/26/25	14:47
	Uncertainty			+/-0.487							
Rad Ra-226											
Batch	2743208										
QC1205992499	706875001	DUP									
Radium-226		1.01		0.837	pCi/L	18.5		(0% - 100%)	MJ2	03/02/25	08:34
	Uncertainty	+/-0.484		+/-0.442							
QC1205992501	LCS										
Radium-226	27.2			20.9	pCi/L		77	(75%-125%)		03/02/25	08:33
	Uncertainty			+/-1.62							
QC1205992498	MB										
Radium-226			U	0.177	pCi/L					03/02/25	08:34
	Uncertainty			+/-0.245							
QC1205992500	706875001	MS									
Radium-226	271	1.01		239	pCi/L		87.8	(75%-125%)		03/02/25	08:33
	Uncertainty	+/-0.484		+/-12.1							

- Notes:**
Counting Uncertainty is calculated at the 95% confidence level (1.96-sigma).
The Qualifiers in this report are defined as follows:
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
 - J Value is estimated
 - X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
 - H Analytical holding time was exceeded

GEL LABORATORIES LLC

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QC Summary

Workorder: 706875

Page 2 of 2

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

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

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

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

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

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

Technical Case Narrative
Santee Cooper
SDG #: 706875

General Chemistry

Product: Carbon, Total Organic

Analytical Method: SM 5310 B

Analytical Procedure: GL-GC-E-093 REV# 22

Analytical Batch: 2743526

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
706875001	AG21210
706875002	AG21211
706875008	AG21204
706875009	AG21208
706875010	AG21212
706875011	AG21207
706875012	AG21209
706875013	AG21206
706875022	AG21198
706875023	AG21199
706875024	AG21200
706875025	AG21201
706875026	AG21202
706875027	AG21203
1205993092	Method Blank (MB)
1205993093	Laboratory Control Sample (LCS)
1205993096	706875001(AG21210) Sample Duplicate (DUP)
1205993097	706875001(AG21210) Post Spike (PS)

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

Data Summary:

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

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 36

Analytical Batch: 2743199

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
706875001	AG21210
706875002	AG21211

706875003	AG21177
706875004	AG21175
706875005	AG21178
706875006	AG21167
706875007	AG21168
706875008	AG21204
706875009	AG21208
706875010	AG21212
706875011	AG21207
706875012	AG21209
706875013	AG21206
706875014	AG21188
706875015	AG21187
706875016	AG21189
706875017	AG21176
706875018	AG21173
706875019	AG21169
706875020	AG21174
1205992456	Method Blank (MB)
1205992457	Laboratory Control Sample (LCS)
1205992458	706875001(AG21210) Sample Duplicate (DUP)
1205992459	706875001(AG21210) Post Spike (PS)
1205992460	706875002(AG21211) Sample Duplicate (DUP)
1205992461	706875002(AG21211) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions

The following samples 1205992458 (AG21210DUP), 1205992459 (AG21210PS), 1205992460 (AG21211DUP), 1205992461 (AG21211PS), 706875001 (AG21210), 706875002 (AG21211), 706875009 (AG21208), 706875010 (AG21212), 706875011 (AG21207), 706875012 (AG21209), 706875013 (AG21206), 706875017 (AG21176), 706875018 (AG21173) and 706875019 (AG21169) were diluted because target analyte concentrations exceeded the calibration range. The following sample 706875020 (AG21174) in this sample group was diluted due to matrix interference. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	706875									
	001	002	009	010	011	012	013	017	018	019
Chloride	5X	5X	200X	200X	100X	100X	1X	10X	1X	200X
Sulfate	1X	1X	200X	10X	100X	100X	10X	1X	10X	200X

Analyte	706875
	020
Chloride	2X
Fluoride	2X
Sulfate	2X

Sample Re-analysis

Samples 706875013 (AG21206) and 706875020 (AG21174) were re-analyzed due to (its) proximity to an overrange sample. The results from the reanalysis are reported.

Miscellaneous Information

Manual Integrations

Samples 1205992458 (AG21210DUP), 1205992460 (AG21211DUP), 706875001 (AG21210), 706875002 (AG21211), 706875003 (AG21177), 706875005 (AG21178), 706875006 (AG21167), 706875008 (AG21204), 706875009 (AG21208), 706875010 (AG21212), 706875011 (AG21207), 706875012 (AG21209), 706875013 (AG21206), 706875014 (AG21188), 706875015 (AG21187), 706875017 (AG21176), 706875019 (AG21169) and 706875020 (AG21174) were manually integrated to correctly position the baseline as set in the calibration standards.

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 36

Analytical Batch: 2743200

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
706875021	AG21181
706875022	AG21198
706875023	AG21199
706875024	AG21200
706875025	AG21201
706875026	AG21202
706875027	AG21203
1205992462	Method Blank (MB)
1205992463	Laboratory Control Sample (LCS)
1205992466	706875027(AG21203) Sample Duplicate (DUP)
1205992467	706875027(AG21203) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions

The following samples 1205992466 (AG21203DUP), 1205992467 (AG21203PS), 706875021 (AG21181), 706875022 (AG21198), 706875023 (AG21199), 706875024 (AG21200), 706875025 (AG21201), 706875026 (AG21202) and 706875027 (AG21203) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	706875						
	021	022	023	024	025	026	027

Chloride	2X	20X	20X	20X	20X	20X	50X
Sulfate	1X	20X	20X	20X	20X	20X	50X

Miscellaneous Information

Manual Integrations

Sample 706875024 (AG21200) was manually integrated to correctly position the baseline as set in the calibration standards.

Product: Nitrate/Nitrite Cad Redux Low Level

Analytical Method: EPA 353.2 Low Level

Analytical Procedure: GL-GC-E-128 REV# 16

Analytical Batch: 2743403

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
706875001	AG21210
706875002	AG21211
706875008	AG21204
706875009	AG21208
706875010	AG21212
706875011	AG21207
706875012	AG21209
706875013	AG21206
706875022	AG21198
706875023	AG21199
706875024	AG21200
706875025	AG21201
706875026	AG21202
706875027	AG21203
1205992909	Method Blank (MB)
1205992910	Laboratory Control Sample (LCS)
1205992913	706875022(AG21198) Sample Duplicate (DUP)
1205992914	706875022(AG21198) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions

The following samples 1205992913 (AG21198DUP), 1205992914 (AG21198PS), 706875001 (AG21210), 706875002 (AG21211), 706875008 (AG21204), 706875009 (AG21208), 706875010 (AG21212), 706875011 (AG21207), 706875012 (AG21209), 706875013 (AG21206), 706875022 (AG21198), 706875023 (AG21199), 706875024 (AG21200), 706875025 (AG21201), 706875026 (AG21202) and 706875027 (AG21203) in this sample group were diluted due to matrix interference. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	706875										
	001	002	008	009	010	011	012	013	022	023	
Nitrogen, Nitrate/Nitrite	5X	5X	5X	5X	5X	5X	5X	5X	5X	5X	

Analyte	706875			
	024	025	026	027
Nitrogen, Nitrate/Nitrite	5X	5X	5X	5X

Sample Re-analysis

Sample 1205992910 (LCS) was re-analyzed to verify the result.

Radiochemistry

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

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

Analytical Batch: 2743620

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
706875001	AG21210
706875002	AG21211
706875003	AG21177
706875004	AG21175
706875005	AG21178
706875006	AG21167
706875007	AG21168
706875010	AG21212
706875011	AG21207
706875012	AG21209
706875013	AG21206
706875014	AG21188
706875015	AG21187
706875016	AG21189
706875017	AG21176
706875018	AG21173
706875019	AG21169
706875020	AG21174
706875021	AG21181
1205993349	Method Blank (MB)
1205993350	706875001(AG21210) Sample Duplicate (DUP)
1205993351	Laboratory Control Sample (LCS)

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

Data Summary:

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

Quality Control (QC) Information

RDL Met

The following RDLs were met with rounding.

Sample	Analyte	Value
1205993350 (AG21210DUP)	Radium-228	Result 0.468 < MDA 1.08 > RDL 1 pCi/L
706875001 (AG21210)	Radium-228	Result 0.715 < MDA 1.17 > RDL 1 pCi/L
706875011 (AG21207)	Radium-228	Result 0.524 < MDA 1.24 > RDL 1 pCi/L
706875012 (AG21209)	Radium-228	Result 0.942 < MDA 1.17 > RDL 1 pCi/L
706875015 (AG21187)	Radium-228	Result 0.481 < MDA 1.17 > RDL 1 pCi/L
706875016 (AG21189)	Radium-228	Result 0.513 < MDA 1.24 > RDL 1 pCi/L
706875017 (AG21176)	Radium-228	Result 1 < MDA 1.3 > RDL 1 pCi/L
706875020 (AG21174)	Radium-228	Result 0.958 < MDA 1.11 > RDL 1 pCi/L
706875021 (AG21181)	Radium-228	Result 0.731 < MDA 1.17 > RDL 1 pCi/L

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2743208

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
706875001	AG21210
706875002	AG21211
706875003	AG21177
706875004	AG21175
706875005	AG21178
706875006	AG21167
706875007	AG21168
706875010	AG21212
706875011	AG21207
706875012	AG21209
706875013	AG21206
706875014	AG21188
706875015	AG21187
706875016	AG21189
706875017	AG21176
706875018	AG21173
706875019	AG21169
706875020	AG21174
706875021	AG21181
1205992498	Method Blank (MB)
1205992499	706875001(AG21210) Sample Duplicate (DUP)

1205992500 706875001(AG21210) Matrix Spike (MS)
1205992501 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

1205992499 (AG21210DUP), 1205992500 (AG21210MS) and 706875001 (AG21210) 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.

RAD- 2/21/25

706875

Contract Lab Info: GEL Contract Lab Due Date (Lab Only): 2 / 7 / 24

Send report to lcwillia@santeecooper.com & sherri.levy@santeecooper.com

Chain of Custody



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

Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Run request for any flagged QC

LINDA WILLIAMS @santeecooper.com

125715 / JMO2.09. G01.1 / 36500

Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle Type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments	RAD 226/228	TOC	F, Cl, SO4	NO3/NO2
AG21210	FOZ-7	1/27/25	0928	ATH DCA	4	P _d G	G	GW	2/1,3		2	1	1	1
1 11	FOZ-7 DUP	1	0933	1	1	1	1	1	1		1	1	1	1
AG21177	CCMAP-10	1/30/25	0920	1	3	P	G	GW	2/1		2	1	1	1
75	CCMAP-8	1	1011	1	1	1	1	1	1		1	1	1	1
78	CCMAP-11	1	1116	1	1	1	1	1	1		1	1	1	1
67	CCMAP-1	1	1240	1	1	1	1	1	1		1	1	1	1
68	CCMAP 2	1	1347	1	1	1	1	1	1		1	1	1	1
AG21204	CLFIB-5D	1/27/25	1535	MDF ATH	3	P _e G	G	GW	1/3,1		1	1	1	1
AG21208	FOZ-5D	1/28/25	1216	ATH DCA	3	P _e G	G	GW	1/3,1		1	1	1	1

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) <input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
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Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
	36851		GEL	1/31/25	1017	
	GEL		GEL	1.31.25	1540	

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)

RAD 2/21/25

Contract Lab Info: GEL

Contract Lab Due Date (Lab Only): 2 / 7 / 24

Send report to lcwillia@santecooper.com & sheri.levy@santecooper.com

Chain of Custody



Customer Email/Report Recipient:

Date Results Needed by:

Project/Task/Unit #:

Rerun request for any flagged QC

LINDA WILLIAMS @santecooper.com

125915 / JM02.09.G-01.1 / 36500

Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments	RAD 226/228	TOC	F, C, SO4	NOS / NO2
AG21212	FSZ-8	1/28/25	1012	ATH DC	4	P/G	G	GW	2/1/3					
07	-4		1056											
09	-6		1339											
06	-3		1439											
AG21188	CCMLF-1D	1/29/25	1139	ATH DC	3	P	G	GW	2/1					
87	CCMLF-1		1239											
89	CCMLF-2		1343											
76	CCMAP-9		1447											
73	CCMAP-6		1529											

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Parity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) <input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
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Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
<i>[Signature]</i>	36851	<i>[Signature]</i>	GEL	1/31/25	1017	
<i>[Signature]</i>	GEL	<i>[Signature]</i>	GEL	1-31-25	1540	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=<4°C 2=HNO3 3=H2SO4 4=HCl 5=Na2S2O3 6=Other (Specify)

Chain of Custody



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

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228	TOC	F, Cl, SO ₄	NO ₃ /NO ₂
AG21169	CCMAP-3	1/21/25	1010	MDE DCA	3	P	G	GW	2/1		2			
74	CCMAP-7		1117								2			
81	CCMAP-14		1217								2			
AG21198	CLFIB-1	1/21/25	0919	MDF ATH	3	P+G			1/3					
99	CLFIB-1 DUP		0924											
200	CLFIB-2		1039											
201	CLFIB-3		1212											
202	CLFIB-4		1335											
203	CLFIB-5		1454											

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TP04 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) <input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
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Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
<i>[Signature]</i>	36851	<i>[Signature]</i>	GEL	1/31/25	1017	
<i>[Signature]</i>	661	<i>[Signature]</i>	GEL	1/31/25	1540	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=<4°C 2=HNO₃ 3=H₂SO₄ 4=HCl 5=Na₂S₂O₃ 6-Other (Specify)

SAMPLE RECEIPT & REVIEW FORM

Client: SGGP SDG/AT/CDC/Work Order: 706875 GEL PM:
 Received By: QG Date Received at GEL: 1/31/25
 Carrier (Circle Applicable) FedEx Express FedEx Ground UPS Field Services Courier Client Other: IR Temp gun # IR1-23 Daily Calibration Performed (Y/N)

Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radionchem only).	Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radionchem only).
<u>code1 1</u>	<u>0°C</u>				
<u>code1 2</u>	<u>0°C</u>				
<u>code1 3</u>	<u>15°C</u>	<input checked="" type="checkbox"/>			

Suspected Hazard Information

Yes No *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? No
 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? No
 COC notation on radioactive stickers on containers equal client designation.

C) Did the RSO classify the samples as radioactive? No
 Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr
 Classified as: Rad 1 Rad 2 Rad 3

D) Are there any sample hazards to document? No
 If yes, select Hazards below.
 PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Corrosive Other: _____

E) Was a SDS received and reviewed by Lab Safety? No
 Circle Applicable: See additional Comments below. No additional comments needed after review.

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Direct client dropoff Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 If there are samples requiring cold preservation, did they arrive within (0 < 6 °C)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry Ice None Other: *all temperatures recorded next to tracking numbers are in Celsius
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preserved per COC request or list Sample IDs and Containers Affected: If Preservation added, Lot#: _____
6 Do any samples require Volatile Analysis? (If yes, answer all three additional questions.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present? Yes ___ No ___ (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 IDs and containers affected: _____
7 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IDs and tests affected: _____
8 Sample IDs on COC match IDs on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IDs and containers affected: _____
9 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Missing Container (provide details) Other (describe) <u>AG 21212, 07, 07, 04 have 5 containers</u>
11 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments:
AG 21210, u have 5 containers

PM (or PMA) review: Initials MGJ Date 2/3/25
 Confirmation Form Required when selected

List of current GEL Certifications as of 02 March 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

July 08, 2025

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

Re: ABS Lab Analytical
Work Order: 728144

Dear Ms. Gilmetti:

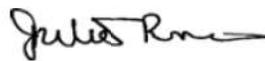
GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 10, 2025. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

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

Sincerely,



Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures



GEL LABORATORIES LLC

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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 728144 GEL Work Order: 728144

The Qualifiers in this report are defined as follows:

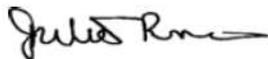
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

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

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

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 8, 2025

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

Client Sample ID: AG34934 Project: SOOP00119
Sample ID: 728144001 Client ID: SOOP001
Matrix: GW
Collect Date: 02-JUN-25 10:34
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	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	0.735	+/-0.552	0.880	1.00	pCi/L			JE1	06/26/25	1140	2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.481	+/-0.429	0.587	1.00	pCi/L			RS2	06/24/25	0953	2813432	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"			80.7	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: July 8, 2025

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

Client Sample ID: AG34930 Project: SOOP00119
Sample ID: 728144002 Client ID: SOOP001
Matrix: GW
Collect Date: 05-JUN-25 10:47
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		3.46	+/-0.780	0.785	1.00	pCi/L			JE1	06/26/25	1136 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		8.19	+/-1.58	0.757	1.00	pCi/L			RS2	06/24/25	0953 2813432	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"			68.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Company : Santee Cooper
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Moncks Corner, South Carolina 29461
Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34929 Project: SOOP00119
Sample ID: 728144003 Client ID: SOOP001
Matrix: GW
Collect Date: 05-JUN-25 11:45
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		3.28	+/-0.712	0.623	1.00	pCi/L			JE1	06/26/25	1306 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		2.41	+/-0.799	0.665	1.00	pCi/L			RS2	06/24/25	0953 2813432	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"			70.2	(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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Moncks Corner, South Carolina 29461
Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34911 Project: SOOP00119
Sample ID: 728144004 Client ID: SOOP001
Matrix: GW
Collect Date: 05-JUN-25 12:44
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	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	0.427	+/-0.513	0.866	1.00	pCi/L		JE1	06/26/25	1140	2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		1.60	+/-0.649	0.499	1.00	pCi/L		RS2	06/24/25	0952	2813432	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"			74.2	(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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Moncks Corner, South Carolina 29461
Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34927 Project: SOOP00119
Sample ID: 728144005 Client ID: SOOP001
Matrix: GW
Collect Date: 05-JUN-25 13:39
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		2.13	+/-0.652	0.784	1.00	pCi/L		JE1	06/26/25	1140	2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.871	+/-0.520	0.443	1.00	pCi/L		RS2	06/24/25	0952	2813432	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"			67.3	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34928 Project: SOOP00119
Sample ID: 728144006 Client ID: SOOP001
Matrix: GW
Collect Date: 05-JUN-25 13:44
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		2.09	+/-0.732	0.843	1.00	pCi/L			JE1	06/26/25	1139 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		1.00	+/-0.533	0.470	1.00	pCi/L			RS2	06/24/25	1027 2813432	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"			61.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34933 Project: SOOP00119
Sample ID: 728144007 Client ID: SOOP001
Matrix: GW
Collect Date: 05-JUN-25 14:50
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		4.44	+/-0.900	0.834	1.00	pCi/L		JE1	06/26/25	1136	2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		1.82	+/-0.773	0.695	1.00	pCi/L		RS2	06/24/25	1027	2813432	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"			70.4	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG34926	Project: SOOP00119
Sample ID: 728144008	Client ID: SOOP001
Matrix: GW	
Collect Date: 05-JUN-25 15:48	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		3.40	+/-0.788	0.794	1.00	pCi/L			JE1	06/26/25	1136 2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		1.22	+/-0.671	0.611	1.00	pCi/L			RS2	06/24/25	1027 2813432	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"			68.7	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34895 Project: SOOP00119
Sample ID: 728144009 Client ID: SOOP001
Matrix: GW
Collect Date: 03-JUN-25 10:21
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	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	0.590	+/-0.529	0.868	1.00	pCi/L		JE1	06/26/25	1136	2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.401	+/-0.358	0.469	1.00	pCi/L		RS2	06/24/25	1027	2813432	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"			81.8	(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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 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG34893	Project: SOOP00119
Sample ID: 728144010	Client ID: SOOP001
Matrix: GW	
Collect Date: 05-JUN-25 09:37	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228	U	0.736	+/-0.516	0.814	1.00	pCi/L			JE1	06/26/25	1142	2812271	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226	U	0.210	+/-0.337	0.610	1.00	pCi/L			RS2	06/24/25	1027	2813432	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"			79.6	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Company : Santee Cooper
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 Moncks Corner, South Carolina 29461
 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG34885	Project: SOOP00119
Sample ID: 728144011	Client ID: SOOP001
Matrix: GW	
Collect Date: 04-JUN-25 09:37	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.17	+/-0.583	0.859	1.00	pCi/L		JE1	06/26/25	1142	2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.910	+/-0.502	0.457	1.00	pCi/L		RS2	06/24/25	1027	2813432	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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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34886 Project: SOOP00119
Sample ID: 728144012 Client ID: SOOP001
Matrix: GW
Collect Date: 04-JUN-25 10:38
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		2.39	+/-0.736	0.810	1.00	pCi/L			JE1	06/26/25	1143 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.891	+/-0.537	0.618	1.00	pCi/L			RS2	06/24/25	1027 2813432	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"			67.8	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Moncks Corner, South Carolina 29461
Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34887 Project: SOOP00119
Sample ID: 728144013 Client ID: SOOP001
Matrix: GW
Collect Date: 04-JUN-25 11:39
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	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	0.135	+/-0.430	0.784	1.00	pCi/L		JE1	06/26/25	1136	2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.364	+/-0.456	0.758	1.00	pCi/L		RS2	06/24/25	1027	2813432	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"			66.2	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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 Contact: Ms. Jeanette Gilmetti
 Project: ABS Lab Analytical

Client Sample ID: AG34888	Project: SOOP00119
Sample ID: 728144014	Client ID: SOOP001
Matrix: GW	
Collect Date: 04-JUN-25 12:38	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		4.27	+/-0.797	0.616	1.00	pCi/L			JE1	06/26/25	1139 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.234	+/-0.387	0.704	1.00	pCi/L			RS2	06/24/25	1103 2813432	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"			60	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34889 Project: SOOP00119
Sample ID: 728144015 Client ID: SOOP001
Matrix: GW
Collect Date: 04-JUN-25 12:43
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		3.07	+/-0.735	0.802	1.00	pCi/L			JE1	06/26/25	1139 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.690	+/-0.488	0.576	1.00	pCi/L			RS2	06/24/25	1103 2813432	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"			69.1	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Contact: Ms. Jeanette Gilmetti
Project: ABS Lab Analytical

Client Sample ID: AG34890 Project: SOOP00119
Sample ID: 728144016 Client ID: SOOP001
Matrix: GW
Collect Date: 04-JUN-25 14:03
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.08	+/-0.554	0.804	1.00	pCi/L		JE1	06/26/25	1142	2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.854	+/-0.599	0.775	1.00	pCi/L		RS2	06/24/25	1103	2813432	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"			69.8	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Report Date: July 8, 2025

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

Client Sample ID: AG34880	Project: SOOP00119
Sample ID: 728144017	Client ID: SOOP001
Matrix: GW	
Collect Date: 03-JUN-25 11:26	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.01	+/-0.537	0.784	1.00	pCi/L			JE1	06/26/25	1139 2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.0289	+/-0.233	0.541	1.00	pCi/L			RS2	06/24/25	1103 2813432	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"			68.2	(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: July 8, 2025

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

Client Sample ID: AG34882 Project: SOOP00119
Sample ID: 728144018 Client ID: SOOP001
Matrix: GW
Collect Date: 03-JUN-25 13:43
Receive Date: 10-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		1.05	+/-0.571	0.815	1.00	pCi/L			JE1	06/26/25	1139 2812271	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.425	+/-0.380	0.497	1.00	pCi/L			RS2	06/24/25	1103 2813432	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"			61.1	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 8, 2025

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

Client Sample ID: AG34883	Project: SOOP00119
Sample ID: 728144019	Client ID: SOOP001
Matrix: GW	
Collect Date: 03-JUN-25 14:50	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.881	+/-0.555	0.830	1.00	pCi/L			JE1	06/26/25	1136 2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.419	+/-0.416	0.605	1.00	pCi/L			RS2	06/24/25	1103 2813432	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"			71.3	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 8, 2025

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

Client Sample ID: AG34884	Project: SOOP00119
Sample ID: 728144020	Client ID: SOOP001
Matrix: GW	
Collect Date: 03-JUN-25 16:16	
Receive Date: 10-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		12.5	+/-1.26	0.847	1.00	pCi/L		JE1	06/26/25	1142	2812271	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		5.78	+/-1.20	0.378	1.00	pCi/L		RS2	06/24/25	1103	2813432	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"			71.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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QC Summary

Report Date: July 8, 2025

Page 1 of 2

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

Contact: Ms. Jeanette Gilmetti

Workorder: 728144

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2812271										
QC1206137705	728144001	DUP									
Radium-228	U	0.735	U	0.465	pCi/L	N/A		N/A	JE1	06/26/25	11:39
	Uncertainty	+/-0.552		+/-0.505							
QC1206137706	LCS										
Radium-228	27.7			31.6	pCi/L		114	(75%-125%)		06/26/25	11:36
	Uncertainty			+/-2.08							
QC1206137704	MB										
Radium-228			U	0.690	pCi/L					06/26/25	11:40
	Uncertainty			+/-0.535							
Rad Ra-226											
Batch	2813432										
QC1206140305	728144010	DUP									
Radium-226	U	0.210	U	0.547	pCi/L	N/A		N/A	RS2	06/24/25	11:22
	Uncertainty	+/-0.337		+/-0.519							
QC1206140307	LCS										
Radium-226	27.1			32.4	pCi/L		120	(75%-125%)		06/24/25	11:22
	Uncertainty			+/-3.23							
QC1206140304	MB										
Radium-226			U	0.167	pCi/L					06/24/25	11:03
	Uncertainty			+/-0.364							
QC1206140306	728144010	MS									
Radium-226	137 U	0.210		125	pCi/L		91.2	(75%-125%)		06/24/25	11:22
	Uncertainty	+/-0.337		+/-12.3							

- 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

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QC Summary

Workorder: 728144

Page 2 of 2

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

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 #: 728144**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

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

Analytical Batch: 2812271

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
728144001	AG34934
728144002	AG34930
728144003	AG34929
728144004	AG34911
728144005	AG34927
728144006	AG34928
728144007	AG34933
728144008	AG34926
728144009	AG34895
728144010	AG34893
728144011	AG34885
728144012	AG34886
728144013	AG34887
728144014	AG34888
728144015	AG34889
728144016	AG34890
728144017	AG34880
728144018	AG34882
728144019	AG34883
728144020	AG34884
1206137704	Method Blank (MB)
1206137705	728144001(AG34934) Sample Duplicate (DUP)
1206137706	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 728144003 (AG34929) was recounted to verify sample results. Recount is reported.

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2813432

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
728144001	AG34934
728144002	AG34930
728144003	AG34929
728144004	AG34911
728144005	AG34927
728144006	AG34928
728144007	AG34933
728144008	AG34926
728144009	AG34895
728144010	AG34893
728144011	AG34885
728144012	AG34886
728144013	AG34887
728144014	AG34888
728144015	AG34889
728144016	AG34890
728144017	AG34880
728144018	AG34882
728144019	AG34883
728144020	AG34884
1206140304	Method Blank (MB)
1206140305	728144010(AG34893) Sample Duplicate (DUP)
1206140306	728144010(AG34893) Matrix Spike (MS)
1206140307	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, 1206140306 (AG34893MS), aliquot was reduced to conserve sample volume.

Certification Statement

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

Chain of Custody

728144



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

LINDA WILLIAMS @santecooper.com _____ / _____ / _____ 125915 / JMO2.09.G81 / 36500 **Yes** No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix (see below)	Preservative (see below)	Comments • Method # • Reporting limit • Misc. sample info • Any other notes	RAD 226/228
AG34934	PM-1	6/2/25	1034	ASP EA	2	P	G	GW	2		X
AG34930	CGYP-4	6/5/25	1047								
AG34929	CGYP-3		1145								
AG34911	CCMGP-1		1244								
AG34927	CGYP-2		1339								
AG34928	CGYP-2 DUP		1344								
AG34933	CGYP-7		1450								
AG34926	CGYP-1		1548								
AG34895	CBW-1	6/3/25	1021								

Metals	Gypsum	Coal	Flyash	Oil	MISC.	Other
<input type="checkbox"/> TOC <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Zn <input type="checkbox"/> Mn <input type="checkbox"/> Fe <input type="checkbox"/> Al <input type="checkbox"/> SO ₄	<input type="checkbox"/> Ca <input type="checkbox"/> Mg <input type="checkbox"/> SO ₄ <input type="checkbox"/> Cl <input type="checkbox"/> NO ₃ <input type="checkbox"/> NH ₄ <input type="checkbox"/> F <input type="checkbox"/> Si <input type="checkbox"/> B <input type="checkbox"/> Br <input type="checkbox"/> I <input type="checkbox"/> J <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Na <input type="checkbox"/> Rb <input type="checkbox"/> Sr <input type="checkbox"/> Tl <input type="checkbox"/> U <input type="checkbox"/> V <input type="checkbox"/> W <input type="checkbox"/> Y <input type="checkbox"/> Zr	<input type="checkbox"/> Short Prox <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HCl Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	<input type="checkbox"/> Oil <input type="checkbox"/> Grease <input type="checkbox"/> PCB <input type="checkbox"/> PAHs <input type="checkbox"/> VOCs <input type="checkbox"/> SVOCs <input type="checkbox"/> Pesticides <input type="checkbox"/> Herbicides <input type="checkbox"/> Fungicides <input type="checkbox"/> Pharmaceuticals <input type="checkbox"/> Endocrine Disruptors <input type="checkbox"/> Heavy Metals <input type="checkbox"/> Radionuclides	<input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Arsenic <input type="checkbox"/> Barium <input type="checkbox"/> Beryllium <input type="checkbox"/> Boron <input type="checkbox"/> Cadmium <input type="checkbox"/> Calcium <input type="checkbox"/> Chloride <input type="checkbox"/> Chromium <input type="checkbox"/> Cobalt <input type="checkbox"/> Copper <input type="checkbox"/> Fluoride <input type="checkbox"/> Gallium <input type="checkbox"/> Germanium <input type="checkbox"/> Iodine <input type="checkbox"/> Iron <input type="checkbox"/> Lead <input type="checkbox"/> Lithium <input type="checkbox"/> Magnesium <input type="checkbox"/> Manganese <input type="checkbox"/> Mercury <input type="checkbox"/> Molybdenum <input type="checkbox"/> Nickel <input type="checkbox"/> Nitrate <input type="checkbox"/> Nitrite <input type="checkbox"/> Phosphate <input type="checkbox"/> Potassium <input type="checkbox"/> Selenium <input type="checkbox"/> Silver <input type="checkbox"/> Sodium <input type="checkbox"/> Strontium <input type="checkbox"/> Sulfate <input type="checkbox"/> Sulfur <input type="checkbox"/> Tellurium <input type="checkbox"/> Thallium <input type="checkbox"/> Vanadium <input type="checkbox"/> Zinc <input type="checkbox"/> Zirconium

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: _____ Date/Time/Init for preservative: _____
<i>Shery</i>	35594	<i>DDP</i>	GEL	6/10/25	1015	
<i>DDP</i>	GEL	<i>Thy...</i>	GEL	6/10/25	1015	

SAMPLE RECEIPT & REVIEW FORM

Client: SDGP SDG/ARCOC/Work Order: 728144 GEL PM: J.R.

Received By: Thyasia Tatum Date Received at GEL: 6/10/25

Carrier (Circle Applicable): FedEx Express FedEx Ground UPS Field Services Courier Client Other: IR Temp gun # IR2-23 Daily Calibration Performed Y

Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radiorbms only).	Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radiorbms only).
<u>COOPER 1</u>	<u>10</u>		<u>COOPER 2</u>	<u>10</u>	

Suspected Hazard Information

Yes No *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Hazard Class Shipped: UN#

B) Did the client designate the samples are to be received as radioactive? If IIR2910, is the Radioactive Shipment Survey Compliant? Yes No COC notation of 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

If yes, select Hazards below: PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Corrosive Other: _____

D) Are there any sample hazards to document?

E) Was a SDS received and reviewed by Lab Safety? Circle Applicable: See additional Comments below. No additional comments needed after review.

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Direct client dropoff Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 If there are samples requiring cold preservation, did they arrive within (0 < 6 °C)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry Ice None Other: _____ *all temperatures recorded next to tracking numbers are in Celsius
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preserved per COC request or list Sample IDs and Containers Affected:
6 Do any samples require Volatile Analysis? (If yes, answer all three additional questions.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Preservation added, Log: _____ If Yes, are Encores or Soil Kits present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA Sample IDs and containers affected: _____
7 Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IDs and tests affected: _____
8 Sample IDs on COC match IDs on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IDs and containers affected: _____
9 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Missing Container (provide details) Other (describe)
11 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments:

PM (or PMA) review: Initials JW Date 6/11/25

Continuation Form Required when selected

List of current GEL Certifications as of 08 July 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

July 17, 2025

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

Re: ABS Lab Analytical
Work Order: 729950

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 20, 2025. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

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

Sincerely,

Julie Robinson
Project Manager

Purchase Order: 398684
Enclosures



GEL LABORATORIES LLC

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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 729950 GEL Work Order: 729950

The Qualifiers in this report are defined as follows:

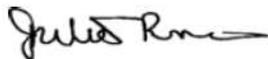
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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

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

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

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34896	Project: SOOP00119
Sample ID: 729950001	Client ID: SOOP001
Matrix: GW	
Collect Date: 16-JUN-25 09:43	
Receive Date: 20-JUN-25	
Collector: Client	

Parameter	Qualifier	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	0.433	+/-0.453	0.752	1.00	pCi/L		JE1	07/09/25	0925	2817796	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.115	+/-0.136	0.221	1.00	pCi/L		RS2	07/09/25	0854	2817559	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"			61.9	(15%-125%)

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34907 Project: SOOP00119
Sample ID: 729950002 Client ID: SOOP001
Matrix: GW
Collect Date: 16-JUN-25 11:17
Receive Date: 20-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		1.09	+/-0.529	0.757	1.00	pCi/L			JE1	07/09/25	0759 2817796	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.942	+/-0.311	0.276	1.00	pCi/L			RS2	07/09/25	0854 2817559	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"			64.8	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34904	Project: SOOP00119
Sample ID: 729950003	Client ID: SOOP001
Matrix: GW	
Collect Date: 16-JUN-25 12:25	
Receive Date: 20-JUN-25	
Collector: Client	

Parameter	Qualifier	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	0.577	+/-0.537	0.879	1.00	pCi/L			JE1	07/09/25	0759 2817796	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		1.35	+/-0.370	0.341	1.00	pCi/L			RS2	07/09/25	0854 2817559	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"			59.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34906 Project: SOOP00119
Sample ID: 729950004 Client ID: SOOP001
Matrix: GW
Collect Date: 16-JUN-25 13:29
Receive Date: 20-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		0.793	+/-0.490	0.737	1.00	pCi/L		JE1	07/09/25	0759	2817796	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.308	+/-0.228	0.337	1.00	pCi/L		RS2	07/09/25	0854	2817559	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"			65.2	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34905 Project: SOOP00119
Sample ID: 729950005 Client ID: SOOP001
Matrix: GW
Collect Date: 16-JUN-25 14:25
Receive Date: 20-JUN-25
Collector: Client

Parameter	Qualifier	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	0.638	+/-0.444	0.685	1.00	pCi/L		JE1	07/09/25	0759	2817796	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.982	+/-0.334	0.215	1.00	pCi/L		RS2	07/09/25	0854	2817559	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"			61.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34918 Project: SOOP00119
Sample ID: 729950006 Client ID: SOOP001
Matrix: GW
Collect Date: 16-JUN-25 15:52
Receive Date: 20-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.896	+/-0.508	0.746	1.00	pCi/L		JE1	07/09/25	0759	2817796	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.534	+/-0.245	0.257	1.00	pCi/L		RS2	07/09/25	0928	2817559	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"			57.3	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34916 Project: SOOP00119
Sample ID: 729950007 Client ID: SOOP001
Matrix: GW
Collect Date: 17-JUN-25 09:41
Receive Date: 20-JUN-25
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		0.813	+/-0.478	0.710	1.00	pCi/L			JE1	07/09/25	0759	2817796	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.716	+/-0.275	0.295	1.00	pCi/L			RS2	07/09/25	0928	2817559	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"			61.5	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: July 17, 2025

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

Client Sample ID: AG34917	Project: SOOP00119
Sample ID: 729950008	Client ID: SOOP001
Matrix: GW	
Collect Date: 17-JUN-25 10:33	
Receive Date: 20-JUN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.00	+/-0.458	0.629	1.00	pCi/L		JE1	07/09/25	0759	2817796	1
Rad Radium-226												
Lucas Cell, Ra226, Liquid "As Received"												
Radium-226		0.636	+/-0.289	0.277	1.00	pCi/L		RS2	07/09/25	0928	2817559	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"			65.6	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: July 17, 2025

Page 1 of 2

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

Workorder: 729950

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2817796										
QC1206148939	729950001		DUP								
Radium-228	U	0.433	U	0.135	pCi/L	N/A		N/A	JE1	07/09/25	09:25
	Uncertainty	+/-0.453		+/-0.476							
QC1206148940	LCS										
Radium-228	27.2			25.1	pCi/L		92	(75%-125%)		07/09/25	07:59
	Uncertainty			+/-1.45							
QC1206148938	MB										
Radium-228			U	0.470	pCi/L					07/09/25	07:59
	Uncertainty			+/-0.360							
Rad Ra-226											
Batch	2817559										
QC1206148453	729236007		DUP								
Radium-226	U	0.190		0.488	pCi/L	88		(0% - 100%)	RS2	07/09/25	09:28
	Uncertainty	+/-0.255		+/-0.262							
QC1206148457	LCS										
Radium-226	27.2			23.4	pCi/L		86.2	(75%-125%)		07/09/25	10:00
	Uncertainty			+/-1.55							
QC1206148452	MB										
Radium-226			U	0.119	pCi/L					07/09/25	09:28
	Uncertainty			+/-0.169							
QC1206148455	729236007		MS								
Radium-226	129	U	0.190	121	pCi/L		93.8	(75%-125%)		07/09/25	09:28
	Uncertainty		+/-0.255	+/-6.88							

- 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

GEL LABORATORIES LLC

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QC Summary

Workorder: 729950

Page 2 of 2

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

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 #: 729950**

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

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

Analytical Batch: 2817796

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
729950001	AG34896
729950002	AG34907
729950003	AG34904
729950004	AG34906
729950005	AG34905
729950006	AG34918
729950007	AG34916
729950008	AG34917
1206148938	Method Blank (MB)
1206148939	729950001(AG34896) Sample Duplicate (DUP)
1206148940	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

Samples 1206148939 (AG34896DUP) and 729950001 (AG34896) were recounted due to high relative percent difference/relative error ratio. 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: 2817559

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
729950001	AG34896
729950002	AG34907
729950003	AG34904
729950004	AG34906

729950005	AG34905
729950006	AG34918
729950007	AG34916
729950008	AG34917
1206148452	Method Blank (MB)
1206148453	729236007(AG34900) Sample Duplicate (DUP)
1206148455	729236007(AG34900) Matrix Spike (MS)
1206148457	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

1206148455 (AG34900MS) Aliquot was reduced due to limited sample volume.

Certification Statement

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

Chain of Custody 729950



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

LINDA.WILLIAMS @santecooper.com / / 125915 / JM02.09.G01.1 / 36110 (Yes) No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments	RAD 226 / 228
AG34896	CCMAP-1	6/16/25	0943	AGP EA	2	P	G	GW	2		X
AG34907	CCMAP-11		1117								
AG34904	CCMAP-8		1225								
AG34906	CCMAP-10		1329								
AG34905	CCMAP-9		1425								
AG34918	CCMLF-2		1552								
AG34916	CCMLF-1	6/17/25	0941								
AG34917	CCMLF-10		1033								

Nutrients	Gypsum	Coal	Flyash	Oil	MISC.	Metals (All)
<input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP-TP04 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	<input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	<input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	<input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Trans. Oil Quality <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	<input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input checked="" type="checkbox"/> Rad 226 <input checked="" type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)

Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only) TEMP (°C): _____ Initials: _____ Correct pH: Yes No Preservative Lot #: Date/Time/Init for preservative:
<i>J. Helmetti</i>	36110	<i>[Signature]</i>	GEL	6/20/25	0950	
<i>[Signature]</i>	GEL	<i>[Signature]</i>		6-22-25	1540	

SAMPLE RECEIPT & REVIEW FORM

Client: SOOP SDG/AR/COC/Work Order: 729950 GEL PAI:
 Received By: KE Date Received at GEL: 06.20.25
 Carrier (Circle Applicable)
 FedEx Express FedEx Ground UPS Field Services Courier Client Other: IR Temp gun # IR1-24 Daily Calibration Performed? Y/N

Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radlochem only).	Tracking Number	Temp (C)	If over 6 °C, check if samples do not require cold preservation (ie radlochem only).
<u>COOLCY</u>	<u>3</u>				
<u>COOLCY</u>	<u>22</u>	<input checked="" type="checkbox"/>			

Suspected Hazard Information

Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
	<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ IF EN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
	<input checked="" type="checkbox"/>	COC notation of radioactive stickers on containers equal client designation
	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
	<input checked="" type="checkbox"/>	If yes, select Hazards below: PCBs Flammable Foreign Soil RCRA Asbestos Beryllium Corrosive Other: _____
	<input checked="" type="checkbox"/>	D) Are there any sample hazards to document? E) Was a SDS received and reviewed by Lab Safety? Circle Applicable: See additional Comments below. No additional comments needed after review.

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Direct client dropoff Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			Circle Applicable: Client contacted and provided COC COC created upon receipt
3 If there are samples requiring cold preservation, did they arrive within (0 < 6 °C)?	<input checked="" type="checkbox"/>			Preservation Method: <u>Wet Ice</u> Ice Packs Dry Ice <u>None</u> Other: *all temperatures recorded next to tracking numbers are in Celsius
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Preserved per COC request or list Sample IDs and Containers Affected: If Preservation added, Lot#: _____
6 Do any samples require Volatile Analysis? (If yes, answer all three additional questions.)	<input checked="" type="checkbox"/>			If Yes, are Encores or Soil Kits present? Yes ___ No ___ (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 IDs and containers affected: _____
7 Samples received within holding time?	<input checked="" type="checkbox"/>			IDs and tests affected: <u>See COC copy for affected IDs * 729954</u>
8 Sample IDs on COC match IDs on bottles?	<input checked="" type="checkbox"/>			IDs and containers affected: _____
9 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
10 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Circle Applicable: No container count on COC Missing Container (provide details) Other (describe)
11 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>			
12 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished Other (describe)

Comments:

PM (or PMA) review: Initials djw Date 6/21/25

Continuation Form Required when selected

List of current GEL Certifications as of 17 July 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

February 18, 2025

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

Re: ABS Lab Analytical
Work Order: 705193

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 21, 2025. 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.G02.36500
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: 705193 GEL Work Order: 705193

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 18, 2025

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

Client Sample ID: AG21160 Project: SOOP00119
Sample ID: 705193002 Client ID: SOOP001
Matrix: GW
Collect Date: 16-JAN-25 09:59
Receive Date: 21-JAN-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride		4.81	0.165	0.500	mg/L		5	CH6	01/21/25	1653	2738098	1
Chloride		1080	13.4	40.0	mg/L		200	CH6	01/24/25	1656	2738098	2
Sulfate		734	26.6	80.0	mg/L		200					

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	EPA 300.0		
2	EPA 300.0		

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 18, 2025

Page 1 of 2

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

Contact:
Workorder: 705193

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch 2738098											
QC1205983601	705193001	DUP									
Chloride		1090		1080	mg/L	0.0737		(0%-20%)	CH6	01/24/25	15:54
Fluoride		4.46		4.76	mg/L	6.43		(0%-20%)		01/21/25	15:51
Sulfate		771		776	mg/L	0.683		(0%-20%)		01/24/25	15:54
QC1205983600	LCS										
Chloride	5.00			4.70	mg/L		94	(90%-110%)		01/21/25	14:50
Fluoride	2.50			2.42	mg/L		96.7	(90%-110%)			
Sulfate	10.0			9.63	mg/L		96.3	(90%-110%)			
QC1205983599	MB										
Chloride			U	0.0670	mg/L					01/21/25	14:20
Fluoride			U	0.0330	mg/L						
Sulfate			U	0.133	mg/L						
QC1205983602	705193001	PS									
Chloride	5.00	5.43		10.8	mg/L		106	(90%-110%)		01/24/25	16:25
Fluoride	2.50	0.892		3.44	mg/L		102	(90%-110%)		01/21/25	16:22
Sulfate	10.0	3.85		13.1	mg/L		92.6	(90%-110%)		01/24/25	16:25

GEL LABORATORIES LLC

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

QC Summary

Workorder: 705193

Page 2 of 2

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

The Qualifiers in this report are defined as follows:

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

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: February 18, 2025

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

Client Sample ID: AG21159	Project: SOOP00119
Sample ID: 705193001	Client ID: SOOP001
Matrix: GW	
Collect Date: 16-JAN-25 09:54	
Receive Date: 21-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		3.72	+/-0.730	0.613	1.00	pCi/L			ST2	02/05/25	1110	2738525	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.870	+/-0.418	0.417	1.00	pCi/L			MJ2	02/13/25	1054	2738867	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"			63.8	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 18, 2025

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

Client Sample ID: AG21160	Project: SOOP00119
Sample ID: 705193002	Client ID: SOOP001
Matrix: GW	
Collect Date: 16-JAN-25 09:59	
Receive Date: 21-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "As Received"													
Radium-228		4.36	+/-0.958	0.948	1.00	pCi/L			ST2	02/05/25	1110	2738525	1
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.845	+/-0.412	0.359	1.00	pCi/L			MJ2	02/13/25	1054	2738867	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"			48.9	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 18, 2025

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

Client Sample ID: AG21164	Project: SOOP00119
Sample ID: 705193003	Client ID: SOOP001
Matrix: GW	
Collect Date: 16-JAN-25 14:08	
Receive Date: 21-JAN-25	
Collector: Client	

Parameter	Qualifier	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	0.632	+/-0.480	0.757	1.00	pCi/L			ST2	02/05/25	1110	2738525	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.835	+/-0.384	0.320	1.00	pCi/L			MJ2	02/13/25	1054	2738867	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"			63	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 18, 2025

Page 1 of 2

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

Contact:
Workorder: 705193

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2738525										
QC1205984347	705193001	DUP									
Radium-228		3.72		2.80	pCi/L	28.2 *		(0%-20%)	ST2	02/05/25	11:10
	Uncertainty	+/-0.730		+/-0.654							
QC1205984348	LCS										
Radium-228	28.5			31.1	pCi/L		109	(75%-125%)		02/05/25	11:10
	Uncertainty			+/-1.77							
QC1205984346	MB										
Radium-228			U	0.521	pCi/L					02/05/25	11:10
	Uncertainty			+/-0.456							
Rad Ra-226											
Batch	2738867										
QC1205984875	705193003	DUP									
Radium-226		0.835		1.28	pCi/L	42.3		(0% - 100%)	MJ2	02/13/25	10:54
	Uncertainty	+/-0.384		+/-0.508							
QC1205984877	LCS										
Radium-226	27.4			28.9	pCi/L		105	(75%-125%)		02/13/25	10:53
	Uncertainty			+/-2.34							
QC1205984874	MB										
Radium-226			U	0.0500	pCi/L					02/13/25	10:54
	Uncertainty			+/-0.379							
QC1205984876	705193003	MS									
Radium-226	135	0.835		130	pCi/L		95.7	(75%-125%)		02/13/25	10:54
	Uncertainty	+/-0.384		+/-9.93							

- 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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 705193

Page 2 of 2

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

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

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

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

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

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

Technical Case Narrative
Santee Cooper
SDG #: 705193

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 36

Analytical Batch: 2738098

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
705193001	AG21159
705193002	AG21160
705193003	AG21164
1205983599	Method Blank (MB)
1205983600	Laboratory Control Sample (LCS)
1205983601	705193001(AG21159) Sample Duplicate (DUP)
1205983602	705193001(AG21159) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions

The following samples 1205983601 (AG21159DUP), 1205983602 (AG21159PS), 705193001 (AG21159) and 705193002 (AG21160) were diluted because target analyte concentrations exceeded the calibration range. The following sample 705193003 (AG21164) in this sample group was diluted due to matrix interference. Samples 1205983601 (AG21159DUP), 1205983602 (AG21159PS), 705193001 (AG21159), 705193002 (AG21160) and 705193003 (AG21164) were diluted based on historical data. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	705193		
	001	002	003
Chloride	200X	200X	5X
Fluoride	5X	5X	10X
Sulfate	200X	200X	5X

Miscellaneous Information

Manual Integrations

Samples 1205983601 (AG21159DUP), 1205983602 (AG21159PS), 705193001 (AG21159), 705193002 (AG21160)

and 705193003 (AG21164) were manually integrated to correctly position the baseline as set in the calibration standards.

Radiochemistry

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

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

Analytical Batch: 2738525

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
705193001	AG21159
705193002	AG21160
705193003	AG21164
1205984346	Method Blank (MB)
1205984347	705193001(AG21159) Sample Duplicate (DUP)
1205984348	Laboratory Control Sample (LCS)

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

Data Summary:

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

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample

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

Sample	Analyte	Value
1205984347 (AG21159DUP)	Radium-228	RPD 28.2* (0.00%-20.00%) RER 1.17 (0-3)

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2738867

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
705193001	AG21159
705193002	AG21160

705193003	AG21164
1205984874	Method Blank (MB)
1205984875	705193003(AG21164) Sample Duplicate (DUP)
1205984876	705193003(AG21164) Matrix Spike (MS)
1205984877	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, 1205984876 (AG21164MS), aliquot was reduced to conserve sample volume.

Certification Statement

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

Chain of Custody



Customer Email/Report Recipient: linda.williams@santeecooper.com Date Results Needed by: 1/1/ Project/Task/Unit #: 125915/Jm0208.602.3/36500 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	Yes	No
A621159	CAP-9	1/14/25	0954	MDL/DLA	3	P	G	GW	1/2		X	X
A621160	CAP-9 Dup	1/16/25	0959	L	3	P	G	GW	1/2		X	X
A621164	CAP-13	1/16/25	1408	L	3	P	G	GW	1/2		X	X
										EPA 300.0 - F, U, SO		

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TP04 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> %Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input checked="" type="checkbox"/> Rad 226 <input checked="" type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	Metals (All) <input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
--	---	---	--	---	---	--

Relinquished by: <u>[Signature]</u>	Employee # <u>36851</u>	Received by: <u>[Signature]</u>	Employee # <u>GEL</u>	Date <u>1/21/25</u>	Time <u>1120</u>	Sample Receiving (Internal Use Only) TEMP (°C): <u>0</u> Initials: _____ Correct pH: Yes No Preservative Lot #: _____ Lot # <u>0104501J</u> SW: <u>1000-1902-QC-</u> rative: <u>10.0N20</u> <u>RAD 226/228</u>
Relinquished by: <u>[Signature]</u>	Employee # <u>GEL</u>	Received by: <u>[Signature]</u>	Employee # <u>GEL</u>	Date <u>1/21/25</u>	Time <u>1245</u>	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	
Relinquished by:	Employee #	Received by:	Employee #	Date	Time	

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-lime
 FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=-4°C 2=HNO3 3=H2SO4 4-HCl 5=Na2S2O5 6-Other (Specify)



Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SDGP Received By: CLM SDG/AR/COC/Work Order: 705193 Date Received at GEL: 1/21/25 GEL PM: JR

Carrier: FedEx Express, FedEx Ground, UPS, Field Services, Courier (circled), Client, Other: IR Temp gun # IR5-23 Daily Calibration Performed ON

Table with 4 columns: Tracking Number, Temp (C), (If over 6 °C, check if samples do not require cold preservation (ie radionuclides only)), Tracking Number, Temp (C), (If over 6 °C, check if samples do not require cold preservation (ie radionuclides only)).

Suspected Hazard Information section with Yes/No columns and various hazard-related questions (A-E).

Table with 4 columns: Sample Receipt Criteria, Yes, NA, No, Comments/Qualifiers (Required for Non-Conforming Items). Contains 12 rows of criteria.

Comments: PM (or PMA) review: Initials [Signature] Date 1/27/25 Continuation Form Required when selected

List of current GEL Certifications as of 18 February 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

February 14, 2025

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

Re: ABS Lab Analytical
Work Order: 704945

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on January 17, 2025. 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.G01/36500
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: 704945 GEL Work Order: 704945

The Qualifiers in this report are defined as follows:

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

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

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

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

Reviewed by



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 14, 2025

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

Client Sample ID: AG21205	Project: SOOP00119
Sample ID: 704945001	Client ID: SOOP001
Matrix: GW	
Collect Date: 14-JAN-25 10:19	
Receive Date: 17-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		6.14	0.330	1.00	mg/L		1	KB3	01/21/25	0812	2737188	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Fluoride	J	0.0382	0.0330	0.100	mg/L		1	CWW	01/18/25	0251	2736888	2
Chloride		11.7	0.134	0.400	mg/L		2	CWW	01/18/25	1640	2736888	3
Sulfate		21.4	0.266	0.800	mg/L		2					
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite	U	0.0700	0.0700	0.200	mg/L		10	AXH3	01/20/25	0743	2736854	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 14, 2025

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

Client Sample ID: AG21166	Project: SOOP00119
Sample ID: 704945002	Client ID: SOOP001
Matrix: GW	
Collect Date: 14-JAN-25 11:54	
Receive Date: 17-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
SM 5310 B Total Organic Carbon "As Received"												
Total Organic Carbon Average		1.98	0.330	1.00	mg/L		1	KB3	01/21/25	0925	2737188	1
Ion Chromatography												
EPA 300.0 Fluoride, Liquid "As Received"												
Chloride		3.46	0.0670	0.200	mg/L		1	CWW	01/18/25	0322	2736888	2
Fluoride		0.134	0.0330	0.100	mg/L		1					
Sulfate		76.9	0.665	2.00	mg/L		5	CWW	01/18/25	1816	2736888	3
Nutrient Analysis												
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.671	0.0700	0.200	mg/L		10	AXH3	01/20/25	0744	2736854	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 5310 B	
2	EPA 300.0	
3	EPA 300.0	
4	EPA 353.2 Low Level	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 14, 2025

Page 1 of 4

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

Contact:
Workorder: 704945

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Carbon Analysis											
Batch	2737188										
QC1205981766	704945001	DUP									
Total Organic Carbon Average		6.14		6.24	mg/L	1.68		(0%-20%)	KB3	01/21/25	08:36
QC1205981754	LCS										
Total Organic Carbon Average	10.0			9.63	mg/L		96.3	(80%-120%)		01/20/25	22:36
QC1205981755	LCSD										
Total Organic Carbon Average	10.0			10.3	mg/L	7.09	103	(0%-20%)		01/20/25	22:48
QC1205981753	MB										
Total Organic Carbon Average			U	0.330	mg/L					01/20/25	22:28
QC1205981767	704945001	PS									
Total Organic Carbon Average	10.0	6.14		16.1	mg/L		99.7	(65%-120%)		01/21/25	09:01
Ion Chromatography											
Batch	2736888										
QC1205981051	704940001	DUP									
Chloride		168		166	mg/L	0.635		(0%-20%)	CWW	01/17/25	21:00
Fluoride		1.64		1.55	mg/L	5.93	^	(+/-0.500)		01/18/25	05:30
Sulfate		759		771	mg/L	1.54		(0%-20%)		01/17/25	21:00
QC1205981053	704945002	DUP									
Chloride		3.46		3.47	mg/L	0.202		(0%-20%)		01/18/25	03:54
Fluoride		0.134		0.142	mg/L	5.66	^	(+/-0.100)			

GEL LABORATORIES LLC

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

QC Summary

Workorder: 704945

Page 2 of 4

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	2736888										
Sulfate		76.9		76.4	mg/L	0.581		(0%-20%)	CWW	01/18/25	18:48
QC1205981050	LCS										
Chloride	5.00			4.83	mg/L		96.5	(90%-110%)		01/17/25	19:25
Fluoride	2.50			2.48	mg/L		99.3	(90%-110%)			
Sulfate	10.0			9.80	mg/L		98	(90%-110%)			
QC1205981049	MB										
Chloride			U	0.0670	mg/L					01/17/25	18:53
Fluoride			U	0.0330	mg/L						
Sulfate			U	0.133	mg/L						
QC1205981052	704940001	PS									
Chloride	5.00	1.68		6.55	mg/L		97.4	(90%-110%)		01/17/25	21:32
Fluoride	2.50	0.328		2.74	mg/L		96.4	(90%-110%)		01/18/25	06:02
Sulfate	10.0	7.59		17.6	mg/L		99.9	(90%-110%)		01/17/25	21:32
QC1205981054	704945002	PS									
Chloride	5.00	3.46		8.54	mg/L		102	(90%-110%)		01/18/25	04:26
Fluoride	2.50	0.134		2.77	mg/L		105	(90%-110%)			
Sulfate	10.0	15.4		25.5	mg/L		102	(90%-110%)		01/18/25	19:19

GEL LABORATORIES LLC

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

QC Summary

Workorder: 704945

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Nutrient Analysis											
Batch	2736854										
QC1205980950	704712003	DUP									
Nitrogen, Nitrate/Nitrite		2.93		3.09	mg/L	5.32		(0%-20%)	AXH3	01/20/25	07:13
QC1205980949	LCS										
Nitrogen, Nitrate/Nitrite	1.00			0.991	mg/L		99.1	(90%-110%)		01/20/25	07:11
QC1205980948	MB										
Nitrogen, Nitrate/Nitrite			U	0.00700	mg/L					01/20/25	07:10
QC1205980951	704712003	PS									
Nitrogen, Nitrate/Nitrite	1.00	0.293		1.23	mg/L		93.7	(90%-110%)		01/20/25	07:14

Notes:

The Qualifiers in this report are defined as follows:

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

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

QC Summary

Workorder: 704945

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
e		5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes									
x		Subaliquot was taken. See Case Narrative for details.									

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: February 14, 2025

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

Client Sample ID: AG21205	Project: SOOP00119
Sample ID: 704945001	Client ID: SOOP001
Matrix: GW	
Collect Date: 14-JAN-25 10:19	
Receive Date: 17-JAN-25	
Collector: Client	

Parameter	Qualifier	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	0.273	+/-0.523	0.919	1.00	pCi/L			DH1	02/14/25	1055	2737101	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"													
Radium-226		0.421	+/-0.295	0.290	1.00	pCi/L			MJ2	02/11/25	0902	2736892	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"			67.6	(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: February 14, 2025

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

Client Sample ID: AG21166	Project: SOOP00119
Sample ID: 704945002	Client ID: SOOP001
Matrix: GW	
Collect Date: 14-JAN-25 11:54	
Receive Date: 17-JAN-25	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Gas Flow Proportional Counting GFPC, Ra228, Liquid "As Received"												
Radium-228		0.981	+/-0.594	0.917	1.00	pCi/L			DH1	02/14/25	1052 2737101	1
Rad Radium-226 Lucas Cell, Ra226, Liquid "As Received"												
Radium-226	U	0.142	+/-0.260	0.498	1.00	pCi/L			MJ2	02/11/25	0902 2736892	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"			66.1	(15%-125%)

Notes:

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

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: February 14, 2025

Page 1 of 2

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

Contact: Ms. Jeanette Gilmetti
Workorder: 704945

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	2737101										
QC1205981536	704940001	DUP									
Radium-228				1.38	4.10	pCi/L	99.1	(0% - 100%)	DH1	02/14/25	10:54
	Uncertainty			+/-0.692	+/-1.00						
QC1205981537	LCS										
Radium-228				28.7	28.7	pCi/L	100	(75%-125%)		02/14/25	10:54
	Uncertainty				+/-1.67						
QC1205981535	MB										
Radium-228			U	0.304	0.304	pCi/L				02/14/25	10:49
	Uncertainty			+/-0.471							
Rad Ra-226											
Batch	2736892										
QC1205981067	704940001	DUP									
Radium-226			U	0.264	0.586	pCi/L	75.7	(0% - 100%)	MJ2	02/11/25	09:01
	Uncertainty			+/-0.263	+/-0.411						
QC1205981069	LCS										
Radium-226				27.2	24.3	pCi/L	89.1	(75%-125%)		02/11/25	09:01
	Uncertainty				+/-2.28						
QC1205981066	MB										
Radium-226			U	0.299	0.299	pCi/L				02/11/25	09:02
	Uncertainty			+/-0.324							
QC1205981068	704940001	MS									
Radium-226			137 U	0.264	137	pCi/L	99.6	(75%-125%)		02/11/25	09:01
	Uncertainty			+/-0.263	+/-11.6						

- 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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 704945

Page 2 of 2

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

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

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

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

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

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

Technical Case Narrative
Santee Cooper
SDG #: 704945

General Chemistry

Product: Carbon, Total Organic

Analytical Method: SM 5310 B

Analytical Procedure: GL-GC-E-093 REV# 22

Analytical Batch: 2737188

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
704945001	AG21205
704945002	AG21166
1205981753	Method Blank (MB)
1205981754	Laboratory Control Sample (LCS)
1205981755	Laboratory Control Sample Duplicate (LCSD)
1205981766	704945001(AG21205) Sample Duplicate (DUP)
1205981767	704945001(AG21205) Post Spike (PS)

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

Data Summary:

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

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 36

Analytical Batch: 2736888

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
704945001	AG21205
704945002	AG21166
1205981049	Method Blank (MB)
1205981050	Laboratory Control Sample (LCS)
1205981051	704940001(AG21151) Sample Duplicate (DUP)
1205981052	704940001(AG21151) Post Spike (PS)
1205981053	704945002(AG21166) Sample Duplicate (DUP)
1205981054	704945002(AG21166) Post Spike (PS)

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

Data Summary:

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

following exceptions.

Technical Information

Sample Dilutions

The following samples 1205981051 (AG21151DUP), 1205981052 (AG21151PS), 1205981053 (AG21166DUP), 1205981054 (AG21166PS), 704945001 (AG21205) and 704945002 (AG21166) were diluted because target analyte concentrations exceeded the calibration range. Samples 1205981051 (AG21151DUP) and 1205981052 (AG21151PS) were diluted to minimize matrix effects on instrument performance. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	704945	
	001	002
Chloride	2X	1X
Sulfate	2X	5X

Miscellaneous Information

Manual Integrations

Samples 1205981051 (AG21151DUP), 1205981052 (AG21151PS) and 704945001 (AG21205) were manually integrated to correctly position the baseline as set in the calibration standards.

Product: Nitrate/Nitrite Cad Redux Low Level

Analytical Method: EPA 353.2 Low Level

Analytical Procedure: GL-GC-E-128 REV# 16

Analytical Batch: 2736854

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
704945001	AG21205
704945002	AG21166
1205980948	Method Blank (MB)
1205980949	Laboratory Control Sample (LCS)
1205980950	704712003(NonSDG) Sample Duplicate (DUP)
1205980951	704712003(NonSDG) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions

The following samples 1205980950 (Non SDG 704712003DUP) and 1205980951 (Non SDG 704712003PS) were diluted because target analyte concentrations exceeded the calibration range. The following samples 704945001 (AG21205) and 704945002 (AG21166) in this sample group were diluted due to matrix interference. Dilutions may

be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	704945	
	001	002
Nitrogen, Nitrate/Nitrite	10X	10X

Radiochemistry

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

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

Analytical Batch: 2737101

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
704945001	AG21205
704945002	AG21166
1205981535	Method Blank (MB)
1205981536	704940001(AG21151) Sample Duplicate (DUP)
1205981537	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

1205981536 (AG21151DUP) Aliquot was reduced due to limited sample volume.

Product: Lucas Cell, Ra226, Liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2736892

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
704945001	AG21205
704945002	AG21166
1205981066	Method Blank (MB)
1205981067	704940001(AG21151) Sample Duplicate (DUP)

1205981068 704940001(AG21151) Matrix Spike (MS)
1205981069 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, 1205981068 (AG21151MS), aliquot was reduced to conserve sample volume.

Certification Statement

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

Chain of Custody



Customer Email/Report Recipient: linda.williams@santecooper.com Date Results Needed by: 1/31/25 Project/Task/Unit #: 125915 / Im02.09.601 / 36500 Rerun request for any flagged QC: Yes No

Analysis Group

Labworks ID # (Internal use only)	Sample Location/ Description	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type (Glass- G/Plastic-F)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see below)	Comments	Method #	Reporting limit	Misc. sample info	Any other notes
AG-21205	Pm-1	1/14/25	1019	MDG/DCA	5	Pl-G	G	GW	1/2/3					
AG-21166	CBW-1	1/14/25	1154	MDG/DCA	5	Pl-G	G	GW	1/2/3					
										EPA 300.0 - F, Cl, SO4				
										EPA 353.2 - NO2/NO3 by CdAd				
										SM5310B - TOC				

Nutrients <input type="checkbox"/> TOC <input type="checkbox"/> DOC <input type="checkbox"/> TP/TPO4 <input type="checkbox"/> NH3-N <input type="checkbox"/> F <input type="checkbox"/> Cl <input type="checkbox"/> NO2 <input type="checkbox"/> Br <input type="checkbox"/> NO3 <input type="checkbox"/> SO4	Gypsum <input type="checkbox"/> Wallboard <input type="checkbox"/> AIM <input type="checkbox"/> TOC <input type="checkbox"/> Total metals <input type="checkbox"/> Soluble Metals <input type="checkbox"/> Purity (CaSO4) <input type="checkbox"/> % Moisture <input type="checkbox"/> Sulfites <input type="checkbox"/> pH <input type="checkbox"/> Chlorides <input type="checkbox"/> Particle Size <input type="checkbox"/> Sulfur <input type="checkbox"/> USDA	Coal <input type="checkbox"/> Short Prox. <input type="checkbox"/> % Moisture <input type="checkbox"/> Ash <input type="checkbox"/> Sulfur <input type="checkbox"/> BTUs <input type="checkbox"/> Ultimate <input type="checkbox"/> Volatile Matter <input type="checkbox"/> CHN <input type="checkbox"/> HGI Other Analysis: <input type="checkbox"/> Fineness <input type="checkbox"/> Particulate Matter	Flyash <input type="checkbox"/> Ammonia <input type="checkbox"/> LOI <input type="checkbox"/> % Carbon <input type="checkbox"/> Mineral Analysis <input type="checkbox"/> Sieve <input type="checkbox"/> % Moisture NPDES <input type="checkbox"/> Oil & Grease <input type="checkbox"/> As <input type="checkbox"/> TSS	Oil Trans. Oil Quality <input type="checkbox"/> % Moisture <input type="checkbox"/> Color <input type="checkbox"/> Acidity <input type="checkbox"/> Dielectric Strength <input type="checkbox"/> IFT <input type="checkbox"/> Dissolved Gases Used Oil <input type="checkbox"/> Flashpoint <input type="checkbox"/> Metals (As, Cd, Cr, Ni, Pb, Hg) GOFER	MISC. <input type="checkbox"/> BTEX <input type="checkbox"/> Naphthalene <input type="checkbox"/> VOA/Semi <input type="checkbox"/> Oil & Grease <input type="checkbox"/> E. Coli <input type="checkbox"/> Total Coliform <input type="checkbox"/> pH <input type="checkbox"/> Dissolved As <input type="checkbox"/> Dissolved Fe <input type="checkbox"/> Rad 226 <input type="checkbox"/> Rad 228 <input type="checkbox"/> PCB	<input type="checkbox"/> Metals (All) <input type="checkbox"/> Ag <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Ca <input type="checkbox"/> Cd <input type="checkbox"/> Co <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> K <input type="checkbox"/> Li <input type="checkbox"/> Mg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Na <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se <input type="checkbox"/> Sn <input type="checkbox"/> Sr <input type="checkbox"/> Ti <input type="checkbox"/> Tl <input type="checkbox"/> V <input type="checkbox"/> Zn <input type="checkbox"/> Hg <input type="checkbox"/> CrVI <input type="checkbox"/> XRF scan <input type="checkbox"/> RCRA (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
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Relinquished by:	Employee #	Received by:	Employee #	Date	Time	Sample Receiving (Internal Use Only)
<i>[Signature]</i>	36851	<i>[Signature]</i>	GEL	1/17/25	0917	TEMP (°C): _____
<i>[Signature]</i>	GEL	<i>[Signature]</i>	GEL	1/17/25	1555	Initials: _____
						Correct pH: Yes No
						Preservative Lot #:
						Date/Time/Init for preservative:

Matrix codes: GW-groundwater, DW-drinking water, SW-surface water, WW-waste water, BW-boiler water, L-limestone, Oil-oil, S-Soil, SL-solid, C-coal, G-gypsum, FA-flyash, BA-bottom ash, M-misc (describe in comment section)
 Preservative code- 1=4°C 2=HNO3 3=H2SO4 4=HCl 5=Na2S2O5 6=Other (Specify)

List of current GEL Certifications as of 14 February 2025

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	525-24-281-19660
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	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-45
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Field Data Sheets

(Note: the color coding is to assist field personnel in determining when the well has stabilized enough to begin sample collection.)

**Cross Generating Station
for CCR ACM Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1D	80.653	5.09	23 - 28	1/29/2025	1139	31.2
Final GW Depth:	5.27	depth to GW (ft)		20.5	Screen Submerged (ft)?	
Drawdown:	0.18	ft		-0.61	Silt Buildup (ft)	
Ferric Iron:	N/A*	mg/L				
Ferrous Iron:	0.55	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1029	17.61	6.95	196	273	11.4	5.9
1034	17.19	7.37	187	278	7.6	3.96
1039	17.08	7.47	184	280	5	4.98
1044	17.23	7.5	181	280	2.4	4.42
1049	17.35	7.47	173	280	0	4.47
1054	17.43	7.44	140	281	3.1	4.1
1057	17.69	7.41	105	280	2.6	3.97
1100	17.75	7.41	78	280	0	3.4
1103	17.86	7.38	54	281	0	3.39
1106	17.96	7.37	28	281	0	3.01
1109	17.95	7.35	9	282	0	2.73
1112	17.92	7.37	-4	283	0	2.31
1115	18.18	7.37	-15	282	0	2.66
1118	18.33	7.39	-18	283	0	2.7
1121	18.5	7.39	-71	284	0	2.17
1124	18.58	7.41	-36	284	0	2.01
1127	18.64	7.41	-41	285	4.2	1.76
1130	18.75	7.39	-49	285	0.9	1.51
1133	18.68	7.39	-55	286	0	1.24
1136	18.85	7.38	-60	285	0	1.28
1139	18.87	7.38	-64	286	0	1.33

Samples were collected by Aaron Hill and Dan Alexander

Comments/Conditions: NA*--Supply issues/out of Ferric Iron Reagent Packs

**Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-6	83.84	7.41	12-22	1/28/2025	1339	24.27
Final GW Depth:	7.43	depth to GW (ft)		7.17	Screen Submerged (ft)?	
Drawdown:	0.02	ft		0.309	Silt Buildup (ft)	
Ferric Iron:	N/A*	mg/L				
Ferrous Iron:	+++	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1247	17.65	6.73	65	1430	27.9	2.43
1252	17.75	6.7	59	1390	22.9	1.82
1257	17.82	6.7	57	1380	20.6	1.62
1302	17.97	6.7	58	1390	23.4	1.55
1307	18.23	6.69	58	1380	21.5	1.45
1312	18.45	6.66	47	2020	23.3	0.99
1315	18.65	6.5	-2	2490	24.3	0.57
1318	18.87	6.51	-32	2580	24.9	0.45
1321	18.9	6.51	-44	2600	21.8	0.47
1324	18.88	6.51	-51	2620	22.3	0.43
1327	19.13	6.52	-56	2610	23	0.4
1330	19.25	6.52	-60	2630	18.7	0.4
1333	19.16	6.52	-63	2640	15.1	0.37
1336	19.14	6.53	-65	2640	16.1	0.37
1339	19.14	6.53	-66	2640	15.3	0.40

Samples were collected by Aaron Hill and Dan Alexander

Comments/Conditions:

** code is
5582

NA*--Supply issues/out of Ferric Iron Reagent Packs

**Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-7	82.02	5.97	12-22	1/29/2025	928	25.12
Final GW Depth:	6.06	depth to GW (ft)		8.47	Screen Submerged (ft)?	
Drawdown:	0.09	ft		-0.683	Silt Buildup (ft)	
Ferric Iron:	N/A*	mg/L				
Ferrous Iron:	0	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
845	16.88	5.41	201	109	4.6	2.36
850	15.78	5.33	198	110	0	1.92
855	16.01	5.25	205	107	0	1.76
900	16.3	5.18	214	105	0	1.52
905	16.46	5.01	230	105	0	1.43
910	16.68	4.95	238	105	0	1.46
913	16.72	4.92	242	106	0	1.41
916	17.02	4.81	253	105	0	1.49
919	17.28	4.97	246	105	0	1.34
922	16.87	5.13	240	107	0	1.24
925	16.96	5.19	238	107	0	1.25
928	16.96	5.21	238	108	0	1.3

Samples were collected by Aaron Hill and Dan Alexander

Comments/Conditions: Duplicate **933**

** code is
5582

NA*--Supply issues/out of Ferric Iron Reagent Packs

**Cross Generating Station
for CCR ACM Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-8	83.13	7.22	44.5 - 55.5	1/28/2025	1012	58.8
Final GW Depth:	7.24	depth to GW (ft)		40.54	Screen Submerged (ft)?	
Drawdown:	0.02	ft		-1.54	Silt Buildup (ft)	
Ferric Iron:	N/A*	mg/L				
Ferrous Iron:	+++	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
929	17.96	6.55	3	2280	9.4	2.23
934	16.99	6.72	-73	2440	4.1	1.12
939	17.05	6.74	-108	2400	4.5	1.01
944	16.19	6.74	-132	2420	3.8	1.02
949	16.38	6.73	-150	2540	2.6	0.97
954	16.6	6.64	-125	3200	0	0.85
957	16.71	6.65	-110	3240	0	0.81
1000	16.76	6.64	-97	3370	1.7	0.79
1003	16.74	6.64	-85	3400	2.4	0.8
1006	16.84	6.64	-79	3410	2.7	0.77
1009	16.77	6.64	-74	3390	2.2	0.8
1012	16.5	6.64	-70	3380	3.8	0.78

Samples were collected by Aaron Hill and Dan Alexander

Comments/Conditions:

** code is
5582

NA*--Supply issues/out of Ferric Iron Reagent Packs

**Cross Generating Station
Background Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CBW-1	85.80	10.95	14-24	1/14/2025	1154	26.84
Final GW Depth:	10.95	depth to GW (ft)		5.68	Screen Submerged (ft)?	
Drawdown:	0	ft		-0.21	Silt Buildup (ft)	
Ferric Iron:	0	mg/L				
Ferrous Iron:	0.05	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1100	17.04	4.83	82	150	0	4.88
1105	17.18	4.67	215	150	0	4.38
1110	17.52	4.65	243	149	0	4.36
1115	17.52	4.65	257	148	0	3.63
1120	17.73	4.65	274	148	0	3.86
1125	17.6	4.65	285	148	0	1.89
1130	17.54	4.66	291	148	0	1.67
1133	17.47	4.67	296	148	0	2.61
1136	17.51	4.67	299	147	0	2.13
1139	17.55	4.67	301	147	0	3.4
1142	17.75	4.68	304	147	0	2.67
1145	17.81	4.68	307	147	0	3.1
1148	17.97	4.67	310	147	0	2.71
1151	17.96	4.67	313	147	0.5	2.91
1154	18.05	4.68	315	147	0	2.9

Samples were collected by Melanie Goings and Dan Alexander

Comments/Conditions:

** code is
5582

**Cross Generating Station
Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
PM-1	83.24	8.46	4-24	1/14/2025	1019	26.5
Final Well Depth:	8.87	depth to GW (ft)		-2.84	Screen submerged (ft)?	
Drawdown:	0.41	ft		-0.88	Silt Buildup (ft)	
Ferric Iron	+++	mg/L				
Ferrous Iron	+++	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
944	17.54	5.15	5	147	18.1	3.12
948	16.72	5.25	6	139	10.5	2.49
954	16.47	5.23	6	127	10.2	2.21
959	16.25	5.2	7	120	9.7	2.86
1004	16.5	5.2	7	120	13.3	2.93
1009	16.8	5.19	8	115	11.4	1.6
1014	16.97	5.2	8	116	8	1.59
1019	17.08	5.2	8	115	7.9	1.54

Samples were collected by Melanie Goings and Dan Alexander
Comments/Conditions:

**Cross Generating Station
for CCR ACM Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-1	80.862	4.49	10-15	6/17/2025	941	18.39
Final GW Depth:	4.55	depth to GW (ft)		8.29	Screen Submerged (ft)?	
Drawdown:	0.06	ft		-0.61	Silt Buildup (ft)	
Ferric Iron:	0	mg/L				
Ferrous Iron:	0	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
910	21.13	5.57	122	157	8.3	1.63
915	22.47	5.57	87	161	2.7	1.09
920	22.96	5.74	79	161	0.7	0.89
925	23.34	5.77	78	159	0.1	0.71
930	23.49	5.79	76	157	0.9	0.63
935	23.57	5.82	74	156	0.7	0.56
938	23.66	5.82	73	156	0.7	0.52
941	23.72	5.83	73	155	0.9	0.48

Samples were collected by Ashton Poole and Evan Amick

Comments/Conditions:

** code is
5582

**Cross Generating Station
for CCR ACM Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
CCMLF-2	84.08	8	9.5-19.5	6/16/2025	1552	22.69
Final GW Depth:	8.04	depth to GW (ft)		4.28	Screen Submerged (ft)?	
Drawdown:	0.04	ft		-0.41	Silt Buildup (ft)	
Ferric Iron:	0	mg/L				
Ferrous Iron:	0.11	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1500	31.46	5.29	159	68	27	1.07
1505	30.75	5.18	201	72	0.5	0.66
1510	30.56	5.11	223	72	0	0.45
1515	30.68	5.17	227	73	0	0.39
1520	30.98	5.15	234	74	0	0.36
1525	30.95	5.28	229	74	0	0.36
1528	30.83	5.29	230	74	0	0.35
1531	30.74	5.22	234	77	0	0.35
1534	30.77	5.02	244	80	0	0.34
1537	30.85	5.13	238	80	0	0.34
1540	30.95	5.3	228	81	0	0.34
1543	30.95	5.26	229	81	0	0.33
1546	31.04	5.32	225	87	0	0.33
1549	31.14	5.38	221	86	0	0.33
1552	31.17	5.41	219	87	0	0.32

Samples were collected by Ashton Poole and Evan Amick

Comments/Conditions:

** code is
5582

**Cross Generating Station
Class 2 Landfill Groundwater Monitoring Wells**

Well ID	TOC Elevation (feet)	GW Depth (feet)	Screen Intervals (ft, bgs)	Sample Date	Sample Time	Total Well Depth
POZ-6	83.84	7.64	12-22	6/10/2025	1210	24.22
Final GW Depth:	7.49	depth to GW (ft)		6.94	Screen Submerged (ft)?	
Drawdown:	-0.15	ft		0.359	Silt Buildup (ft)	
Ferric Iron:	+++	mg/L				
Ferrous Iron:	+++	mg/L				
Time	Temp (celcius)	pH (units)	Eh ORP (mV)	Spec Cond (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1033	23.53	6.53	-39	1150	6.1	1.05
1038	23.3	6.55	-54	1130	4.1	0.57
1043	23.12	6.55	-55	1130	4.7	0.45
1048	22.54	6.56	-58	1140	4.3	0.47
1053	22.35	6.57	-67	1200	3.7	0.71
1058	22.3	6.51	-80	2300	3.3	0.41
1101	22.22	6.5	-82	2620	3.6	0.35
1104	22.18	6.49	-81	2700	4.6	0.41
1107	22.15	6.49	-82	2740	3.6	0.52
1110	22.04	6.49	-82	2770	3.7	0.4
1113	21.96	6.49	-83	2780	3.9	0.38
1116	21.83	6.49	-84	2790	3.4	0.56
1119	21.81	6.49	-84	2800	3	0.81
1122	21.74	6.49	-84	2800	3.5	0.51
1125	21.7	6.49	-84	2810	3.3	0.83
1128	21.67	6.49	-84	2810	3.4	0.87
1131	21.61	6.49	-84	2810	3.4	1.14
1134	21.49	6.49	-85	2820	3.3	1.44
1137	21.47	6.49	-85	2820	3.4	1.53
1140	21.45	6.49	-85	2820	3.3	1.26
1143	21.38	6.49	-85	2830	3.7	1.42
1146	21.33	6.49	-85	2830	3.8	1.27
1149	21.3	6.49	-85	2830	3.3	1.18
1152	21.26	6.49	-85	2830	3.4	0.9
1155	21.24	6.49	-85	2830	3.5	0.81
1158	21.23	6.49	-85	2830	3.7	0.65
1201	21.2	6.49	-85	2830	4	0.55

1204	21.18	6.49	-85	2840	3.6	0.43
1207	21.14	6.49	-85	2840	3.2	0.39
1210	21.13	6.49	-85	2840	3.2	0.36

Samples were collected by Ashton Poole and Evan Amick
Comments/Conditions: Rain began at approximately 1053

** code is
5582

Appendix C – MONITORED NATURAL ATTENUATION DEMONSTRATION



December 2025
Cross Generating Station Class 2 Landfill



Monitored Natural Attenuation Demonstration

Prepared for Santee Cooper

*Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel*

December 2025
Cross Generating Station Class 2 Landfill

Monitored Natural Attenuation Demonstration

Prepared for
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Prepared by
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APPENDICES

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ABBREVIATIONS

ACM	Assessment of Corrective Measures
$\mu\text{g/L}$	microgram per liter
$\mu\text{S/cm}$	microsiemen per centimeter
bgs	below ground surface
CCR	coal combustion residuals
CEC	cation exchange capacity
CaCO_3	calcite
cm	centimeter
Co^{2+}	dissolved cobalt
Co_3O_4	cobalt oxide
CoCO_3	cobalt carbonate
EGL	Anchor QEA's Environmental Geochemistry Laboratory in Portland, Oregon
$\text{Fe}(\text{OH})_3(\text{a})$	amorphous iron hydroxide
Fe^{2+}	ferrous iron
FeCO_3	siderite
FeS	iron sulfide as mackinawite
FeS_2	iron sulfide as pyrite
GWPS	groundwater protection standard
ICPMS	inductively coupled plasma mass spectrometry
Landfill	Cross Generating Station Class 2 Landfill
meq/kg	milliequivalent per kilogram
mg/kg	milligram per kilogram
mg/L	milligram per liter
mL	milliliter
MNA	monitored natural attenuation
mol/L	mole per Liter
mV	millivolt
NPDES	National Pollutant Discharge Elimination System
pe	Negative logarithm of activity of electrons (calculated from oxidation reduction potential)
PV	pore volume
SCDES	South Carolina Department of Environmental Services
SCDHEC	South Carolina Department of Health and Environmental Control
SEM	scanning electron microscopy
SM	Standard Method
SSE	selective sequential extraction

SU	standard unit (pH)
USEPA	U.S. Environmental Protection Agency
wt%	weight percent
XRD	X-ray diffraction
XRF	X-ray fluorescence

Executive Summary

Extensive geochemical and related studies demonstrate that monitored natural attenuation (MNA) is a viable corrective action for groundwater impacts associated with the Cross Generating Station Class 2 Landfill (Landfill). Multiple lines of evidence indicate that Landfill conditions meet the U.S. Environmental Protection Agency's requirements for MNA—specifically, the area of impact is stable or shrinking, the mechanisms for attenuation are identified, the attenuating mechanisms are stable, there is sufficient aquifer capacity for attenuation, and the time to achieve groundwater protection standards (GWPSs) is reasonable as compared to other corrective-action alternatives.

Investigations performed to support MNA as a potential remedy for cobalt concentrations greater than the GWPS in monitoring well POZ-4 included the following:

- Preparation of concentration versus time and concentration versus distance graphs for total cobalt in groundwater
- Groundwater, well solids (precipitates), and aquifer solids sampling
- Laboratory analysis of well solids and aquifer solids samples for bulk chemistry (X-ray fluorescence), mineralogy (X-ray fluorescence and scanning electron microscopy), and cation exchange capacity
- Geochemical modeling
- Selective sequential extraction (SSE) to determine associations of cobalt with attenuating solids
- Column studies to assess the aquifer solids (soil) capacity for attenuation

Graphs of concentration versus time for cobalt associated with the Landfill indicate reduction of cobalt in groundwater over time. Decreasing cobalt concentrations with time are expected to continue to be observed through natural attenuation because the source of cobalt has been eliminated (Landfill closure in 2016 and water management improvements in 2020; Section 1).

Results from existing groundwater data analysis, geochemical modeling, well solids (precipitates) analyses, and aquifer solids (soil) analyses provide multiple lines of evidence for attenuation mechanisms for cobalt operating at the Landfill. The major attenuation mechanisms operating at the Landfill include the following:

- Sorption-coprecipitation with crystalline iron oxides, consistent with incorporation into a cobalt-iron oxide
- Sorption-coprecipitation with amorphous iron and manganese oxides (reducible fraction)
- Sorption-coprecipitation with iron sulfides
- Cation exchange on clay minerals

Column studies were performed to assess the ability for the aquifer (soil) to attenuate cobalt. Laboratory results were then extrapolated to the entire saturated mass of aquifer downgradient of the coal combustion residuals ponds. Based on the column studies and saturated volume of the downgradient aquifer, the aquifer has much more capability to attenuate (sorb) cobalt than the mass of cobalt currently in groundwater. Specifically, the aquifer has an attenuating capacity 28 times greater than the mass of cobalt in groundwater.

SSE was performed on well solids (precipitates) samples, aquifer solids (soil) samples, and the aquifer solids used in the column studies to assess the stability of the attenuated cobalt, and the host minerals present in the aquifer. Based on SSE results, cobalt is moderately to very stable, as it is mostly associated with exchangeable, poorly crystalline, and crystalline iron phases.

The slope of trend lines through groundwater data and reactive transport modeling were used to estimate time to achieve the applicable GWPS. The estimated time to achieve GWPS for cobalt (6 micrograms per liter) at POZ-4 is approximately 8 years, which is very reasonable compared to durations of other corrective-action technologies. This estimate is also well within the widely accepted time frame for achieving GWPS's with MNA alone (approximately 30 years). Cobalt concentrations in POZ-4 will continue to be evaluated using data collected during CCR Rule semiannual groundwater monitoring events. If, after additional monitoring, cobalt concentration trends do not indicate the GWPS will be achieved in a reasonable time frame (e.g., 30 years), an alternative remedy may be evaluated. Updates regarding progress toward compliance and remedy effectiveness will be included in the annual groundwater monitoring and corrective action reports.

1 Introduction

The Cross Generating Station Class 2 Landfill (Landfill), in Pineville, South Carolina, is owned and operated by Santee Cooper. As of December 31, 2015, the Landfill ceased receipt of all coal combustion residuals (CCR) and non-CCR waste streams, and closure by capping was completed by August 9, 2016 (Santee Cooper 2024). The South Carolina Department of Environmental Services (SCDES, formerly South Carolina Department of Health and Environmental Control [SCDHEC]) certified the Landfill as closed on February 28, 2017. Since then, Santee Cooper has been monitoring groundwater at the Landfill in accordance with the U.S. Environmental Protection Agency (USEPA) CCR Rule and an SCDES-approved groundwater monitoring program under SCDES Post Closure Permit No. 083337-1601.

Assessment monitoring was conducted in 2018 in accordance with § 257.95 of the CCR Rule and identified the presence of cobalt greater than the groundwater protection standard (GWPS). Therefore, a remedy was required to be selected in accordance with § 257.97. A *Remedy Selection Report* for the Landfill was completed in 2020 with closure by capping, water management improvements, and monitored natural attenuation (MNA) as the selected remedial strategies (Santee Cooper 2020). The purpose of this report is to document findings from the MNA demonstration that uses site-specific data to identify attenuation mechanisms (primarily sorption and coprecipitation) present in the aquifer. In addition, the MNA demonstration evaluates aquifer uptake capacity and time to achieve compliance with GWPS.

Although the Landfill had been closed since 2016, water entrained in the Landfill CCR material had been observed seeping from the toe drain outlets, which flowed into unlined stormwater conveyances and was being managed with other site stormwater. Water management improvements were implemented at the Landfill in January 2020 under the oversight of SCDES. The water management improvements refer to capturing water present in the Landfill at the time of closure, thereby removing as much of the source material potentially being released from the CCR unit as was feasible. The water captured from the toe drains is now isolated from stormwater and is being redirected to the operation Class 3 Landfill Leachate Collection Pond before further treatment prior to discharge under National Pollutant Discharge Elimination System (NPDES) permit No. SC0037401.

USEPA defines MNA as the “reliance on natural attenuation processes (within the context of a carefully controlled and monitored site cleanup approach) to achieve site-specific remediation objectives within a time frame that is reasonable compared to that offered by other more active methods” (USEPA 1999, 2015). An MNA evaluation consists of the following steps or tiers (USEPA 2015):

1. Demonstrate that the area of impacts (plume) is stable or shrinking.
2. Determine the mechanisms and rates of attenuation.

3. Determine that the capacity of the aquifer is sufficient to attenuate the mass of constituents in groundwater and that the immobilized constituents are stable and will not remobilize.
4. Design a performance monitoring program based on the mechanisms of attenuation and establish contingency remedies (tailored to site-specific conditions) should MNA not perform as expected.

As shown in Table 1, the field and laboratory investigations completed for this evaluation support Tiers 1 through 3. Tier 4 is considered outside the scope of this report. It is anticipated that a detailed sitewide performance monitoring program would be developed as a separate report.

Groundwater beneath the Landfill flows north and northwest. Although the Landfill has been closed since 2016, water entrained in the Landfill CCR has been observed seeping from the toe drain outlets that flowed into unlined stormwater conveyances. This water was being managed with other site stormwater. Water management improvements were implemented at the Landfill in January 2020 under the oversight of SCDES. The water management improvements refer to capturing water present in the Landfill at the time of closure, thereby removing as much of the source material potentially being released from the CCR unit as was feasible. The water captured from the toe drains is now isolated from stormwater and is being redirected to the operation Class 3 Landfill Leachate Collection Pond before further treatment prior to discharge under NPDES permit No. SC0037401.

The primary constituent of interest for the Landfill is cobalt, which has been measured at statistically significant levels in monitoring well POZ-4 (Figure 1; Santee Cooper 2024). POZ-4 is the only monitoring well downgradient of the Landfill with statistically significant levels identified. As discussed in this report, substantial evidence for MNA of cobalt exists for the Landfill.

2 Stability of Areas of Impacts

Existing groundwater data were used to generate concentration versus time and concentration versus distance graphs to determine if attenuation is occurring over time and/or with distance from the waste boundary and to assess natural attenuation occurrence and rates. Total cobalt concentrations were plotted on the y-axis. For the concentration versus time plots presented in Figure 2, the time between sampling events (in days from 2015 through 2023) was plotted on the x-axis. For the concentration versus distance plots presented in Figure 3, transects were selected based on groundwater flow direction from POZ-4 and downgradient, and to evaluate cobalt migration with distance from the waste boundary. Concentration versus distance graphs were made for the following transects:

- POZ-4 to CCMLF-1
- POZ-4 to CCMLF-2

The trends observed in recent data provide evidence that natural attenuation is occurring at the Landfill. Recent cobalt trends in POZ-4 are generally either stable or are decreasing, which supports USEPA's Tier I for an MNA evaluation. All concentration versus time graphs are included in Appendix A. For concentration versus distance¹, both transects showed cobalt concentrations decreasing with distance away from the Landfill, indicating spatial attenuation.

¹ Concentration versus distance graphs were generated using data from a recent (June 2022) representative CCR Rule sampling event for illustrative purposes. Data from other recent sampling events show similar trends.

3 Groundwater Sampling and Analysis

Groundwater samples were collected by Santee Cooper on January 30 and 31, 2023. The samples were submitted to Santee Cooper's laboratory to evaluate geochemical conditions important for evaluating attenuation mechanisms and to provide data used in groundwater geochemical modeling. Groundwater samples were collected from monitoring wells as listed in Table 2 and shown in Figure 1. The samples were analyzed for major cations, anions, and dissolved parameters influencing the chemical behavior of cobalt. The analyzed constituents and associated laboratory analytical methods used for geochemical stability and speciation calculations (Section 4) and reactive transport modeling (Section 7) are summarized in Table 3. The groundwater data could also be used to support geochemically based corrective action such as geochemical manipulation (injections), should they be considered.

Additional groundwater samples were collected by Anchor QEA on March 20, 2025, for initial groundwater characterization prior to column testing. The samples were submitted to Anchor QEA's Environmental Geochemistry Laboratory (EGL) in Portland, Oregon to conduct column studies. Groundwater samples for column studies were collected from POZ-4 and CCMLF-2. Column study methodologies and results are discussed in Section 8.

Wells were purged at a low flow rate to minimize drawdown and sampled using low-flow sampling techniques in accordance with methodologies outlined in the *Cross Generating Station Groundwater Sampling & Analysis Plan* (Santee Cooper 2023). Prior to sampling, each monitoring well was purged until field parameters (pH, temperature, specific conductance, dissolved oxygen, oxidation reduction potential, and turbidity) stabilized. Sampling logs are included in Appendix B.

4 Geochemical Stability and Speciation Calculations

Geochemical equilibrium modeling was performed to help determine which phases may be controlling the dissolved concentrations, mobility, and attenuation of cobalt, as well as the behavior of other species (such as iron) that influence the behavior of cobalt.

The Geochemist's Workbench software (Bethke and Yeakel 2013) was used to construct Pourbaix (Eh-pH) diagrams for iron and cobalt based on Landfill groundwater chemistry and to assess the geochemical stability of phases potentially controlling cobalt concentrations under site conditions (Figures 4 and 5). Blue fields indicate dissolved/mobile species, and tan fields indicate solid/attenuated species. Eh-pH data from the January 2023 groundwater sampling event are also plotted to determine the most stable species under site conditions. The Pourbaix (Eh-pH) stability diagrams indicate the following associations and attenuating mechanisms:

- There is evidence supporting sorption-coprecipitation with crystalline iron oxides and reduced iron phases (e.g., carbonates and sulfides). Landfill Eh-pH data generally fall above or along the equilibrium line between amorphous iron hydroxide [Fe(OH)₃(a)] and dissolved ferrous iron [Fe²⁺], from which the presence of iron oxides in the aquifer can be inferred as a significant control on Eh-pH conditions (Figure 4). Iron oxides are strong sorbents for many metals and metalloids, including cobalt. There is also evidence for stability of ferrous iron solid phases (e.g., siderite [FeCO₃] at POZ-8²) where the Landfill conditions are more reducing.
- There is evidence supporting incorporation into carbonates. Most Landfill Eh-pH data plot near the boundary between cobalt oxide [Co₃O₄], cobalt carbonate [CoCO₃], and dissolved cobalt [Co²⁺] (Figure 5), suggesting potential for incorporation of cobalt in mineral carbonate phases, in addition to incorporation in iron oxides. Note that calcite [CaCO₃] was identified in the well solids from POZ-4, POZ-6, and POZ-8.

Geochemical speciation-solubility calculations were performed using the U.S. Geological Survey (USGS) computer program PHREEQC (Parkhurst and Appelo 2013) with the USGS wateq4f.dat thermodynamic database (augmented with data for cobalt species from the USEPA minteq.dat thermodynamic database) to calculate aqueous speciation and determine the saturation state of groundwater samples with respect to possible mineral phases. Saturation index calculations can be useful in inferring potential solid phases present in an aquifer and controls on water chemistry and reactivity of an aqueous solution toward specific mineral phases. If a groundwater solution is saturated or supersaturated with a solid mineral phase, then that phase could be precipitating and attenuating cobalt as it precipitates. Saturation indices for groundwater samples collected in

² While there is evidence of attenuation at POZ-8, this well was installed in the deep aquifer to vertically delineate cobalt observed in POZ-4. Therefore, groundwater and aquifer solid (soil) conditions in POZ-8 are not representative of the surficial aquifer, and data are included in this report for informational purposes only.

January 2023 are presented in Table 4, and geochemical speciation modeling results indicate the following:

- Groundwater samples with detectable iron concentrations are close to equilibrium with respect to $\text{Fe}(\text{OH})_3(\text{a})$ and supersaturated with respect to crystalline iron oxides (goethite, hematite, and magnetite). Groundwater at POZ-6 and POZ-8 is slightly supersaturated with respect to siderite, and several wells, including POZ-8, are close to equilibrium with respect to calcite. This indicates the tendency for these mineral phases to precipitate out of solution, likely incorporating and attenuating cobalt in the process.
- Groundwater samples with detectable cobalt concentrations are undersaturated with respect to potential cobalt mineral phases, except for a cobalt-iron oxide phase, which is consistent with cobalt incorporation into iron oxides.

5 Solids Sampling and Analysis

Precipitation and coprecipitation may be major mechanisms for natural attenuation. Soil and aquifer media can also sorb cobalt, and their geochemistry can indicate if natural attenuation is occurring or has the potential to occur. If well solids (precipitates) are forming and incorporating cobalt, then natural attenuation is occurring. Similarly, if well solids (precipitates) are forming and incorporating cobalt, this also suggests attenuation mechanisms can be enhanced by geochemical manipulation under existing Landfill conditions. Sampling logs are included in Appendix B.

5.1 Sample Collection

To evaluate these mechanisms (sorption and coprecipitation), solid particles (well solids) were collected from the bottom of select monitoring wells and analyzed (Table 2). The solids (Figure 6) may be well solids (precipitates) forming in the aquifer or part of the mineralogy of the aquifer that has migrated into the well through the well screen. Regardless, depending upon their chemistry and mineralogy, the solids may have the ability to attenuate cobalt.

Well solids samples were collected as follows:

- Well solids were pumped from the bottom of the well via polyethylene tubing and a peristaltic pump.
- Groundwater and well solids (precipitates) were pumped through an inline filter holder and stand (for example, those manufactured by Geotech Environmental Equipment, Inc.) with a 0.45-micron filter membrane until the filter clogged or the water ran clear. Up to five filters containing well solids were collected at each well (with the objective to collect as much solid material as possible from the bottom of each well).
- All filters from each well were placed in a single plastic petri dish, and the petri dish lid was secured with duct tape.
- Each wrapped petri dish was placed in a Mylar bag with oxygen-absorbent packets.
- The Mylar bags were sealed with no headspace and placed in a secured, iced cooler.
- Samples were stored on ice and shipped to the EGL for analysis.

Aquifer solids (soil) samples were collected from borings and analyzed to conduct column laboratory experiments to determine aquifer capacity, uptake rates, and stability of MNA (Section 8). Aquifer solids samples were collected from October 17 to October 18, 2024, from the aquifer solids boring locations (Figure 1). Aquifer solids samples were collected using direct-push technology borings at six locations at the Landfill. Photographs of representative aquifer solids samples are shown in Figure 7. Samples were selected in the field, packaged to preserve field redox conditions (airtight containers packed in Mylar bags with oxygen-scavenging packets), and shipped on ice to the EGL for geochemical testing and column study experiments.

Each aquifer solids sample collected for laboratory analyses was assigned a unique alphanumeric identifier. Analytical sample identification was based on the following designations:

- CLFMNA
- Sample location number
- Interval start depth in feet below ground surface (bgs)
- Interval end depth in feet bgs

For example, a sample collected at location 3 from 15 to 20 feet bgs would be designated as "CLFMNA-3-15-20."

5.2 Sample Analysis

Upon arrival at the EGL, well solids (precipitates) and aquifer solids samples were inspected and checked against the chain of custody. Samples were then stored in Mylar bags with oxygen scrubbers under refrigeration until processing. To maintain in situ geochemical conditions, well solids (precipitates) were removed from the filters under a nitrogen atmosphere in an anaerobic glove box for analysis and geochemical characterization. Well solids retained on the sample filters were allowed to dry and were recovered, homogenized, and transferred into pre-cleaned glass jars.

The well solids and aquifer solids samples were analyzed by the following methods:

- X-ray fluorescence (XRF) to determine the chemical composition of the matrix (e.g., iron compounds) and presence of cobalt
- X-ray diffraction (XRD) to determine crystalline mineral phases
- Scanning electron microscopy – energy dispersive x-ray spectroscopy (SEM-EDX) to directly observe mineral/attenuating phases and determine chemical compositions
- Selective sequential extraction (SSE) to determine association of cobalt with attenuating phases, determine relative strength of attenuation, and provide a sense of permanence
- Cation exchange capacity (CEC) to assess ion exchange as a mechanism for attenuation
- Column testing of aquifer solids samples to determine cobalt uptake capacity and reversibility of cobalt uptake
- SSE on aquifer solids used in column testing to determine cobalt attenuation mechanisms and stability.

Additional detail (including the relevance of each analysis to the MNA evaluation) is included in Table 5.

All samples were analyzed by XRF to determine the chemical composition. After drying anaerobically, processed samples were loaded and sealed in plastic sample containers for elemental analysis by XRF. XRF testing was performed by EGL staff using a Niton XL3t GOLDD+ XRF Analyzer for well solids

or a SciAps X-550 XRF Analyzer for aquifer solids samples. Individual samples were analyzed by XRF in both the Mining and Soils modes to include most elements heavier than sodium.

Powder XRD analysis was performed on well solids and selected aquifer solids samples to determine mineralogy. Samples were selected based on several factors, including well location, groundwater chemistry, and bulk chemical composition data (XRF). Samples for XRD were delivered to RC Imaging and Analysis in Portland, Oregon, under chain of custody for analysis.

After XRF analysis, samples for SSE analysis were selected using the criteria above and the results of the XRF analysis. SSE targets a series of operationally defined mineral fractions. In SSE, samples are leached with increasingly aggressive solutions to determine the chemical associations. Generally, each successive step represents stronger attenuation and greater permanence than the previous step. The fractions, from most to least environmentally available, are as follows:

- F1: water soluble
- F2: exchangeable (e.g., clay minerals)
- F3: reducible (e.g., poorly crystalline metal oxides such as iron oxides)
- F4: oxidizable (e.g., crystalline oxide and crystalline sulfide minerals)
- F5: residual (e.g., silicate phases)

The F3, F4, and F5 fractions represent relatively stable (permanent) attenuating mechanisms, provided geochemical conditions at the Landfill do not change significantly.

Ion exchange is a common attenuation mechanism for cobalt. After XRF analysis, samples for CEC analysis were selected using the criteria above and the results of the XRF analysis. Exchange capacity is calculated after adding ammonium acetate to samples and leaching for 16 hours, then analyzing the leachate for released exchangeable cations.

The well solids and select aquifer solids samples were submitted for examination by SEM to confirm attenuating mineral phases and compositions and to identify amorphous coatings on mineral grains (documented by elemental mapping) that can attenuate cobalt. Samples for SEM were delivered to RC Imaging and Analysis in Portland, Oregon, under chain of custody for analysis.

Flow-through column testing was conducted on select solids samples to determine the uptake capacity and stability of cobalt in the aquifer. Aquifer solids samples were packed into test columns under a nitrogen environment and kept anaerobic along with the groundwater influent throughout the duration of the test. Impacted groundwater was passed through the aquifer solids samples, and effluent samples were collected incrementally and analyzed for water quality parameters and dissolved cobalt. Following the completion of this first phase, the impacted influent groundwater was switched to background groundwater and was passed through the aquifer solids samples for more than 20 pore volumes (PVs) to assess the stability of cobalt uptake. Following column testing, SSE

was performed on the aquifer solids recovered from the columns to further evaluate attenuation mechanisms in the aquifer. Results of the column test are discussed in Section 8.

5.3 Well Solids Results

The XRF chemical analysis of the well solids (Table 6) showed the presence of elements associated with natural attenuation (iron and manganese) in samples from four monitoring wells. XRD identified goethite, an attenuating iron oxide, in solids from POZ-7 (Table 7). Figure 8 shows the results of SSE for four samples from the Landfill. Cobalt analyzed in well solids is bound primarily in the stable F3, F4, and F5 fractions, though some cobalt is in the exchangeable (F2) fraction. This is consistent with the identification of amorphous iron and manganese oxides and crystalline iron oxides from the other investigations.

POZ-6 and POZ-8 had sufficient sample mass recovery for CEC testing. CEC ranged from 162 to 238 milliequivalents per kilogram (meq/kg; Table 8), which is sufficient to provide attenuating capacity. Exchangeable cobalt was detected in the well solids, indicating that cation exchange is an attenuating mechanism for cobalt.

SEM and associated elemental mapping were conducted on select samples to confirm mineral phases and attenuating mechanisms. Iron oxide and mixed iron and manganese oxide coatings on silicate grains were the most commonly identified attenuating phases, with cobalt concentrations of up to 2.1 weight percent (wt%) in POZ-4 and up to 0.91 wt% in POZ-7. The relationships of cobalt and iron and cobalt and manganese in POZ-7 are shown in Figures 9a and 9b. Cobalt concentrations generally increase with increasing iron and manganese concentrations, suggesting cobalt attenuation by iron and manganese oxides. Iron sulfides were also detected at POZ-4, with cobalt concentrations ranging from 0.23 to 1.8 wt%. Figure 10 shows an SEM image of iron oxide coatings on well solids collected from POZ-7.

5.4 Aquifer Solids Results

XRF analysis of aquifer solids samples show total iron content in the range of approximately 0.8 to 1.4 wt% and total manganese content in the range of 40 to 90 milligrams per kilogram (mg/kg), suggesting that iron oxides are the dominant oxide phase capable of attenuating cobalt (Table 9). A sulfur content of approximately 1.7 wt% at CLFMNA-3-15-20 suggests the presence of iron sulfides. The mineralogy of the aquifer solids (as determined by XRD) is consistent with the well solids results, consisting mostly of quartz, feldspars and clay minerals (Table 10). The clay minerals include smectite, kaolinite, and illite, all of which have attenuating capacity.

SEM-EDX shows cobalt is present in iron sulfides in the CLFMNA-3-15-20 sample at an average detected concentration of 0.28 wt% (ranging from 0.18 to 0.44 wt%). Cobalt was detected in iron oxides in CLFMNA-4 and CLFMNA-5 at concentrations ranging from 0.19 to 0.24 wt%. Figure 11

shows an SEM image of iron sulfides (framboidal pyrite) present in aquifer solids collected from CLFMNA-3-15-20.

Figure 12 shows SSE results from three aquifer solids samples. SSE shows that cobalt in aquifer solids is predominantly in the F4 (oxidizable) and F2 (exchangeable) fractions at CLFMNA-3, with lower cobalt present in the other three fractions. The F4 cobalt is probably associated with iron sulfides. Cobalt is present in lower concentrations in CLFMNA-4 and CLFMNA-5 and distributed in all five fractions in CLFMNA-4 and predominantly in F4 and F5 in CLFMNA-5.

CEC for the aquifer solids samples is lower than for the well solids samples, ranging from 14 to 132 meq/kg, probably due to the coarser texture than that of the well solids (Table 11).

Analytical results are included in Appendix C.

6 Mechanisms for Natural Attenuation

To support MNA, the following laboratory analyses of groundwater and well solids (precipitates) and aquifer solids were conducted (Sections 4 and 5):

- Performed geochemical modeling using PHREEQC with WATEQ4F
- Analyzed samples of well solids (precipitates) by XRF and XRD
- Directly observed attenuating mineral phases by SEM
- Determined association of cobalt with attenuating phases, determined relative strength of attenuation, and provided a sense of permanence by SSE
- Assessed cation exchange as an attenuation mechanism by CEC

Results from groundwater data analysis, geochemical modeling, and well solids and aquifer solids analyses provide multiple lines of evidence for multiple attenuation mechanisms for cobalt (Table 12). The attenuating mechanisms include sorption-coprecipitation with iron oxides (Figure 13), sorption-coprecipitation with manganese oxides, and cation exchange on clay minerals. Sorption-coprecipitation with iron sulfides is an attenuating mechanism at POZ-4 and CLFMNA-3.

The XRF bulk chemical analysis of aquifer solids show concentrations of iron (an attenuating species) ranging between 8,000 and 14,000 mg/kg or 0.8 to 1.4 wt%. Sulfur was detected at 1.7 wt% at CLFMNA-3, suggesting the presence of iron sulfides. Manganese was detected at concentrations ranging from 40 to 90 mg/kg, suggesting the presence of manganese oxides. Significant aluminum concentrations of 5.1 to 7.0 wt% suggest the presence of clay minerals.

XRD identified clay minerals including smectites, kaolinite, and illite in aquifer solids. Goethite was detected in well solids. CEC, SSE, and SEM were performed on select samples to verify the results of the XRD work. Exchangeable cobalt was detected in both well solids and aquifer solids, supporting attenuation by cation exchange. SEM-EDX confirmed cobalt association with iron sulfides at POZ-4 and CLFMNA-3 and with iron oxides at POZ-4, POZ-7, CLFMNA-4, and CLFMNA-5.

As discussed in greater detail in Section 5.3, SSE indicated an association of cobalt with multiple attenuation mechanisms as follows:

- Sorption-coprecipitation with crystalline iron oxides, consistent with incorporation into a cobalt-iron oxide (Figure 13)
- Sorption-coprecipitation with amorphous iron and manganese oxides (reducible fraction)
- Sorption-coprecipitation with iron sulfides
- Cation exchange on clay minerals

7 Reactive Transport Modeling

Reactive transport modeling was performed using PHREEQC to assess the post-closure fate and transport of cobalt along a groundwater flow path at the Landfill downgradient of POZ-4. The objective of the modeling was to quantitatively assess the effectiveness of natural attenuation in maintaining cobalt at concentrations less than the GWPS.

The model domain consists of a 1D transect originating upgradient of the Landfill at POZ-7 and extending the full length of the Landfill (POZ-7 to POZ-4) to downgradient monitoring well CCMLF-2 (Figure 14a). As a conservative assumption, the groundwater chemistry of POZ-4 was assigned as the initial groundwater chemistry along the length of the transect beneath the Landfill to provide a finite but significant source of cobalt to the downgradient section of the transect. Given that the upgradient extent of the cobalt plume at POZ-4 is currently unknown, this represents a worst-case scenario. Since the Landfill has been closed, groundwater currently present along this transect will be progressively flushed by upgradient groundwater with cobalt concentrations less than the GWPS. In addition, cobalt concentrations will attenuate along the flow path due to reactions with the aquifer matrix. Specific attenuating mechanisms for cobalt that were considered include the following:

- Sorption to and coprecipitation with iron oxides in aquifer solids
- Precipitation of cobalt in sulfide minerals and iron carbonates in aquifer solids
- Cation exchange with clay minerals in aquifer solids

Inclusion of these attenuation mechanisms in the model was supported by geochemical speciation modeling and results of laboratory studies described previously, including data from XRD, XRF, SSE, SEM, and CEC analyses of well solids and aquifer solids samples collected in the vicinity of the model transect (Table 12).

Sorption reactions of cobalt and other species were simulated using the surface complexation model for iron oxide binding sites based on Dzombak and Morel (1990). Transect-specific data, including groundwater chemistry, as well as XRF, SEM, CEC, and extractable iron concentration data for aquifer solids, were used to define initial groundwater and aquifer matrix geochemistry.

Initial groundwater chemistry along the transect was based on data from samples collected in 2023, 2024, and 2025. Initial chemistry was defined by data from upgradient well POZ-7, impacted well POZ-4, and unimpacted downgradient well CCMLF-2. Along the transect, groundwater chemistry was assigned in segments, with POZ-7 groundwater chemistry at the upgradient (influent) boundary, POZ-4 groundwater chemistry along the entire length of the Landfill (conservative assumption), and CCMLF-2 groundwater chemistry in the downgradient portion of the transect. The groundwater chemistry data used in the models are presented in Table 13. Table 14 provides solid-phase model input parameters, including the initial reactive mineral assemblage and mineral phases that could potentially precipitate along the flow path.

Based on the time trend analysis presented earlier, cobalt concentrations at POZ-4 could decrease to less than the GWPS within 10 years. However, additional post-closure monitoring is needed to better constrain this estimate. To account for uncertainty in the rate of decreasing cobalt concentrations in POZ-4, model simulations were extended to 100 years. Groundwater velocity was calculated from hydraulic conductivity, hydraulic gradients, and effective porosity, which were obtained from the June and November 2024 potentiometric maps included in the *2024 Annual Groundwater Monitoring and Corrective Action Report, Class 2 Landfill, Cross Generating Station* (Santee Cooper 2025). Two model scenarios were simulated, in which the role of different iron sulfides on overall cobalt attenuation was evaluated. The details of the two scenarios, along with model results, are as follows:

- Model transect (Figure 14a)
 - Transect length: 6,560 feet (-3,280 to 3,280 feet)
 - Hydraulic gradient: 0.00056
 - Linear groundwater velocity: 1.57 feet per year
 - Initial groundwater chemistry along the transect:
 - Upgradient influent: POZ-7
 - Landfill: POZ-4 (-3,280 to 0 feet), where 0 foot is the downgradient edge of the Landfill waste boundary (POZ-4)
 - Downgradient: CCMLF-2 (0 to 3,280 feet)
- Simulation 1, iron sulfide as pyrite (FeS_2)
 - Cobalt concentrations are predicted to attenuate over time, with limited migration of dissolved cobalt. In 100 years, cobalt exceeding the GWPS is predicted to only migrate approximately 150 feet from the downgradient edge of the Landfill (Figure 14b). The main attenuation mechanisms for cobalt in this scenario are sorption to and coprecipitation with iron oxides and cation exchange.
- Simulation 2, iron sulfide as mackinawite (FeS)
 - Cobalt concentrations are predicted to attenuate more downgradient than in simulation 1, with concentrations that exceed the GWPS migrating only 50 feet in 100 years (Figure 14b). The primary attenuation mechanism in this scenario is the formation of cobalt sulfide.

The reactive transport model results indicate natural attenuation processes will play an important role in achieving the GWPS for cobalt. There is site-specific empirical evidence for the presence of cobalt-containing iron sulfides in the aquifer matrix. The formation of iron sulfides is complex and can involve initial precipitation of mackinawite and subsequent transformation to pyrite, but due to numerous variables controlling the rate of the transformation, the process is not easily simulated. Whether pyrite forms rapidly or iron sulfides initially precipitate as mackinawite and later transform into pyrite, the modeling results indicate natural attenuation of cobalt is occurring and demonstrate its potential as an effective remedy.

8 Column Studies

8.1 Methodology (Setup)

Column tests were performed using Landfill aquifer solids and impacted groundwater to evaluate effectiveness of removal of cobalt under flow conditions and provide a basis for estimating the natural attenuation capacity of the aquifer matrix (part of USEPA's Tier 3).

Two groundwater samples were collected on March 20, 2025, from the impacted (POZ-4) and unimpacted (CCMLF-2) well for initial characterizing of groundwater prior to column testing. Upon receipt, groundwater samples were submitted to ALS Environmental in Kelso, Washington, for chemical analysis prior to beginning the column testing. Analytical results are summarized in Table 15 and included in Appendix C. Two column tests were prepared with two Landfill aquifer solids (CLFMNA-4-5-7.5 and CLFMNA-5-10-15). POZ-4 groundwater was pumped through the columns. The laboratory column setup is shown in Figure 15, and a detailed schematic is provided in Figure 16.

Column tests were carried out in 16-centimeter (cm)-long, 2.5-cm-diameter glass columns. The Landfill aquifer solids were packed into the columns to achieve a total depth of 16 cm. Landfill groundwater was pumped in an upward direction through the columns at an average flow rate of approximately 0.34 to 0.36 milliliters per minute for 14 days using a peristaltic pump with a multichannel pump head. Flow rates were regularly checked and adjusted as needed to maintain a constant flow rate. Table 16 provides a summary of the column test operating conditions.

The initial cobalt concentration in the POZ-4 groundwater was 83.4 micrograms per liter ($\mu\text{g/L}$) and spiked with cobalt(II) chloride hexahydrate to achieve an initial cobalt concentration in the influent reservoir of 140 $\mu\text{g/L}$ (within the historical range measured up to 210 $\mu\text{g/L}$) to ensure cobalt breakthrough could be detected.

Column influents and effluents were sampled twice a day for the first 3 days of testing and then once a day for the remainder of the test. The samples were tested for pH, specific conductance, and oxidation reduction potential at the time of sampling; filtered using 0.45-micron nylon syringe filters; and preserved with nitric acid. Flow rates and cumulative flow volumes were also recorded for each column at the time of sampling to calculate the total number of PVs treated. The column influent and effluent samples were analyzed for dissolved cobalt, iron, and manganese by USEPA Method 6020B (inductively coupled plasma mass spectrometry [ICPMS]) at ALS Environmental.

The laboratory column tests were operated at a higher average linear velocity (194 cm per day for CLFMNA-4-5-7.5 and 288 cm per day for CLFMNA-5-10-15) than the groundwater flow conditions in the vicinity of the Landfill, which is on the order of 1 to 5 cm per day (Santee Cooper 2024). As a result, the hydraulic residence time in the columns was also much shorter than the hydraulic

residence time at the Landfill. The attenuation measured in the columns, therefore, provides a conservative estimate of the attenuation in the field.

After treatment-phase column studies were complete, background Landfill groundwater (CCMLF-2) was pumped through the columns to determine the stability/reversibility of attenuation. The column flushing phase was run at a constant flow rate for more than 20 PVs, and column influents and effluents were sampled once a day for 3 days. Samples were analyzed for dissolved cobalt, iron, and manganese by USEPA Method 6020B (ICPMS) at ALS Environmental.

8.2 Column Test Results

Column test results are shown in Figure 17. Analytical summary reports are included in Appendix C. Cobalt in the effluent was significantly attenuated by the CLFMNA-5-10-15 aquifer solids, remaining below the GWPS for 13 PVs. The cobalt concentration in the effluent gradually increased to a concentration equivalent to 59% of the influent concentration after 124 PVs and remained at that level for the duration of the experiment. The CLFMNA-5-10-15 aquifer solids removed 99.5% of the influent cobalt mass through 3.4 PVs and 49% of the influent cobalt mass through 192 PVs. Cobalt uptake capacity was 2.9 mg/kg and was not exhausted at the end of the experiment.

The cobalt concentration in the effluent increased faster in the CLFMNA-4-5-7.5 column. The higher cobalt concentration at 2.4 PVs than the concentration at 13 PVs could be attributed to desorption of cobalt from the aquifer solids, as CLFMNA-4-5-7.5 had higher soluble and exchangeable cobalt than CLFMNA-5-10-15 (Section 5.4). The effluent cobalt concentration peaked at a concentration equivalent to 68% of the influent concentration at 51 PVs and decreased to 61% of the influent concentration after 136 PVs treated. The CLFMNA-4-5-7.5 aquifer solids removed 79% of the influent cobalt mass through 27 PVs and 42% of the influent cobalt mass through 136 PVs. Cobalt uptake capacity was 3.2 mg/kg and was not exhausted at the end of the experiment.

The hydraulic residence time in the columns was shorter than the hydraulic residence time at the Landfill. The hydraulic residence time in the column could be short for the kinetics of cobalt attenuation mechanisms such as sorption and coprecipitation, which might result in incomplete cobalt attenuation.

8.3 Aquifer Capacity for Attenuation

Aquifer capacity for attenuation was determined by multiplying the mass of cobalt attenuated in the column studies by the total volume of saturated aquifer downgradient of the Landfill, i.e., the volume of the aquifer available for attenuation. This method presumes closure by capping in place will remove the source of cobalt to the surficial aquifer.

The aquifer has far more potential for attenuation than the mass of cobalt requiring attenuation. Specifically, the aquifer has an attenuating capacity of approximately 14,000 kilograms of cobalt, 28 times greater than the approximate mass of cobalt in groundwater [500 kilograms of cobalt]).

9 Time to Achieve Groundwater Protection Standard (Rate) and Stability of Attenuated Cobalt

9.1 Time to Achieve Groundwater Protection Standard

The slope of trend lines through recent monitoring data on concentration versus time graphs was used to estimate time to achieve the GWPS via natural attenuation processes. The estimated time frame at POZ-4 is 8 years based on the slope of the trendline (6.5 µg/L per year) and the average cobalt concentration from the last four sampling events (56.5 µg/L). This is a reasonable time frame compared to durations of other corrective-action technologies. Figure 2 shows typical concentration versus time graphs that served as the basis for the rate analysis, and Appendix A contains all time versus concentration graphs.

Because of the uncertainty in the rate analysis slope at POZ-4, it is recommended that monitoring be continued for 5 to 10 years to confirm cobalt concentrations are decreasing over time. If cobalt concentration trends do not indicate the GWPS will be achieved in a reasonable time frame (e.g., 30 years), geochemical manipulations (via injection treatment) would reduce the time to achieve natural attenuation.

9.2 Flushing-Phase Column Tests to Assess Treatment Stability

After completing the treatment phase of the column tests using impacted groundwater, background groundwater (CCMLF-2) was used to assess the reversibility of the cobalt attenuation by the aquifer solids. Background groundwater was run through the columns for approximately 23 to 34 PVs. Column test results for the flushing phase are included in Table 17 and Appendix C.

During the flushing phase of the column tests, the measured dissolved cobalt concentrations in the effluents indicate the uptake of cobalt by the aquifer solids is essentially irreversible. For instance, the extent of cobalt flushing from the CLFMNA-4-5-7.5 column after 23.3 PVs was approximately 0.06% of the cobalt mass taken up by the aquifer solids. Likewise, the extent of cobalt flushing from the CLFMNA-5-10-15 column after approximately 34 PVs was approximately 0.1% of the cobalt mass taken up by the aquifer solids.

9.3 SSE on Post-Column Aquifer Solids

SSE performed on aquifer solids used in the column studies provides a measure of relative stability of the attenuated cobalt and its hosts, such as iron oxides. The SSE fractions, from least to most stable, are as follows:

- F1: water soluble
- F2: exchangeable (e.g., clay minerals)
- F3: reducible (e.g., poorly crystalline metal oxides such as iron oxides)

- F4: oxidizable (e.g., crystalline oxide and crystalline sulfide minerals)
- F5: residual (e.g., silicate phases)

The F5 fraction is likely not related to attenuation processes occurring at the Landfill; rather, this phase may reflect the composition of residual silicate minerals, such as clay minerals, from the aquifer. However, for completeness, the F5 fraction is shown in Table 18, which provides a summary of post-column-testing SSE results.

Comparing the post-column testing SSE results with those of the untreated aquifer solids (Section 5.4) reveals that the influent cobalt in the column tests was predominantly attenuated in the F2 and F3 fractions of CLFMNA-4-5-7.5 and in the F2, F4, and F3 fractions of CLFMNA-5-10-15, indicating a greater degree of cobalt stability in CLFMNA-5-10-15.

10 Conclusions and Interpretation

Extensive geochemical and related studies demonstrate that MNA is a viable corrective action for groundwater impacts associated with the Landfill. Multiple lines of evidence indicate Landfill conditions meet USEPA's requirements for MNA—specifically, the area of impact is stable or shrinking, the mechanisms for attenuation are identified, the attenuating mechanisms are stable, there is sufficient aquifer capacity for attenuation, and the time to achieve GWPSs is reasonable as compared to other corrective-action alternatives.

Investigations performed to support MNA as a potential remedy for cobalt concentrations greater than the GWPS in monitoring well POZ-4 included the following:

- Preparation of concentration versus time and concentration versus distance graphs for cobalt in groundwater
- Groundwater, well solids (precipitates), and aquifer solids sampling
- Laboratory analysis of well solids and aquifer solids samples for bulk chemistry (XRF), mineralogy (XRD and SEM), and CEC
- Geochemical modeling
- SSE to determine associations of cobalt with attenuating solids
- Column studies to assess the aquifer solids (soil) capacity for attenuation

Graphs of concentration versus time for cobalt associated with the Landfill indicate reduction of cobalt in groundwater over time. Decreasing cobalt concentrations with time are expected to continue to be observed through natural attenuation because the source of cobalt has been eliminated (Landfill closure in 2016 and water management improvements in 2020; Section 1).

Results from existing groundwater data analysis, geochemical modeling, well solids (precipitates) analyses, and aquifer solids (soil) analyses provide multiple lines of evidence for attenuation mechanisms for cobalt operating at the Landfill. The major attenuation mechanisms operating at the Landfill include the following:

- Sorption-coprecipitation with crystalline iron oxides, consistent with incorporation into a cobalt-iron oxide (Figure 13)
- Sorption-coprecipitation with amorphous iron and manganese oxides (reducible fraction)
- Sorption-coprecipitation with iron sulfides
- Cation exchange on clay minerals

Column studies were performed to assess the ability for the aquifer (soil) to attenuate cobalt. Laboratory results were then extrapolated to the entire saturated mass of aquifer downgradient of the CCR ponds. Based on the column studies and saturated volume of the downgradient aquifer, the aquifer has much more capability to attenuate (sorb) cobalt than the mass of cobalt currently in

groundwater. Specifically, the aquifer has an attenuating capacity 28 times greater than the mass of cobalt in groundwater.

SSE was performed on well solids (precipitates) samples, aquifer solids (soil) samples, and the aquifer solids used in the column studies to assess the stability of the attenuated cobalt and host minerals present in the aquifer. Based on SSE results, cobalt is moderately to very stable, as it is mostly associated with exchangeable, poorly crystalline and crystalline iron phases.

The slope of trend lines through groundwater data and reactive transport modeling were used to estimate time to achieve the applicable GWPS. The estimated time to achieve GWPS for cobalt (6 µg/L) at POZ-4 is approximately 8 years, which is very reasonable compared to durations of other corrective-action technologies. This estimate is also well within the widely accepted time frame for achieving GWPS's with MNA alone (approximately 30 years). Cobalt concentrations in POZ-4 will continue to be evaluated using data collected during CCR Rule semiannual groundwater monitoring events. If, after additional monitoring, cobalt concentration trends do not indicate the GWPS will be achieved in a reasonable time frame (e.g., 30 years), an alternative remedy may be evaluated. Updates regarding progress toward compliance and remedy effectiveness will be included in the annual groundwater monitoring and corrective action reports.

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Tables

Table 1
Monitored Natural Attenuation Demonstration Status

Tier	Approach	Status of MNA Demonstration
Tier 1: Area of Impacts Stable or Shrinking	Concentration vs. time and/or distance graphs, statistics, isoconcentrations in plan and/or section view	Satisfied
Tier 2a: Determine Mechanisms of Attenuation	Analysis of well solids: XRF, XRD, SEM, CEC, SSE; complete analysis of groundwater (major cations and anions); geochemical modeling	Satisfied
Tier 2b: Determine Rates of Attenuation	Derived from concentration vs. time graphs, batch and/or column tests, geochemical modeling	Satisfied
Tier 3a: Determine System (Aquifer) Capacity for Attenuation	Batch and/or column tests, geochemical modeling	Satisfied
Tier 3b: Determine Stability of the Attenuating Mechanisms (Solids) and Cobalt	SSE on tested materials from batch and column tests, geochemical modeling, inference from mechanisms	Satisfied
Tier 4a: Design a Performance Monitoring Program	Additional wells, repeat well solids and/or complete groundwater analysis, triggers	Not Performed Under Current MNA Scope
Tier 4b: Identify Alternative Remedies Should MNA Not Perform as Expected	Completed as part of the ACM; some technologies may need further testing and/or development (bench and pilot)	Not Performed Under Current MNA Scope

Notes:

ACM: Assessment of Corrective Measures

CEC: cation exchange capacity

MNA: monitored natural attenuation

SEM: scanning electron microscopy

SSE: selective sequential extraction

XRD: X-ray diffraction

XRF: X-ray fluorescence

Table 2
Sampling Locations

Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel

Groundwater Sampling Locations			
POZ-3	POZ-4	POZ-6	POZ-7
POZ-8	CCMLF-1	CCMLF-1D	CCMLF-2
Well Solids Sampling Locations			
POZ-4	POZ-6	POZ-7	POZ-8

Table 3
Analyzed Constituents and Laboratory Analytical Methods

Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel

Constituent	Analytical Method	Constituent	Analytical Method
Alkalinity (Total as CaCO ₃)	SM 2320 B	Lithium, dissolved	USEPA 6020B
Aluminum, dissolved	USEPA 6020B	Magnesium, dissolved	USEPA 6020B
Antimony, dissolved	USEPA 6020B	Manganese, dissolved	USEPA 6020B
Arsenic, dissolved	USEPA 6020B	Molybdenum, dissolved	USEPA 6020B
Barium, dissolved	USEPA 6020B	Nickel, dissolved	USEPA 6020B
Beryllium, dissolved	USEPA 6020B	Nitrogen Nitrate/Nitrite	USEPA 300.0
Bicarbonate Alkalinity	SM 2320 B	Ortho Phosphate	USEPA 300.0
Boron, dissolved	USEPA 6010D	Potassium, dissolved	USEPA 6020B
Cadmium, dissolved	USEPA 6020B	Selenium, dissolved	USEPA 6020B
Calcium, dissolved	USEPA 6020B	Silicon, dissolved	USEPA 6020B
Carbonate Alkalinity	SM 2320 B	Silver, dissolved	USEPA 6020B
Chloride	USEPA 300.0	Sodium, dissolved	USEPA 6020B
Chromium, dissolved	USEPA 6020B	Sulfate	USEPA 300.0
Cobalt, dissolved	USEPA 6020B	Sulfide	SM 4500-S
Fluoride	USEPA 300.0	Thallium, dissolved	USEPA 6020B
Iron, dissolved	USEPA 6020B	Total Organic Carbon	SM 5310 B
Lead, dissolved	USEPA 6020B	Zinc, dissolved	USEPA 6020B

Notes:

CaCO₃: calcium carbonate

SM: Standard Method

USEPA: U.S. Environmental Protection Agency

Listed parameters were analyzed for geochemical stability, speciation calculations, and reactive transport modeling.

Table 4
Saturation Indices for Groundwater Samples

Sample ID	Fe(OH) ₃ (a)	Goethite	Hematite	Magnetite	Siderite	Calcite	CoFe ₂ O ₄
CCMLF-1	--	--	--	--	--	-3.35	--
CCMLF-1D	--	--	--	--	--	-0.51	--
CCMLF-2	--	--	--	--	--	-4.06	--
CLF1B-1	--	--	--	--	--	-0.21	--
CLF1B-2	0.55	6.23	14.4	13.9	-1.17	-0.13	19.6
CLF1B-3	0.06	5.72	13.4	12.7	-1.16	-0.27	19.2
CLF1B-4	--	--	--	--	--	-0.02	--
CLF1B-5	1.03	6.67	15.3	15.0	-0.65	-0.14	20.0
POZ-3	--	--	--	--	--	-0.07	--
POZ-4	-0.01	5.58	13.1	12.0	-1.04	-0.67	18.1
POZ-6	0.03	5.70	13.4	13.8	0.34	-0.30	17.4
POZ-7	--	--	--	--	--	-4.67	--
POZ-8	0.60	6.22	14.4	15.9	0.75	0.14	--

Notes:

Groundwater samples were collected in January 2023.

Bold indicates positive SI values (i.e., groundwater supersaturated with respect to mineral phase).

--: No saturation index was calculated because one or more constituent(s) in phase was not detected in the groundwater sample.

CoFe₂O₄: cobalt ferrite

Fe(OH)₃(a): amorphous iron hydroxide

Table 5
Summary and Purpose of Analysis

Analysis	Description	Relevance to MNA Demonstration
XRF	Provides bulk chemistry.	Relationships are determined among elements in attenuating phases (e.g., iron and others) and cobalt; Supports Tier 2 (mechanisms) and Tier 3 (stability).
XRD	Identifies and provides mineralogy of crystalline attenuating phases.	Supports Tier 2 (mechanisms) and Tier 3 (stability) of attenuation involving crystalline mineral phases.
SEM	Allows direct visual observation of attenuating phases and distribution (e.g., iron oxide coatings on larger particles).	Supports Tier 2 (mechanisms) and Tier 3 (stability) of attenuating phases.
SSE	Determines which attenuating solid phases are associated with cobalt.	Supports Tier 2 (mechanisms) and Tier 3 (stability) of attenuating phases.
CEC	Determines if ion exchange on clays is an attenuating mechanism.	Supports Tier 2 (mechanisms) and Tier 3 (stability) for cation exchange.
Column Testing	Determines uptake capacity and stability of the aquifer.	Supports Tier 2 (mechanisms) and Tier 3 (stability) of attenuating phases.

Notes:

CEC: cation exchange capacity

MNA: monitored natural attenuation

SEM: scanning electron microscopy

SSE: selective sequential extraction

XRD: X-ray diffraction

XRF: X-ray fluorescence

Table 6
Well Solids Bulk Chemistry by XRF

Well ID	Cobalt	Silicon	Iron	Manganese	Aluminum	Calcium	Sulfur	Potassium
	mg/kg	%	%	mg/kg	%	%	mg/kg	%
POZ-4	ND	23.7	5.35	752	4.65	3.40	605	2.27
POZ-6	ND	6.53	2.30	239	2.26	26.4	644	0.369
POZ-7	ND	15.3	19.1	9200	7.60	2.94	ND	1.78
POZ-8	ND	3.93	1.22	340	0.694	36.2	3700	0.289

Notes:

Elements lighter than magnesium (including lithium) cannot be determined by portable XRF.

mg/kg: milligram per kilogram

ND: below limit of detection

XRF: X-ray fluorescence

**Table 7
Minerals Identified in Well Solids Samples by XRD¹**

Sample ID	Clay Minerals (%)					Mica (%)		Feldspar	Quartz	Calcite	Goethite
	Montmorillonite	Bentonite	Kaolinite	Illite	Vermiculite	Muscovite	Chlorite				
POZ-4	--	4	32	3	--	8	--	35	12	6	--
POZ-6	0.2	2	16	--	0.2	--	--	--	0.6	81	--
POZ-7	--	--	6	--	--	37	45	--	--	--	12
POZ-8	0.2	1	--	--	0.2	--	--	--	9	89	--

Notes:

1. Estimated concentration (weight %) reported where available.

--: not detected

XRD: X-ray diffraction

Table 8
Cation Exchange Capacity of Well Solids

Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel

Well ID	Aluminum	Calcium	Cobalt	Magnesium	Potassium	Sodium	CEC
POZ-6	0.002 J	225.0	0.00083	3.9	2.8	6.7	238
POZ-8	0.003	152	0.0012	3.2	2.1	4.2	162

Notes:

Units are in milliequivalents per kilogram.

CEC: cation exchange capacity

J: results detected but below method reporting limit

Table 9
Aquifer Solids Bulk Chemistry by XRF

Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel

Well ID	Cobalt	Silicon	Iron	Manganese	Aluminum	Calcium	Sulfur	Potassium
	mg/kg	%	%	mg/kg	%	%	%	%
CLFMNA-3-15-20	9.22	22.1	0.789	40.0	5.59	0.193	1.67	1.64
CLFMNA-4-5-7.5	1.24	23.2	1.43	50.0	7.01	0.814	--	0.636
CLFMNA-5-10-15	1.47	22.0	0.876	90.0	5.11	0.725	--	1.16

Notes:

Elements lighter than magnesium (including lithium) cannot be determined by portable XRF.

mg/kg: milligram per kilogram

ND: below limit of detection

XRF: X-ray fluorescence

Table 10
Minerals Identified in Aquifer Solids by XRD¹

Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel

Sample ID	Clay Minerals (%)			Feldspar (%)	Quartz (%)
	Smectite	Kaolinite	Illite		
CLFMNA-3-15-20	--	7	3.9	22	67.4
CLFMNA-4-5-7.5	21	16	--	4.4	59
CLFMNA-5-10-15	16	--	--	24.9	59

Notes:

1. Estimated concentration (weight %) reported where available.

--: not detected

XRD: X-ray diffraction

Table 11
Cation Exchange Capacity of Aquifer Solids

Privileged and Confidential
Work Product and Attorney/Client Communication
Prepared at Request of Counsel

Well ID	Aluminum	Calcium	Cobalt	Magnesium	Potassium	Sodium	CEC
CLFMNA-3-15-20	0.004	11.6	0.052	1.84	0.401 J	0.130 J	14.0
CLFMNA-4-5-7.5	0.006	129	0.003	0.899	0.754	1.04	132
CLFMNA-5-10-15	0.003	51.9	0.0003	1.05	0.559	0.239	53.7

Notes:

Units are in milliequivalent per kilogram.

CEC: cation exchange capacity

J: detected but results below method reporting limit

Table 12
Lines of Evidence for Attenuation Mechanisms

Mechanism	Well Solids¹	CLFMNA-3	CLFMNA-4	CLFMNA-5
Sorption on or coprecipitation with iron sulfides	X	X		
Sorption on or coprecipitation with iron oxides	X		X	X
Sorption on or coprecipitation with manganese oxides	X		X	X
Cation exchange	X	X	X	X

Note:

1. Based on geochemical analyses performed on well solids collected from POZ-4, POZ-6, POZ-7, and POZ-8.

Table 13
Groundwater Chemistry Data Used in Reactive Transport Models

Sample Location ID		POZ-7	POZ-4	CCMLF-2
Analyte	Units	Upgradient (Influent)	Landfill	Downgradient
pe	SU	4.00	1.00	-1.33
pH	SU	6.13	6.30	5.70
Alkalinity	mg/L	20	247	562
Aluminum	mg/L	0.0	0.002	0.151
Barium	mg/L	0.100	0.077	0.494
Calcium	mg/L	7.15	282	148
Chloride	mg/L	20.0	453	283
Cobalt	mg/L	0.0005	0.147	0.001
Iron	mg/L	0.010	0.222	46.2
Magnesium	mg/L	0.800	6.18	3.84
Manganese	mg/L	0.008	2.58	0.102
Potassium	mg/L	2.00	5.65	2.54
Sodium	mg/L	7.60	73.6	8.44
Sulfate	mg/L	6.00	156	0.147
Sulfide	mg/L	0.0	1.06E-15	6.97E-07

Notes:

Equilibrated and charge-balanced groundwater chemistry is based on site data from January 2023, January and June 2024, and March 2025.

Landfill: Cross Generating Station Class 2 Landfill

mg/L: milligram per liter

pe: negative logarithm of the activity of electrons, calculated from oxidation-reduction potential

SU: standard unit

Table 14
Solid-Phase Model Input Parameters Used in Reactive Transport Models

Constituent	Units	FeS ₂ Model	FeS Model
		Initial Concentration	
X	mol/L	0.100	
≡FeOH (weak)	mol/L	0.066	
≡FeOH (strong)	mol/L	0.0017	
FeOOH	mol/L	0.227	
FeS ₂	mol/L	0.102	--
FeS	mol/L	--	0.102
FeCO ₃	mol/L	0.066	
CaCO ₃	mol/L	0.0	
CoS	mol/L	0.0	

Notes:

--: constituent not included in model

≡FeOH (strong): strong surface binding site on hydrous ferric oxide

≡FeOH (weak): weak surface binding site on hydrous ferric oxide

CaCO₃: calcite

CoS: cobalt sulfide

FeCO₃: siderite

FeOOH: goethite

FeS: mackinawite

FeS₂: pyrite

mol/L: mole per liter

X: ion exchange site

Table 15
Initial Groundwater Characterization Results

Parameter	Result		Units
	CCMLF-2	POZ-4	
Alkalinity	26.2	247	mg/L as CaCO ₃
Ammonia as N	0.020 U	0.131	mg/L
Total Organic Carbon	0.15 J	2.20	mg/L
Chloride	5.23	453	mg/L
Sulfate	0.45	156	mg/L
Aluminum, dissolved	3.3 J	2.2 J	µg/L
Antimony, dissolved	0.022 U	0.022 U	µg/L
Arsenic, dissolved	0.06 U	0.49 J	µg/L
Barium, dissolved	30.6	77.0	µg/L
Beryllium, dissolved	0.048	0.314	µg/L
Boron, dissolved	13.7	28.9	µg/L
Cadmium, dissolved	0.011 J	0.266	µg/L
Calcium, dissolved	9210	333000	µg/L
Chromium, dissolved	0.47	0.18 J	µg/L
Cobalt, dissolved	0.079	83.4	µg/L
Iron, dissolved	11	222	µg/L
Lead, dissolved	0.022	0.020 U	µg/L
Lithium, dissolved	1.78	10.1	µg/L
Magnesium, dissolved	250	6180	µg/L
Manganese, dissolved	7.84	2580	µg/L
Molybdenum, dissolved	0.030 U	0.04 J	µg/L
Nickel, dissolved	0.23	12.5	µg/L
Potassium, dissolved	790	5650	µg/L
Selenium, dissolved	0.20 U	0.20 U	µg/L
Silicon, dissolved	6370	10100	µg/L
Silver, dissolved	0.020 U	0.020 U	µg/L
Sodium, dissolved	3900	73600	µg/L
Thallium, dissolved	0.021 J	0.095	µg/L
Zinc, dissolved	2.2	10	µg/L
pH	6.17	6.52	standard unit (S.U)

Notes:

Samples were field-filtered with a 0.45-micron filter at the time of collection and filtered again prior to analysis for dissolved constituents.

Groundwater samples were collected by Anchor QEA for initial groundwater characterization prior to column testing.

1. Calculated as: (nitrogen, nitrate + nitrite) – (nitrogen, nitrite)

--: not applicable

µg/L: microgram per liter

CaCO₃: calcium carbonate

J: indicates the result is an estimated value

mV: millivolt

N: nitrogen

ORP: oxidation-reduction potential

U: indicates the compound was analyzed for but not detected

Table 16
Column Test Operating Conditions

Parameter	Column 1 (CLFMNA-4-5-7.5)	Column 2 (CLFMNA-5-10-15)	Unit
Soil depth	16	16.7	cm
Column Inside diameter	2.5	2.5	cm
Flow rate	21.4	20.5	mL per minute
Empty bed contact time	3.67	3.99	hours
Porosity	0.540	0.348	%
Dry mass of soil in column	106.19	124.47	gram
Hydraulic residence time	1.98	1.39	hours
Darcy flux	104.53	100.41	cm per day
Linear velocity	193.62	288.44	cm per day
Column test duration	14	14	days

Notes:

cm: centimeter

mL: milliliter

Table 17
Column Test Flushing Phase Results

Sample	Sampling Date and Time	Elapsed Time (days)	Flow Rate ¹ (mL/min)	Pore Volumes Flushed	Loaded Cobalt Flushed (%)	Dissolved Concentration (µg/L)			Water Quality Parameters		
						Cobalt	Iron	Manganese	pH	SC (µS/cm)	ORP (mV)
CLFMNA-4-5-7.5 effluent	4/28/2025 17:50	0.26	0.297	2.60	0.01	21.2	4.20	520	7.23	655.4	468.7
	4/29/2025 14:09	1.10	0.352	12.7	0.02	10.1	14.9	141	6.80	173.3	427.3
	4/30/2025 14:20	2.11	0.310	23.3	0.06	11.0	1.4 J	113	6.73	93.28	427.2
CLFMNA-5-10-15 effluent	4/28/2025 17:50	0.26	0.329	4.26	0.01	14.3	17.2	316	7.33	277.0	437.0
	4/29/2025 14:09	1.10	0.341	18.8	0.05	17.40	7.20	167	6.76	117.2	413.9
	4/30/2025 14:20	2.11	0.295	33.8	0.13	17.7	8.40	152	6.69	86.49	420.8
CLFMNA-5-10-15 influent	4/28/2025 17:55	0.26	--	--	--	0.084	3.70	7.50	6.17	80.63	454.4
	4/29/2025 14:12	1.10	--	--	--	0.066	4.60	6.98	6.10	291.5	480.4
	4/30/2025 14:30	2.11	--	--	--	0.063	3.10	6.89	6.21	74.92	446.8

Notes:

Associated sample analytical report: K2311985

1. Flow rate was measured in effluent samples only.

--: not applicable

µg/L: microgram per liter

µS/cm: microsiemen per centimeter

J: indicates the result is an estimated value

mL/min: milliliter per minute

mV: millivolt

ORP: oxidation reduction potential

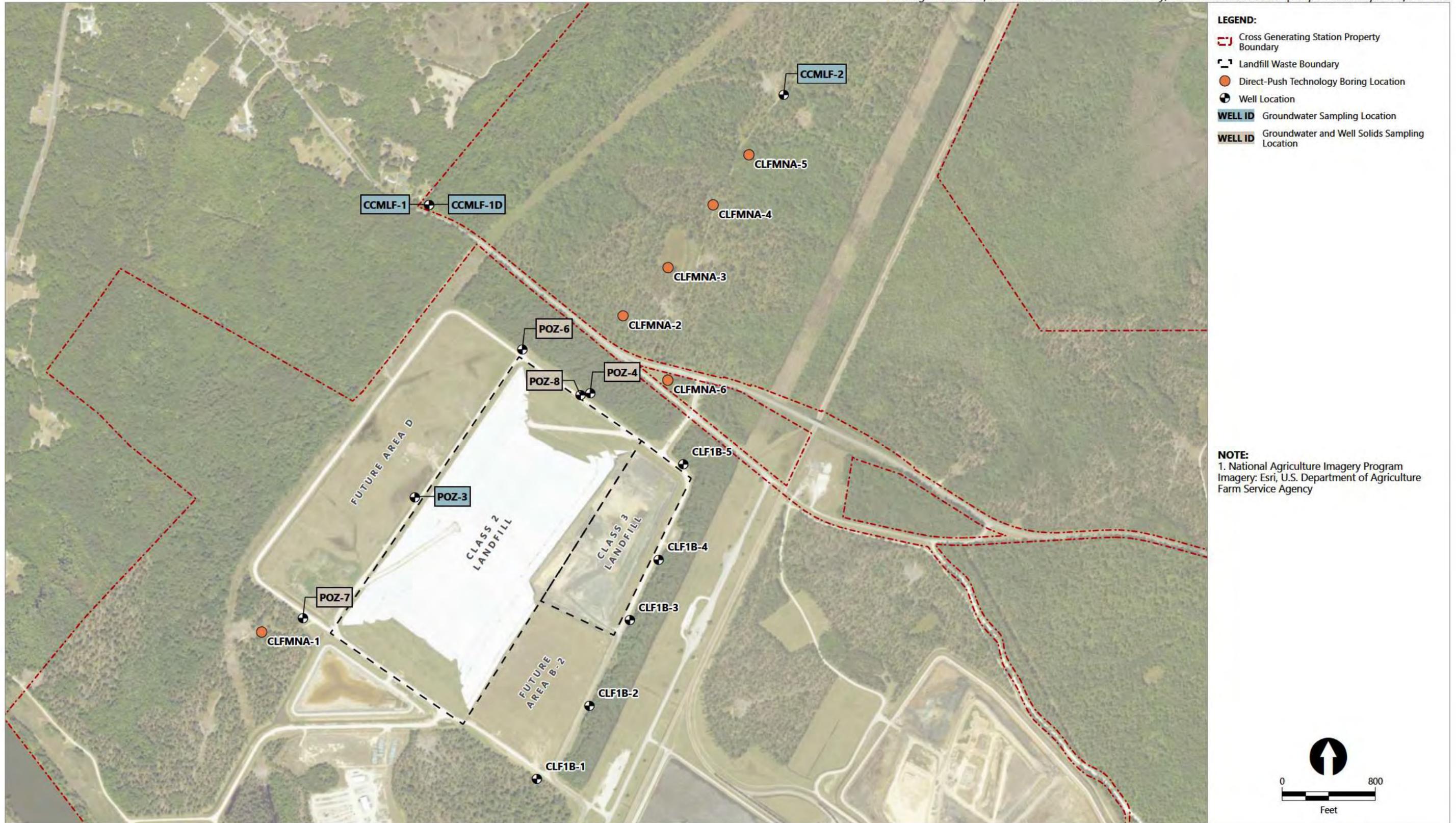
SC: specific conductivity

Table 18
Post-Column Test Soil SSE Results

Sample ID	Cobalt (mg/kg)					Aluminum (mg/kg)					Iron (mg/kg)					Manganese (mg/kg)				
	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5
CLFMNA-4-5-7.5	0.13	1.6	0.25	0.22	0.74	--	--	61	370	1,700	--	--	37	190	2,300	--	--	0.75	0.46	14
CLFMNA-5-10-15	0.17	1.9	0.77	1.5	3.3	--	--	30	410	1,600	--	--	41	200	3,200	--	--	1.8	1.7	14

Notes:
 --: not measured
 F1: soluble
 F2: exchangeable
 F3: reducible (iron/manganese oxide bound)
 F4: oxidizable (sulfide/organic/crystalline oxide bound)
 F5: residual
 mg/kg: milligram per kilogram
 SSE: selective sequential extraction

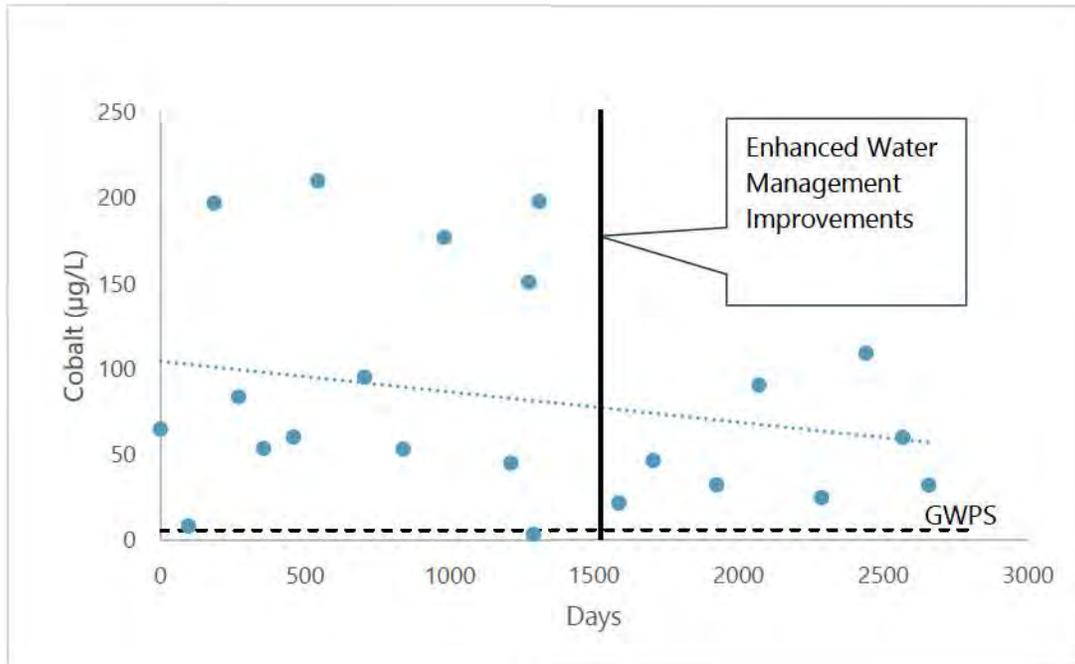
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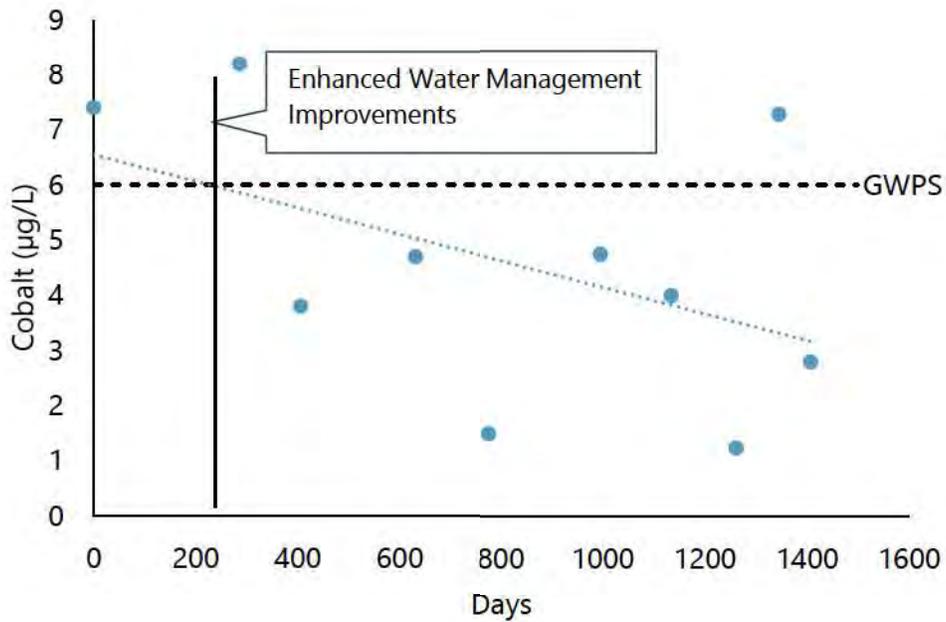
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Figure 1
Monitoring Wells and Sampling Locations
Monitored Natural Attenuation Demonstration
Cross Generating Station Class 2 Landfill



POZ-4 Cobalt



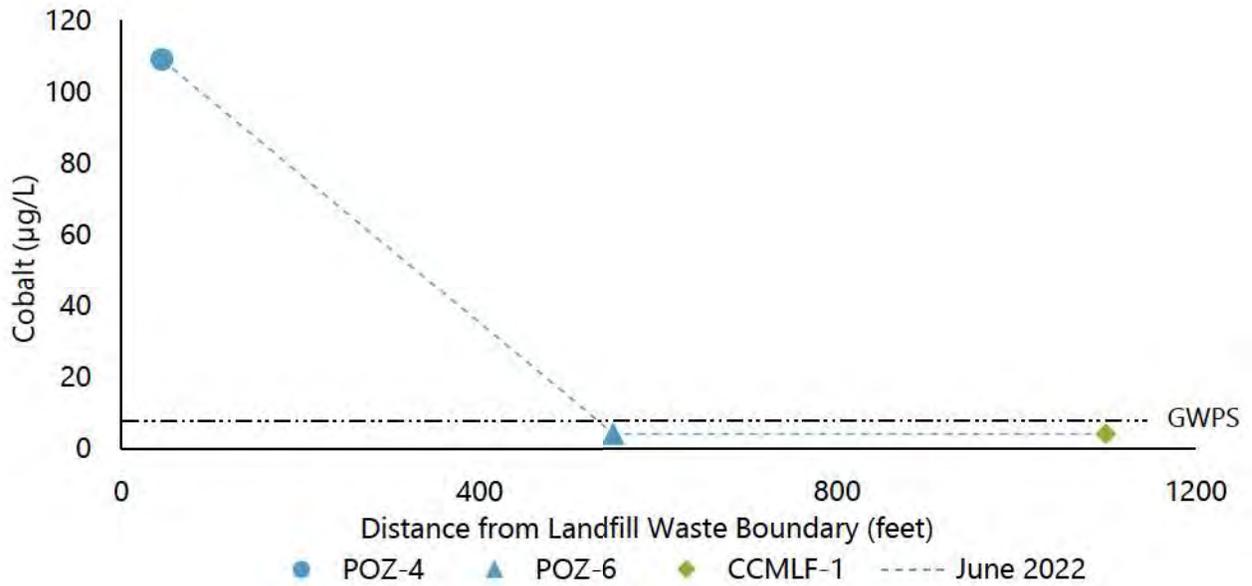
CCMLF-1 Cobalt

Notes: Time zero represents the start of groundwater sampling following issuance of the CCR Rule in 2015 (POZ-4), or construction of the well (CCMLF-1).
 µg/L: microgram per liter Values plotted represent total cobalt concentrations.
 GWPS: groundwater protection standard

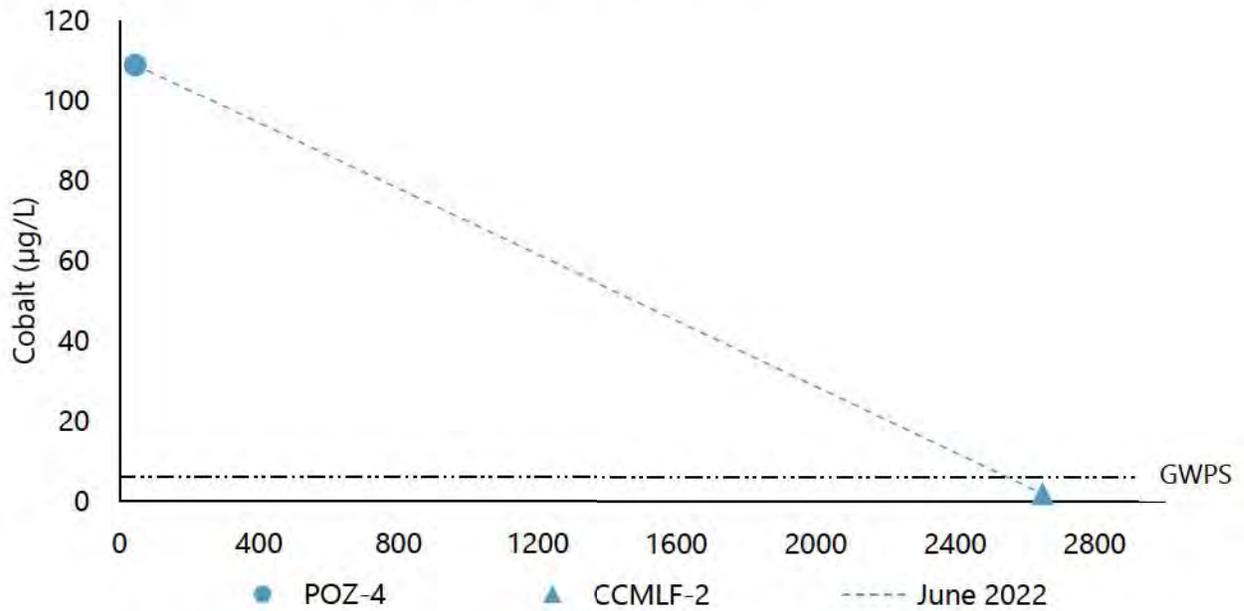
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Figure 2
Concentration Versus Time Graphs
 Monitored Natural Attenuation Demonstration
 Cross Generating Station Class 2 Landfill



POZ-4 to POZ-6 to CCMLF-1 Cobalt



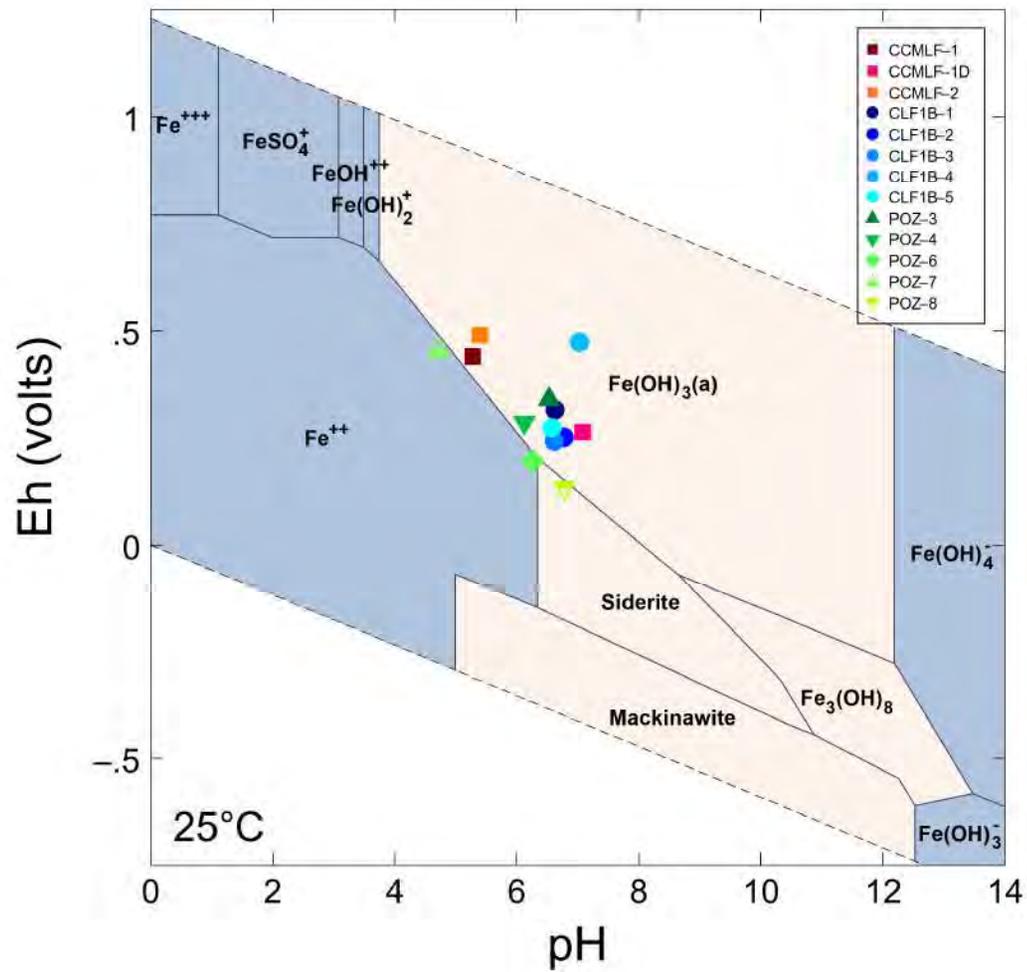
POZ-4 to CCMLF-2 Cobalt

Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard
Values plotted represent total cobalt concentrations.

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Figure 3
Concentration Versus Distance Graphs
Monitored Natural Attenuation Demonstration
Cross Generating Station Class 2 Landfill

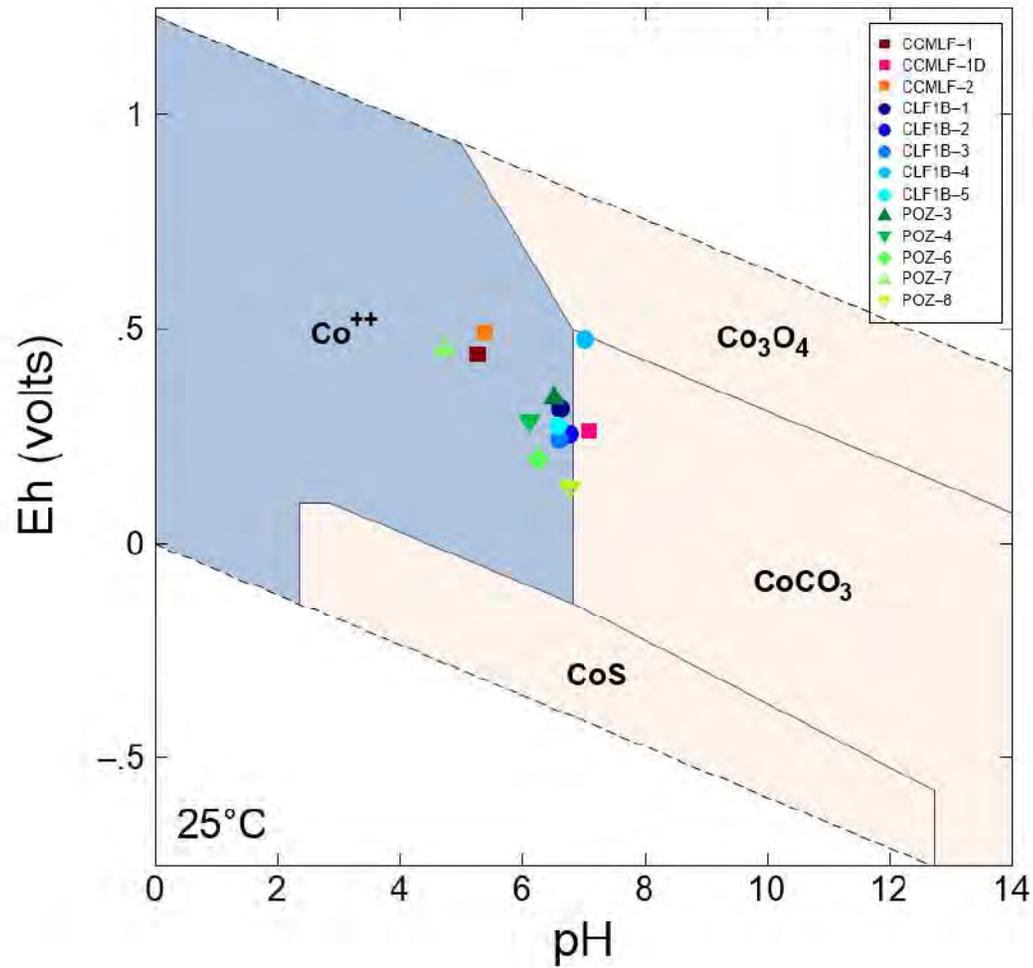


Notes:
 Blue fields indicate dissolved/mobile species.
 Tan fields indicate solid/attenuating species.

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Figure 4
Eh-pH Stability Diagram for Dissolved and Solid Iron Phases
 Monitored Natural Attenuation Demonstration
 Cross Generating Station Class 2 Landfill



Notes:
 Blue fields indicate dissolved/mobile species.
 Tan fields indicate solid/attenuating species.

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Figure 5
Eh-pH Stability Diagram for Dissolved and Solid Cobalt Phases

Monitored Natural Attenuation Demonstration
 Cross Generating Station Class 2 Landfill



Yellow solids (POZ-4)



Yellow solids (POZ-7)

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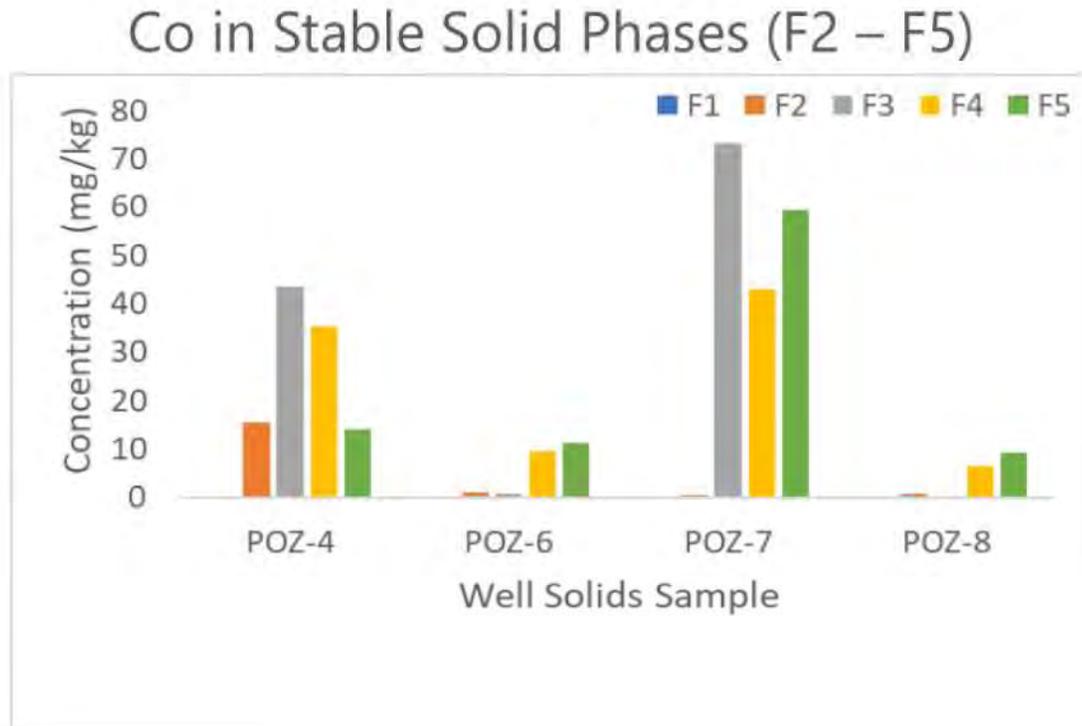
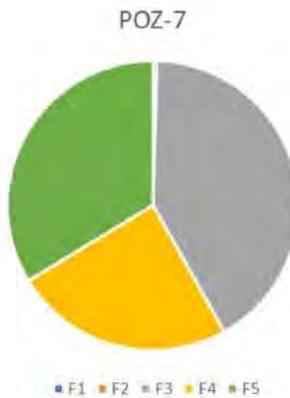


CLFMNA-4 (5–10 feet below ground surface)



CLFMNA-3 (15–20 feet below ground surface)

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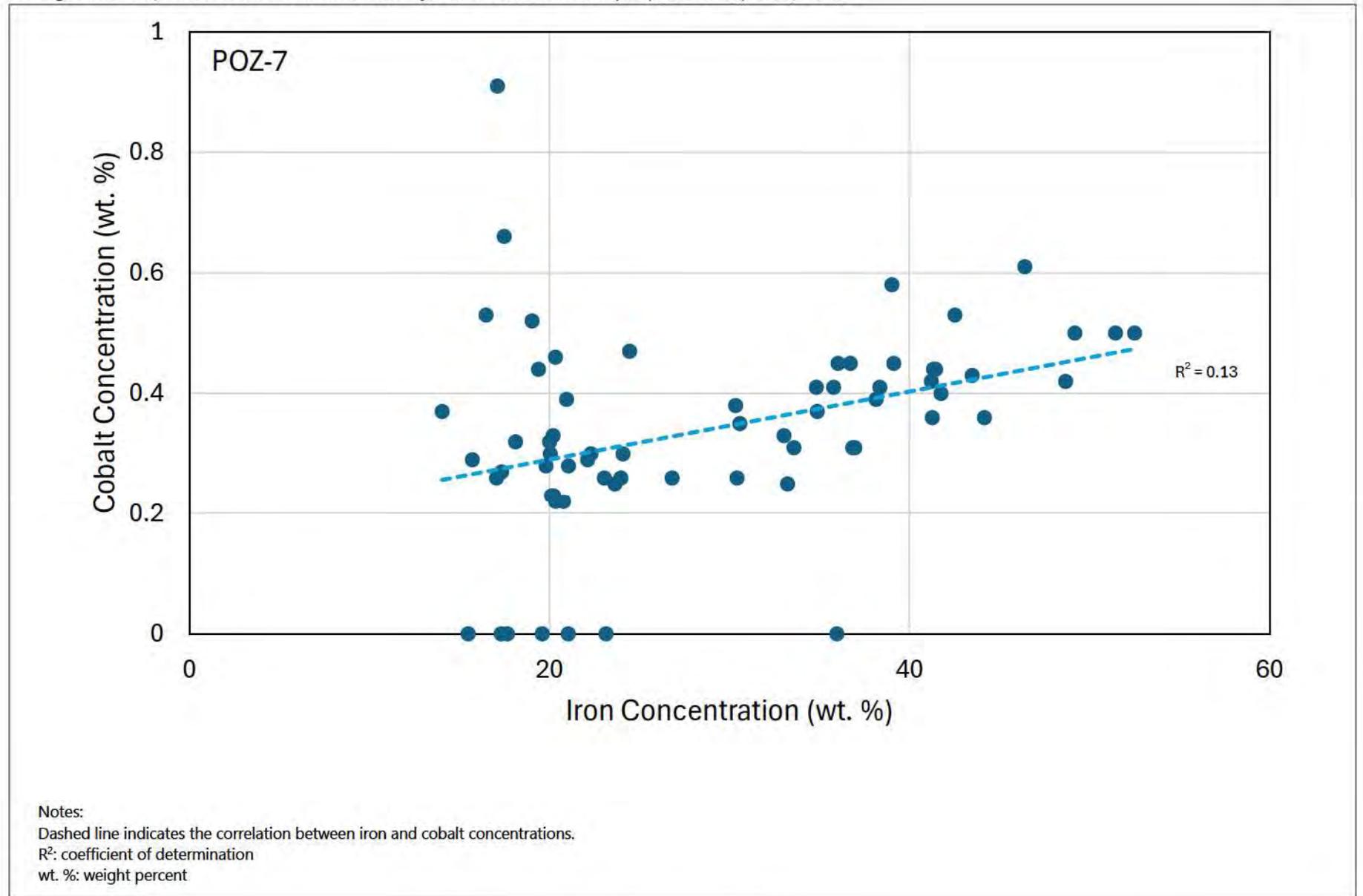
Notes:

- F1: water soluble
- F2: exchangeable (e.g., clay minerals)
- F3: reducible (e.g., poorly crystalline metal oxides such as iron oxides)
- F4: oxidizable (e.g., crystalline oxide and crystalline sulfide minerals)
- F5: residual (e.g., silicate phases)
- Co: cobalt
- mg/kg: milligram per kilogram
- SSE: selective sequential extraction

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Figure 8
SSE Results for Well Solids
 Monitored Natural Attenuation Demonstration
 Cross Generating Station Class 2 Landfill

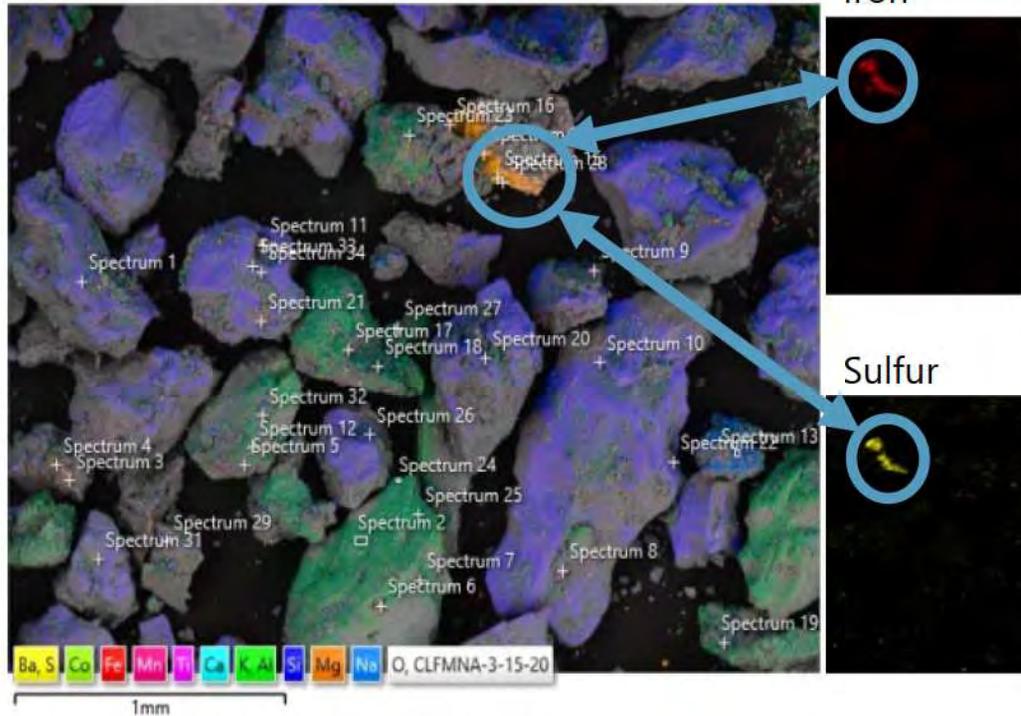


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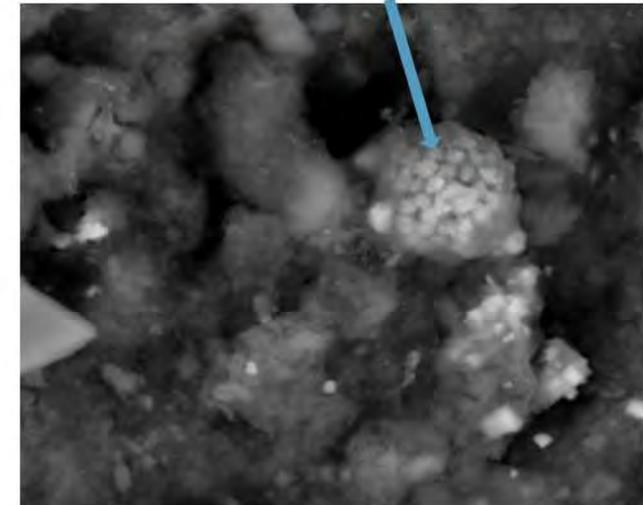


Figure 9a
Well Solids Bulk Chemistry Relationship Between Cobalt and Iron
Monitored Natural Attenuation Demonstration
Cross Generating Station Class 2 Landfill

Iron Sulfides Detected in EDX (CLFMNA-3-15-20)

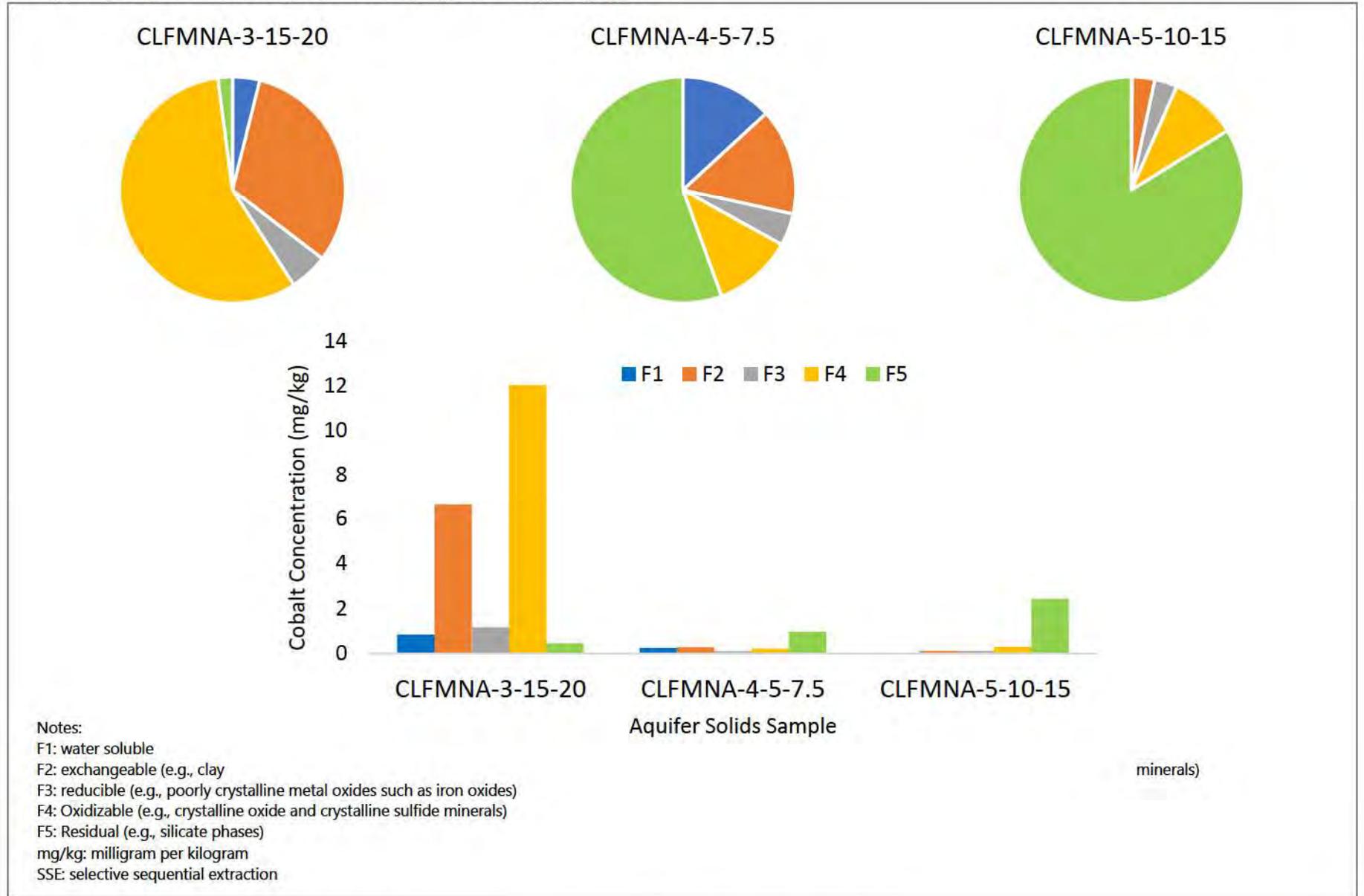


Framboidal pyrite (FeS₂) in SEM Image (CLFMNA-3-15-20)



Notes:
EDX: energy dispersive X-ray spectroscopy
mm: millimeter
SEM: scanning electron microscopy

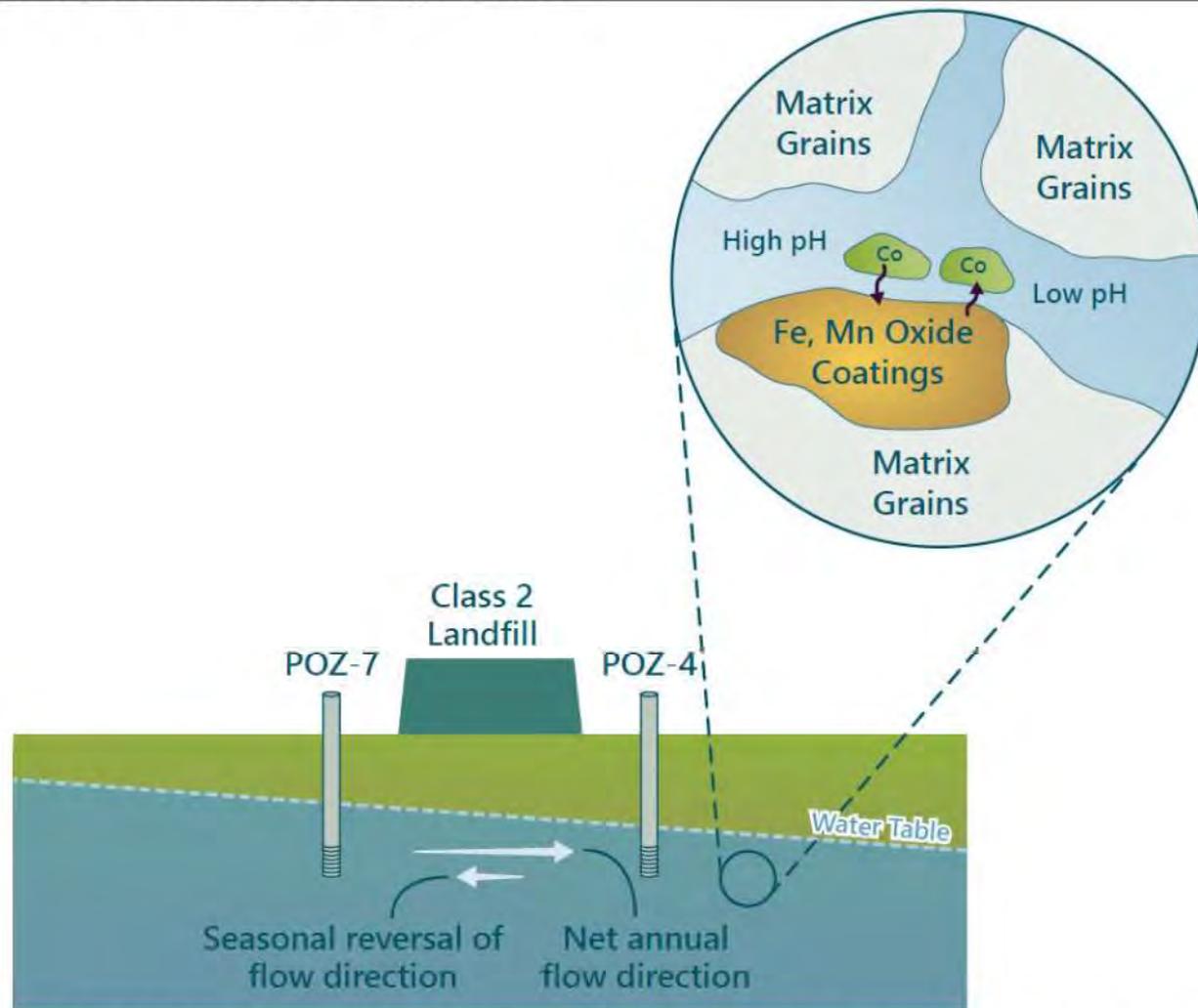
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Figure 12
SSE Results for Aquifer Solids
 Monitored Natural Attenuation Demonstration
 Cross Generating Station Class 2 Landfill



Note:

This figure was modified from Li, L., 2021. "0.1 History of Reactive Transport Modeling." *PNG 550: Reactive Transport in the Subsurface*. University Park, Pennsylvania: The Pennsylvania State University.

Fe: iron

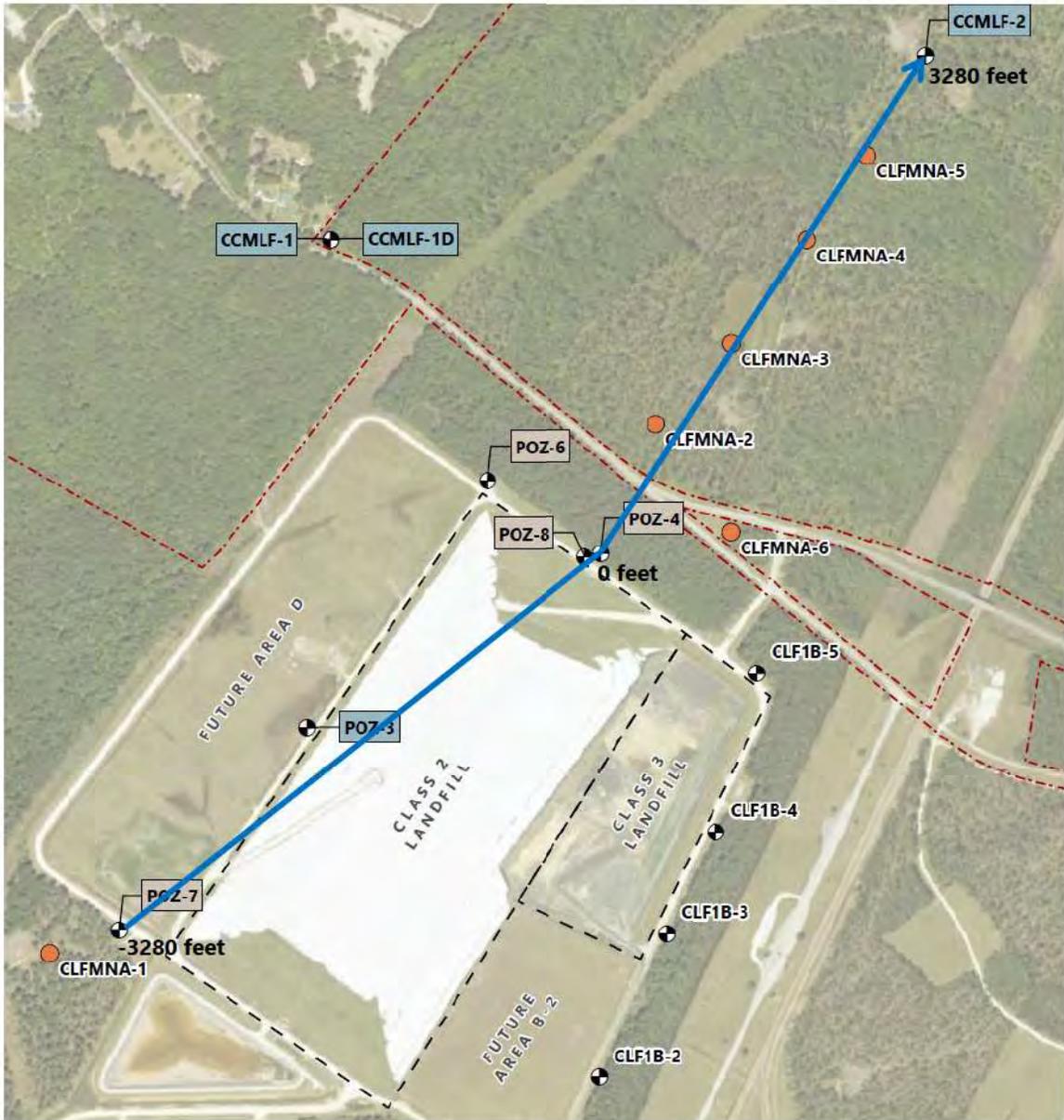
Co: cobalt

Mn: manganese

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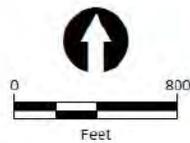
Figure 13
Cobalt Attenuation Schematic
Monitored Natural Attenuation Demonstration
Cross Generating Station Class 2 Landfill



LEGEND:

-  Cross Generating Station Property Boundary
-  Landfill Waste Boundary
-  Direct-Push Technology Boring Location
-  Well Location
- WELL ID**  Groundwater Sampling Location
- WELL ID**  Groundwater and Well Solids Sampling Location

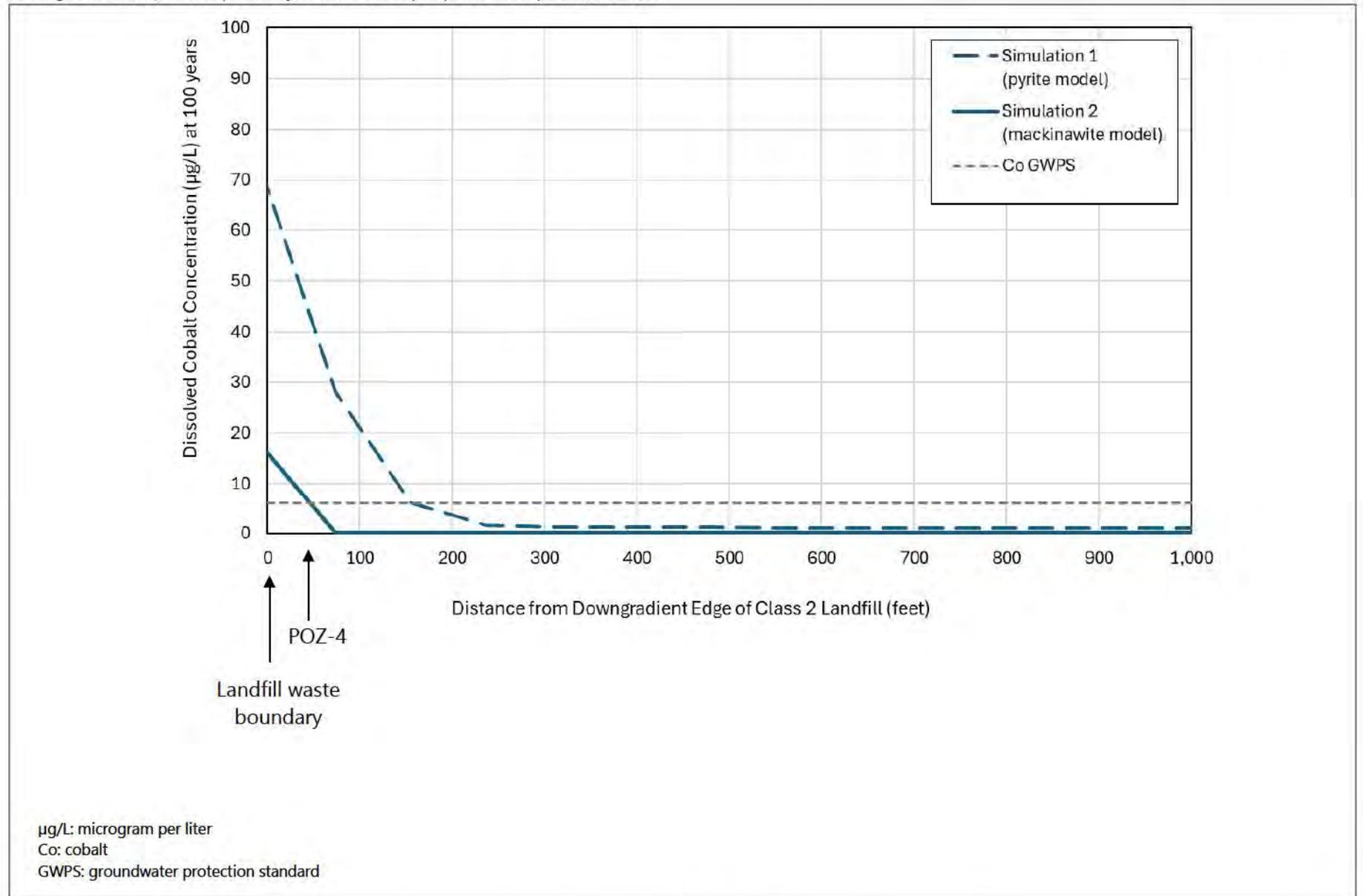
 Model Transect



Filepath: [https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee Cooper/Reports/Figures/Figure 14a - Reactive Transport Model Transect1.docx](https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee%20Cooper/Reports/Figures/Figure%2014a%20-%20Reactive%20Transport%20Model%20Transect1.docx)



Figure 14a
Reactive Transport Model Transect
 Monitored Natural Attenuation Demonstration
 Cross Generating Station Class 2 Landfill



Filepath: [https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee Cooper/Reports/Figures/Figure 14b - Simulated Cobalt Concentration vs Distance1.docx](https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee%20Cooper/Reports/Figures/Figure%2014b%20-%20Simulated%20Cobalt%20Concentration%20vs%20Distance1.docx)



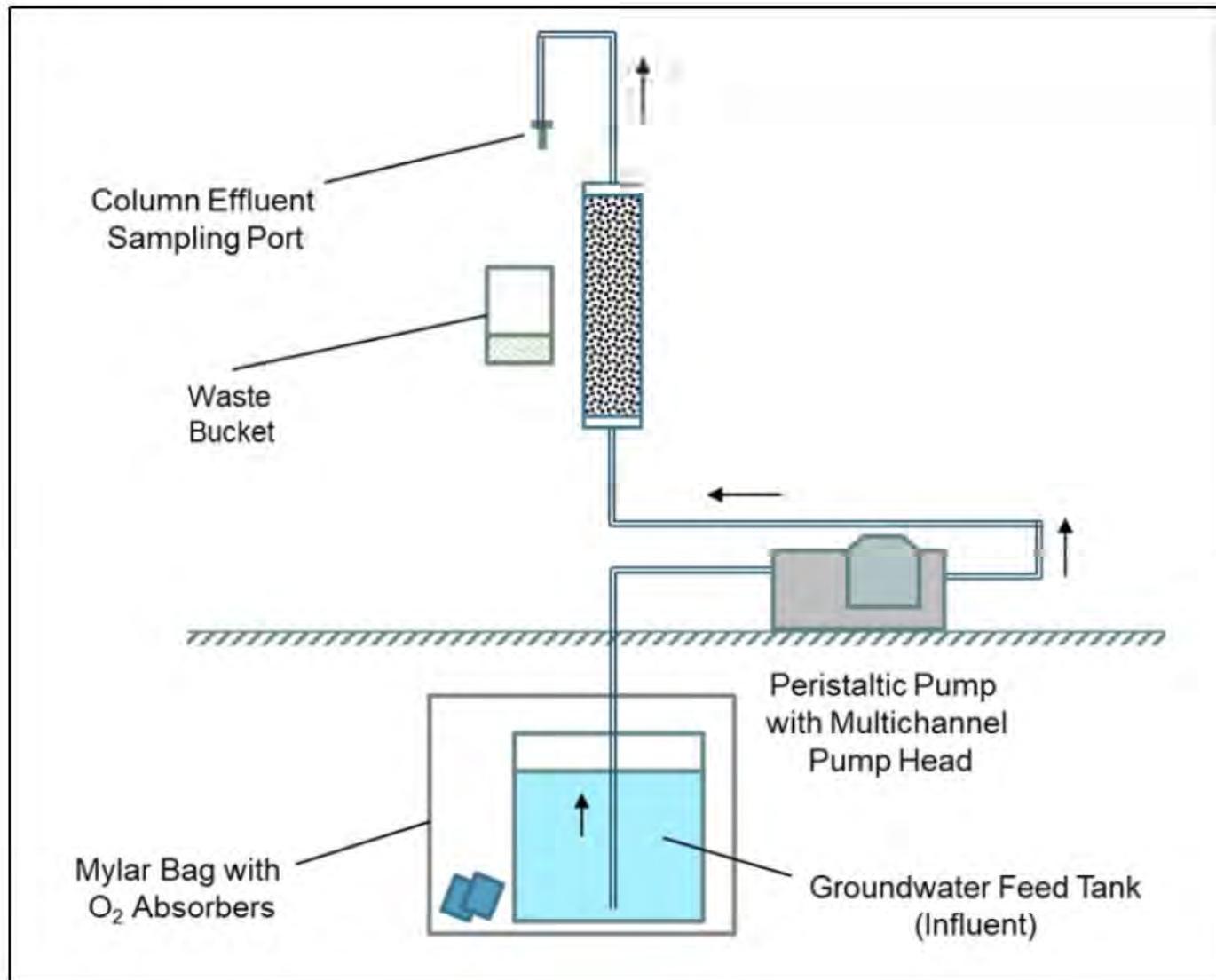
Figure 14b
Simulated Cobalt Concentration Versus Distance
Monitored Natural Attenuation Demonstration
Cross Generating Station Class 2 Landfill



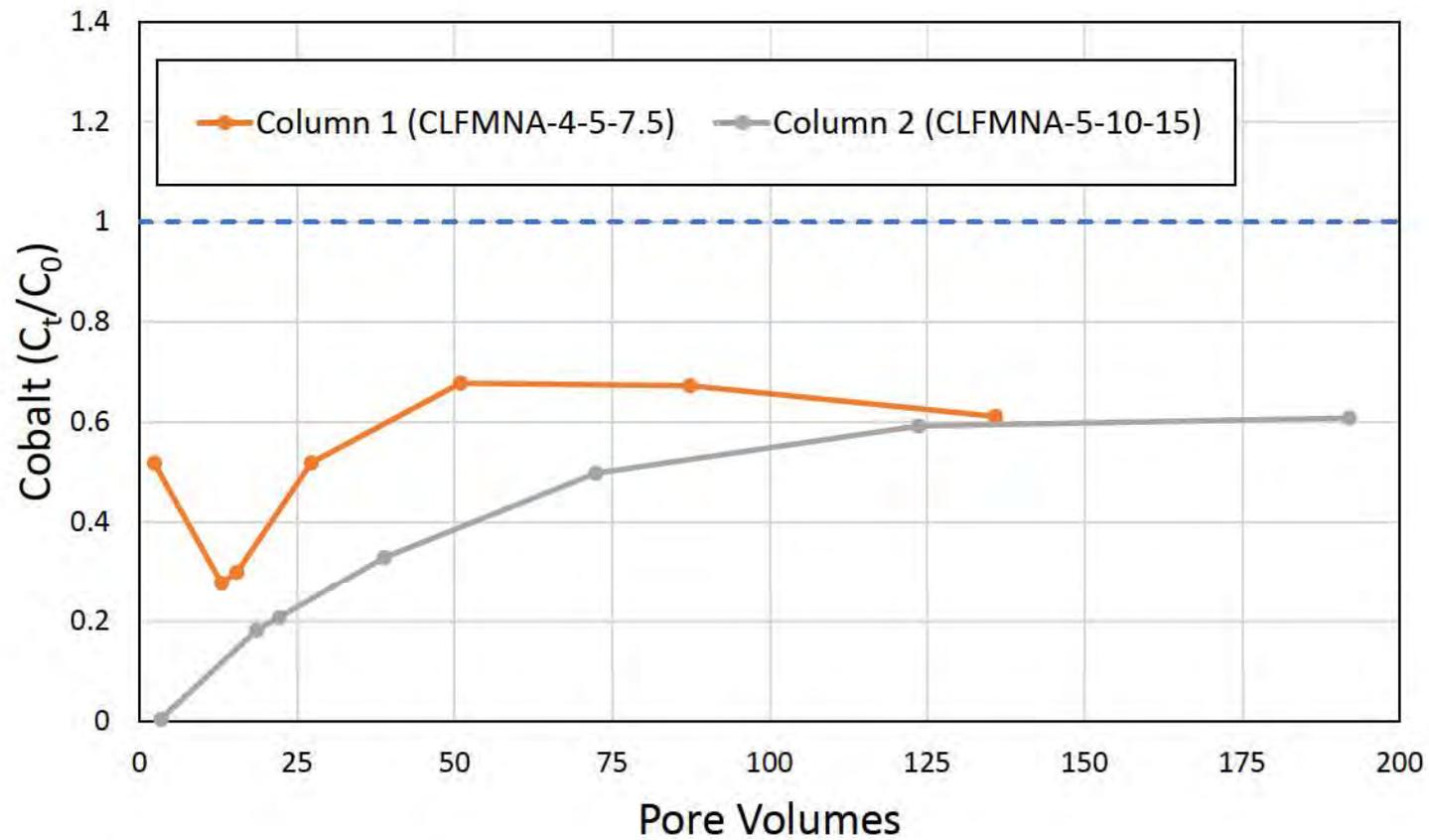
Filepath: [https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee Cooper/Reports/figures/figure 15 - Column Test Equipment Setup1.docx](https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee%20Cooper/Reports/figures/figure%2015%20-%20Column%20Test%20Equipment%20Setup1.docx)



Figure 15
Typical Column Test Equipment Setup
Monitored Natural Attenuation Demonstration
Cross Generating Station Class 2 Landfill



Filepath: [https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee Cooper/Reports/Figures/Figure 16 - Schematic of Column Test1.docx](https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee%20Cooper/Reports/Figures/Figure%2016%20-%20Schematic%20of%20Column%20Test1.docx)



Notes:

Blue dashed line indicates effluent concentrations equal influent concentrations (i.e., capacity for attenuation has been consumed).

C_i : influent concentration

C_e : effluent concentration

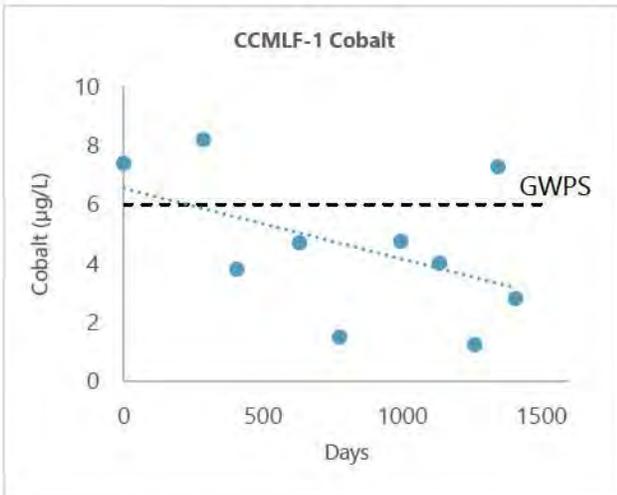
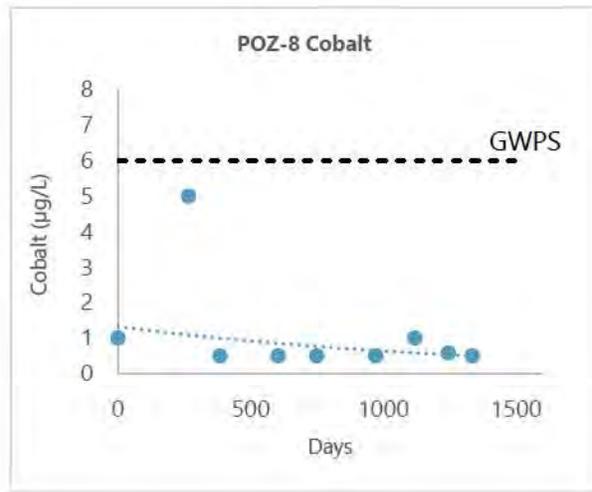
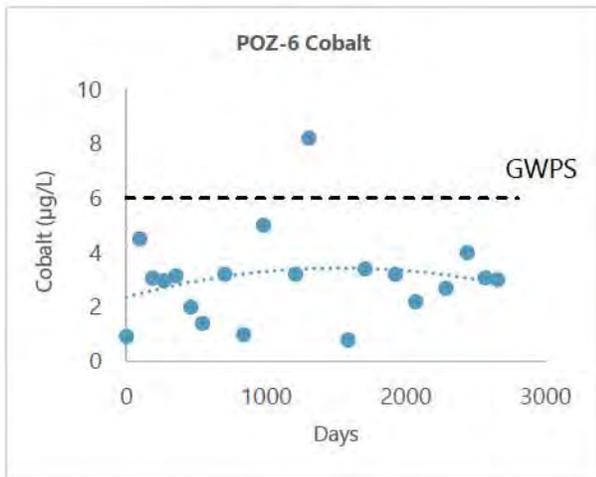
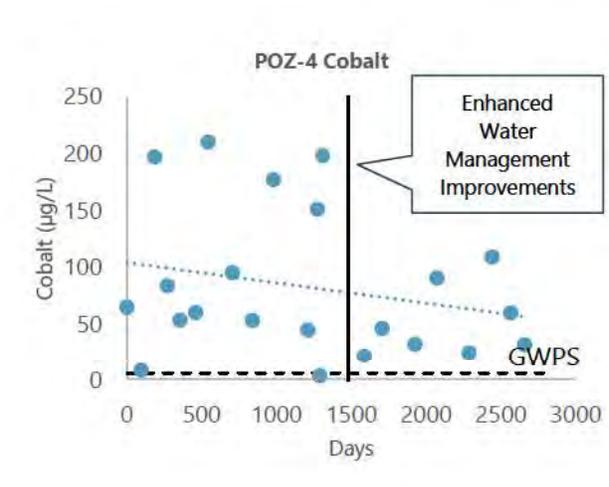
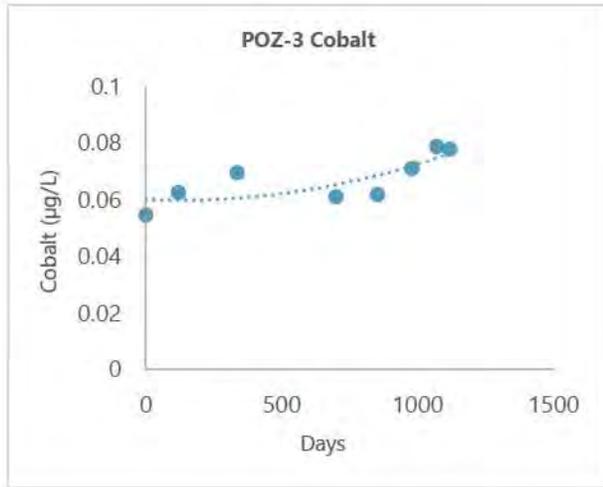
Filepath: \\WCL-FS1\Mobile\Projects\Santee Cooper\2023\Reports\Cross Class 2 LF MNA Report\Figures\Figure 16 - Column Test Results.docx



Figure 17
Column Test Results
Monitored Natural Attenuation Demonstration
Santee Cooper – Cross Generating Class 2 Landfill

Appendix A

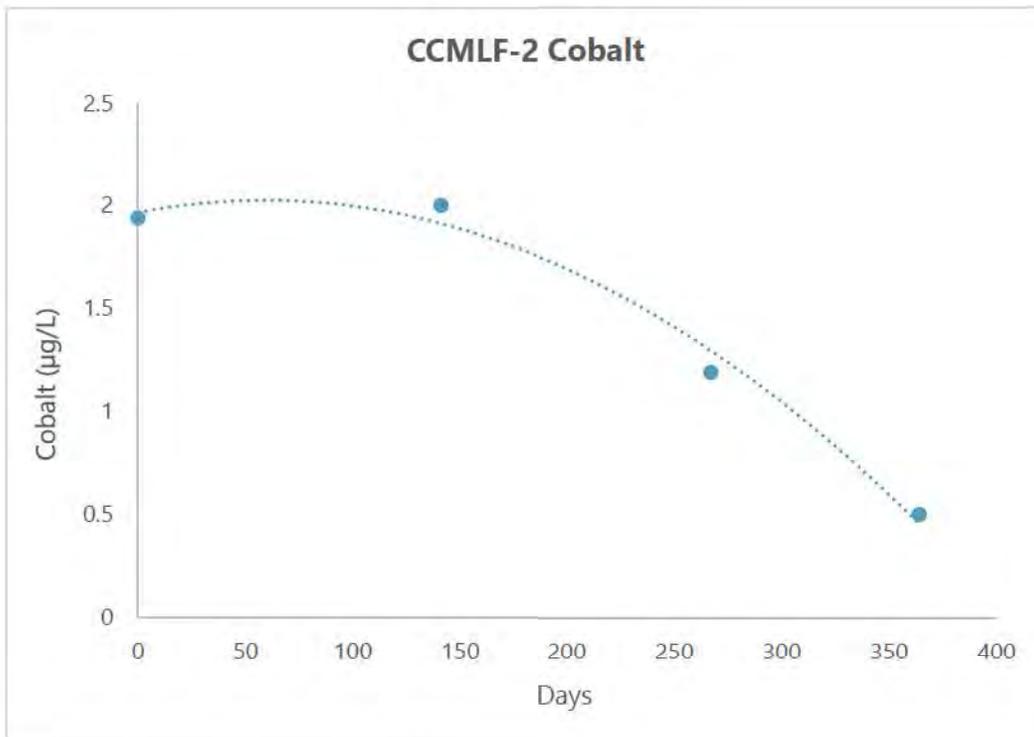
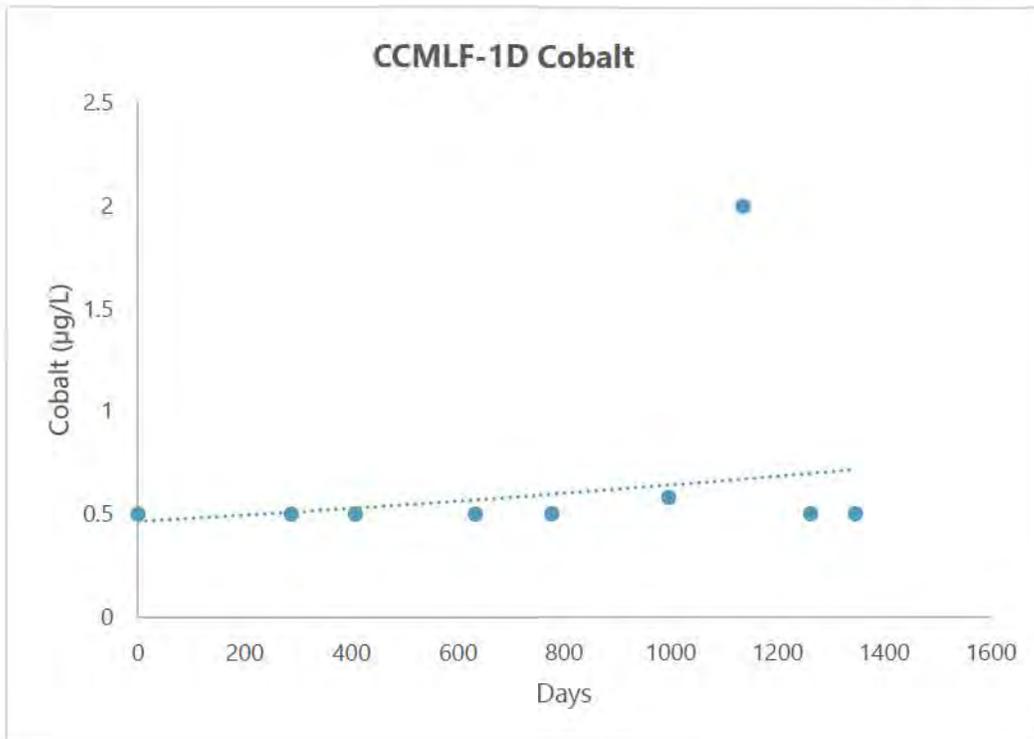
Concentration Versus Time Graphs



Notes:
 µg/L: microgram per liter
 GWPS: groundwater protection standard

Filepath: [https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee Cooper/Reports/Appendices/Appendix A - Concentration Versus Time Graphs/Appendix A - Other Concentration vs Time Graphs.docx](https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee%20Cooper/Reports/Appendices/Appendix%20A%20-%20Concentration%20Versus%20Time%20Graphs/Appendix%20A%20-%20Other%20Concentration%20vs%20Time%20Graphs.docx)





Notes:
µg/L: microgram per liter
GWPS: groundwater protection standard

Filepath: [https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee Cooper/Reports/Appendices/Appendix A - Concentration Versus Time Graphs/Appendix A - Other Concentration vs Time Graphs.docx](https://anchorqea-my.sharepoint.com/personal/jsmith_anchorqea_com/Documents/Santee%20Cooper/Reports/Appendices/Appendix%20A%20-%20Concentration%20Versus%20Time%20Graphs/Appendix%20A%20-%20Other%20Concentration%20vs%20Time%20Graphs.docx)



Appendix B

Sampling Logs

Low-Flow Sampling Log

Well ID: POZ-4

Project Name: Santee Cooper Date: 3/20/2025
 Project Number: 232922-01.01 Weather: Mostly clear, 60-70°F, windy
 Project Location: Pineville, SC Facility ID or Permit # (if applicable):
 Sample Collector(s): C. Patterson Sample ID (on COC): POZ-4
 Well Diameter: 2 in Arrive at Well: 0840
 Screen Interval: 9.5 - 14.5 ft bgs Start Time: 0945
 Well Depth (as constructed): 15 ft bgs Sample Time: 1030
 Depth to Water: 5.58 ft b-TOC Leave Well: 1218
 Measuring Point: TOC Well Type: Stick Up Flush Mount
 Depth of Pump Intake: 12 ft bgs (14.7' b-TOC) Tagged Bottom: n/a ft at (time): n/a
 Pump Used (circle): Peristaltic Bladder Other (describe): Purge Rate: 500 mL/min
 Comments: Stickup is 2.7' ags. Initial filtrate: 410 mL @ 76.4 Hz. Total Volume Purged: 47,100 mL (~61,000 mL)
 Pump Speed: 76.4 Hz

Time	DTW (feet)	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µmhos/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Flow Rate (mL/min)
0948	6.36	13.4	20.78	1417	6.8	-118.4	15.4	410
0951	6.67	13.6	13.44	1420	6.7	-127.9	12.3	420
0954	6.79	13.7	10.74	1443	6.6	-135.5	9.56	425
0957	6.86	13.9	9.72	1480	6.6	-153.0	6.83	425
1000	6.91	14.0	9.02	1534	6.5	-163.9	3.84	430
1003	6.93	13.9	8.74	1549	6.5	-167.5	4.63	450
1006	6.95	14.0	8.85	1606	6.5	-173.4	3.13	480
1009	6.98	14.1	8.71	1637	6.5	-185.7	1.49	500
1012	7.00	14.1	8.47	1700	6.4	-190.3	1.25	500
1015	7.00	14.2	8.11	1731	6.4	-187.7	0.94	500
1018	7.00	14.2	7.79	1748	6.4	-185.8	1.29	500
1021	7.00	14.2	7.45	1807	6.4	-186.5	1.04	500
1024	7.01	14.3	7.21	1807	6.3	-188.8	1.51	500
1027	7.01	14.4	7.00	1819	6.3	-189.8	0.55	500
1030	7.01	14.4	6.95	1829	6.3	-188.9	0.72	500

Sample Analyst Signature: C. Patterson Sample Analyst Name: Christian Patterson Date: 3/20/2025

- Notes:**
 1. Stabilization (3 successive readings, 3 minutes apart): within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP from EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures, April 1996 (Rev 2017)
 2. Documentation errors are to be crossed out with a single line, so the original text is still legible, followed by the staff member's initials and date
 3. Samples are analyzed immediately upon collection.
 4. NC Field Laboratory Certificate Number 5445
 5. 1 µmho/cm = 1 µS/cm

Abbreviations:
 °C: degrees Celsius
 µmhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 mV: millivolt
 NTU: nephelometric turbidity units
 S.U.: standard units
 ft: feet
 in: inches
 bgs: below ground surface
 TOC: top of casing

Method Reference:
 Temperature: SM 2550 B-2010
 Specific conductivity: EPA Method 120.1, Rev. 1982
 DO: SM 4500 O G-2016
 pH: SM 4500-H⁺ B-2011
 Turbidity: SM 2130 B-2011

cat
3/20/25

Low-Flow Sampling Log

Well ID: CCMLF-2

Project Name: Santee Cooper Date: 3/20/2025
 Project Number: 232922-01.01 Weather: 70°F, Cloudy
 Project Location: Pinville, SC Facility ID or Permit # (if applicable):
 Sample Collector(s): C. Patterson Sample ID (on COC): CCMLF-2
 Well Diameter: 2 in Arrive at Well: 1246
 Screen Interval: 9.5-19.5 ft bgs Start Time: 1259
 Well Depth (as constructed): ft bgs Sample Time: 1320
 Depth to Water: 7.84 ft - 190C Leave Well: 1417
 Measuring Point: TOC Well Type: Stick Up Flush Mount
 Depth of Pump Intake: 14.5 ft (7.2' bgs) Tagged Bottom: n/a ft at (time): n/a
 Pump Used (circle): Peristaltic Bladder Other (describe): Purge Rate: 500 mL/min
 Comments: Stickup 2.7' ags. Initial flow rate = 450 mL/min @ 778A Total Volume Purged: ~29,000 mL
 Pump Speed: 77.8 Hz

Time	DTW (feet)	Temperature (°C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µmhos/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Flow Rate (mL/min)
1302	7.89	14.5	3.64	95.9	5.7	-201.5	3.04	450
1305	7.90	14.4	3.36	57.2	5.6	-210.2	2.62	500
1308	7.90	14.4	3.43	56.4	5.6	-213.0	1.20	500
1311	7.89	14.5	3.30	58.2	5.6	-214.1	2.18	500
1314	7.90	14.5	3.32	58.2	5.6	-216.0	2.42	500
1317	7.90	14.5	3.21	58.8	5.7	-218.0	1.24	500
1320	7.90	14.5	3.18	58.8	5.7	-218.6	1.25	500

Sample Analyst Signature: C. Patterson Sample Analyst Name: Christian Patterson Date: 3/20/2025

- Notes:**
 1: Stabilization (3 successive readings, 3 minutes apart); within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP from EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures, April 1996 (Rev 2017)
 2: Documentation errors are to be crossed out with a single line, so the original text is still legible, followed by the staff member's initials and date
 3: Samples are analyzed immediately upon collection.
 4: NC Field Laboratory Certificate Number 5445
 5: 1 µmho/cm = 1 µS/cm

Abbreviations:
 °C: degrees Celsius
 µmhos/cm: micromhos per centimeter
 mg/L: milligrams per liter
 mV: millivolt
 NTU: nephelometric turbidity units
 S.U.: standard units
 ft: feet
 in: inches
 bgs: below ground surface
 TOC: top of casing

Method Reference:
 Temperature: SM 2550 B-2010
 Specific conductivity: EPA Method 120.1, Rev. 1982
 DO: SM 4500 O G-2016
 pH: SM 4500-H' B-2011
 Turbidity: SM 2130 B-2011

Equipment Documentation and Instrument Calibration Data Sheet

Project Name: <u>Savree Cooper</u>	Analyst Conducting Calibration: <u>C. Patterson</u>
Project Number: <u>232922-01.01</u>	Date of Calibration: <u>3/20/2025</u>
Project Location: <u>Pineville, SC</u>	Date of Field Measurements: <u>3/20/2025</u>
Facility ID or Permit # (if applicable): _____	

EQUIPMENT DOCUMENTATION

Rental sample analysis equipment or meters used to take measurements:

Equipment Type	Brand	Serial Number	Date of Use	Rental Company

Select Turbidimeter: Hach 2100Q (s/n 151006045207)
 Rental Hach 2100Q (s/n _____)

Instrument Readings (Hach 2100Q)				
Cal Std Information	10 NTU	20 NTU	100 NTU	800 NTU
Lot #:	<u>A9247</u>	<u>A4257</u>	<u>A4248</u>	<u>A4257</u>
Expiration Date:	<u>12/25</u>	<u>12/25</u>	<u>12/25</u>	<u>12/25</u>
	Cal (NTU):	<u>19.6</u>	Cal (NTU): <u>112</u>	Cal (NTU): <u>803</u>
	Time:	<u>0921</u>	Time: <u>0922</u>	Time: <u>0924</u>
Calibration Verification:	*Pre-Analysis Check (10 NTU):	Result (NTU): <u>10.0</u>	Time: <u>0925</u>	
	*Post-Analysis Check (10 NTU):	Result (NTU): <u>9.86</u>	Time: <u>1401</u>	

* Hach Pocket Pro + pH meter used (S/N 1426)
 Pre-Analysis check: 6.98 s.u. @ 0922
 Post-Analysis check: 7.01 s.u. @ 1400

YSI Professional Plus Multiparameter Meter (s/n 188101802)							Cal Std Information		
Instrument Readings							Lot #	Date Opened	Exp. Date
Dissolved Oxygen (% saturation)	Initial (%): <u>142.0</u>	Cal (%): <u>100.0</u>	mmHg: <u>760</u>	Temperature (°C): <u>14.2</u>	Time: <u>0918</u>	<u>Membrane Replaced</u>			
DO (Site #2, if applicable)*	Initial (%): _____	Cal (%): _____	mmHg: _____	Temperature (°C): _____	Time: _____				
QC** Check: DO	Time: <u>1408</u>	Result (%): <u>103.2</u>	Time: _____	Result (%): _____	Time: _____	Result (%): _____			
pH 7 S.U. report to 0.1 S.U.	Initial:	pHmV:	Cal (S.U.):	pHmV:	Time:		<u>3GE 0720</u>	<u>3/14/24</u>	<u>05/25</u>
pH 4 S.U. report to 0.1 S.U.	Initial:	pHmV:	Cal (S.U.):	pHmV:	Time:		<u>3GE 0572</u>	<u>1/31/24</u>	<u>05/25</u>
pH 10 S.U. report to 0.1 S.U.	Initial:	pHmV:	Cal (S.U.):	pHmV:	Time:		<u>3GC006</u>	<u>5/15/24</u>	<u>03/25</u>
QC** pH 7 S.U. report to 0.1 S.U.	Time:	Result (S.U.):	Time:	Result (S.U.):	Time:	Result (S.U.):	<u>3GE 0720</u>	<u>3/14/24</u>	<u>05/25</u>
Spec. Cond. 1,000 µmhos/cm % Recovery=	Initial:	Cal (µmhos/cm):	Time:				<u>4GH 1109</u>	<u>3/20/25</u>	<u>03/25</u>
QC** Spec. Cond. 1,000 µmhos/cm % Recovery=	Time:	Result (µmhos/cm):	Time:	Result (µmhos/cm):	Time:	Result (µmhos/cm):	<u>4GE 1109</u>	<u>3/20/25</u>	<u>03/25</u>
ORP 200 mV	Initial: <u>211.9</u>	Cal: <u>200.0</u>	Temperature (°C): <u>13.7</u>	Time: <u>0913</u>			<u>4GF0639</u>	<u>3/20/25</u>	<u>03/25</u>

Analyst Signature: C. Patterson Analyst Name: Christian Patterson Date: 3/20/2025

- Notes:**
- Revision 9, 8/27/2024, CAP
 - Instruments shall be calibrated in accordance with the manufacturer's operation manual.
 - Specific Conductivity should be calibrated according to values representative of historic range.
 - Order of Calibration is as follows : Specific Conductivity, pH 7, pH 4, pH 10, DO, ORP, QC checks.
 - *When performing DO analyses at multiple sample sites (i.e. project/facility locations), the DO probe must be calibrated at each sample site prior to analysis.
 - QC Acceptable Ranges: pH +/- 0.1 S.U. and Specific Conductivity 10% of the true value. If QC readings are out of range, the instrument needs to be recalibrated.
 - ** QC check must be performed prior to sampling and following completion of sampling, at a minimum. QC checks must be performed with calibration standard from a separate lot # as the initial QC.
 - % Recovery = (Value Obtained, µmhos/cm ÷ True Value, µmhos/cm) x 100
 - NC Field Laboratory Certificate Number 5445
 - Documentation errors are to be crossed out with a single line, so the original text is still legible, followed by the staff members initials and date
 - Unless otherwise noted, all DO calibrations and measurements are performed at 0 ppt Salinity.
 - 1 µmho/cm = 1 µS/cm

Abbreviations:
 µmhos/cm: micromhos per centimeter
 °C: degrees Celsius
 DO: dissolved oxygen
 mg/L: milligrams per liter
 mV: millivolt
 NTU: nephelometric turbidity units
 ORP: oxidation reduction potential
 s/n: serial number
 S.U.: standard units
 Spec. Cond.: Specific Conductivity

Method Reference:
 Temperature: SM 2550 B-2010
 Specific conductivity: EPA Method 120.1, Rev. 1982
 DO: SM 4500 O G-2021
 pH: SM 4500-H⁺ B-2021
 Turbidity: SM 2130 B-2020

Daily Safety Briefing Form



Date: 6/1/2023
 Project No: 232922-01.01
 Project Name: Santee Cooper Well Solids Sampling

Submit a
 Playing It
 Safe Event

Person Conducting Meeting: C. Patterson Health & Safety Officer: T. Shaner Project Manager: J. Smith

TOPICS COVERED: *Highlighted topics are required*

- Emergency Procedures and Evacuation Route
- Directions to Hospital
- HASP Review and Location
- Safety Equipment Location
- Proper Safety Equipment Use
- Employee Right-to-Know/ SDS Location
- Fire Extinguisher Location
- Eye Wash Station Location
- Buddy System
- Self and Coworker Monitoring
- Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- Lines of Authority
- Communication
- Site Security - Check in 0730
- Vessel Safety Protocols
- Work Zones
- Vehicle Safety and Driving/ Road Conditions
- Equipment Safety and Operation
- Proper Use of PPE
- Decontamination Procedures
- Near Miss Reporting Procedures
- Lifting Techniques
- Slips, Trips, and Falls
- Hazard Exposure Routes
- Heat and Cold Stress
- Overhead and Underfoot Hazards
- Chemical Hazards
- Flammable Hazards
- Biological Hazards
- Eating/Drinking/Smoking
- Reviewed Prior Lessons Learned

Other: _____

Weather Conditions: 70-80°F, Partly Cloudy, Humid

Daily Work Scope: Sample well solids from 5 wells

Site-specific Hazards: Ammonia tanks, STF, biological, vehicles, GW handling

Safety Comments: Note evacuation, keep mind task, hydrate often, stop work authority, change gloves often, check for ticks

Attendees	
Printed Name	Signature
C. Patterson	<i>[Signature]</i>
Justin Kirk	<i>[Signature]</i>
End of Day Wellness Check	
C. Patterson	<i>[Signature]</i>
J. Kirk	<i>[Signature]</i>
	<i>[Authorized]</i>



Anchor QEA of North Carolina, PLLC

Boring Name

CLFMNA-1

Revised 09/2020

BORING LOG SHEET

Project Name Sartce Cooper
 Project No. 232922-01-01
 Geologist Christian Patterson, PE
 Driller SAEDACCO, Brian
 Rig Type Geoprobe 7822DT

Weather 60°F, Sunny
 Method Used DPT
 Date Begun 10/17/2024

Sheet 1 of 2
 Borehole Diam. 1-in.
 Total Depth 25 ft
 Groundwater
 Date Completed 10/17/2024

Location Diagram

Samples:
 Task 6: 5'-7.5'
 Task 7: 7.5'-10'
 Archive: 10'-13'

Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT				
RQD: Include only core sections 4" or greater		Fines	N	Consistency	N	Consistency
USCS (Condensed)			0-2	v. soft	2-4	soft
GW/GP	well-graded/poorly-graded gravels		5-8	firm	9-15	stiff
GM/GC	silty/clayey gravels (gravel/sand/fines mix)	16-30	v. stiff	> 30	hard	
SW/SP	well-graded/poorly-graded sands	Sand and Gravel	N	Relative Density	N	Relative Density
SM/SC	silty/clayey sands (sand/fines mix)		0-4	v. loose	5-10	loose
ML	silty fine sands, clayey silts		11-30	medium	31-50	dense
CL	gravely, sandy, silty clays			> 50	v. dense	

Sample										Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color	Tec Result	PID/FID (ppm)							
										0						
										1					Sandy clay, greyish brown (hand augered)	Difficult to homogenize due to high plasticity, Firm clay.
										2						
										3						
										4						
										5						
										6					Light brown sandy clay, very firm, plasticity high,	High iron content in 5-10 ft.
										7						
										8						
										9						
										10					Red staining ☆	Task 6 and 7 samples.
										11					Reddish brown sandy clay	
										12					Transition	
										13					Grey sand	
										14						
										15					Grey clayey sand	
										16						
										17						
										18						
										19						
										20						



Anchor QEA of North Carolina, PLLC

Boring Name

CLFMNA-1

Revised 09/2020

BORING LOG SHEET

Project Name Santee Cooper
 Project No. 232922-01-01
 Geologist _____
 Driller STEDACCO, Brian
 Rig Type Geoprobe TD22 DT

Weather 60°F, Sunny
 Method Used DPT
 Date Begun 10/17/2024

Sheet 2 of 2
 Borehole Diam. 1 1/2"
 Total Depth 25 ft
 Groundwater _____
 Date Completed 10/17/2024

Location Diagram

Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT				
RQD: Include only core sections 4" or greater		Fines	N	Consistency	N	Consistency
USCS (Condensed)			0-2	v. soft	2-4	soft
GW/GP	well-graded/poorly-graded gravels		5-8	firm	9-15	stiff
GM/GC	silty/clayey gravels (gravel/sand/fines mix)	16-30	v. stiff	> 30	hard	
SW/SP	well-graded/poorly-graded sands	Sand and Gravel	Relative Density		Relative Density	
SM/SC	silty/clayey sands (sand/fines mix)		N	v. loose	N	loose
ML	silty fine sands, clayey silts		0-4	v. loose	5-10	loose
CL	gravely, sandy, silty clays		11-30	medium	31-50	dense
			> 50	v. dense		

Sample										Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color Tec Result	PID/FID (ppm)						
										20				
										1				
										2				
										3				
										4				
										25				
										6				
										7				
										8				
										9				
										0				
										1				
										2				
										3				
										4				
										5				
										6				
										7				
										8				
										9				
										0				

Material Description	Notes
light brown, wet claye sand	
Transition to grey sand, very wet	
END OF Boring	



Anchor QEA of North Carolina, PLLC

Boring Name

CLFMVA-2

Revised 09/2020

BORING LOG SHEET

Project Name Santee Cooper
 Project No. 232922-01-01
 Geologist Christian Patterson, PE
 Driller SAEDACCO, Brian
 Rig Type Geoprobe 7822DT

Weather 60°F, Sunny
 Method Used DPT
 Date Begun 10/18/2024

Sheet 1 of 1
 Borehole Diam. 1 in.
 Total Depth 20 ft
 Groundwater
 Date Completed 10/18/2024

Location Diagram

Samples:
Task 6: 5'-10'
Task 7: 0'-5'
Arche: 10'-15'

Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT			
RQD: Include only core sections 4" or greater		N		Consistency	
USCS (Condensed)		0-2		v. soft	
GW/GP	well-graded/poorly-graded gravels	5-8		firm	
GM/GC	silty/clayey gravels (gravel/sand/fines mix)	16-30		v. stiff	
SW/SP	well-graded/poorly-graded sands	N		Relative Density	
SM/SC	silty/clayey sands (sand/fines mix)	0-4		v. loose	
ML	silty fine sands, clayey silts	11-30		medium	
CL	gravelly, sandy, silty clays	> 50		v. dense	

Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color Tec Result	PID/FID (ppm)	Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS
									1				
									2				
									3				
									4				
									5				
									6				
									7				
									8				
									9				
									10				
									11				
									12				
									13				
									14				
									15				
									16				
									17				
									18				
									19				
									20				

Material Description	Notes
Reddish brown clayey sand medium grain size	0820 set up on hole.
Reddish brown clayey sand with grey sand mixed in	0840 0-5 ft recovered
Reddish brown clayey sand Blow and grain staining @ 7 ft. *	
Grey clayey sand, medium grain	
Light grey clay sand	
Wet grey sand, medium to large grain size	75% recovery
Light brown color mixed in.	
Grey clayey sand, high plasticity, wet.	Liner stuck but sample retrieved in bucket
Brown clayey sand, wet	Cannot recover

END

Project Name <u>Sargee Cooper</u>	BORING LOG SHEET	Sheet <u>1</u> of <u>1</u>
Project No. <u>23L22-01.01</u>	Weather <u>60°F, Sunny</u>	Borehole Diam. <u>1 in.</u>
Geologist <u>Christian Patterson, PE</u>	Method Used <u>DPT</u>	Total Depth <u>20 ft</u>
Driller <u>SAEDACCO, Brian</u>	Date Begun <u>10/17/2024</u>	Groundwater
Rig Type <u>Geoprobe 7822DT</u>		Date Completed <u>10/17/2024</u>

<p>Location Diagram: <u>Sample</u></p> <p>Task 6: <u>15'-20'</u></p> <p>Task 7: <u>0-5'</u></p> <p>Archive: <u>5'-10'</u></p>	<p>Moisture: dry (Dr), damp (Da), moist (M), wet (W)</p> <p>RQD: Include only core sections 4" or greater</p> <p>USCS (Condensed)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>GW/GP</td> <td>well-graded/poorly-graded gravels</td> <td rowspan="3" style="writing-mode: vertical-rl; transform: rotate(180deg);">Fines</td> <td>N</td> <td>Consistency</td> <td>N</td> <td>Consistency</td> </tr> <tr> <td>GM/GC</td> <td>silty/clayey gravels (gravel/sand/fines mix)</td> <td>0-2</td> <td>v. soft</td> <td>2-4</td> <td>soft</td> </tr> <tr> <td>SW/SP</td> <td>well-graded/poorly-graded sands</td> <td>5-8</td> <td>firm</td> <td>9-15</td> <td>stiff</td> </tr> <tr> <td></td> <td></td> <td></td> <td>16-30</td> <td>v. stiff</td> <td>> 30</td> <td>hard</td> </tr> <tr> <td>SM/SC</td> <td>silty/clayey sands (sand/fines mix)</td> <td rowspan="3" style="writing-mode: vertical-rl; transform: rotate(180deg);">Sand and Gravel</td> <td>N</td> <td>Relative Density</td> <td>N</td> <td>Relative Density</td> </tr> <tr> <td>ML</td> <td>silty fine sands, clayey silts</td> <td>0-4</td> <td>v. loose</td> <td>5-10</td> <td>loose</td> </tr> <tr> <td>CL</td> <td>gravelly, sandy, silty clays</td> <td>11-30</td> <td>medium</td> <td>31-50</td> <td>dense</td> </tr> <tr> <td></td> <td></td> <td></td> <td>> 50</td> <td>v. dense</td> <td></td> <td></td> </tr> </table>	GW/GP	well-graded/poorly-graded gravels	Fines	N	Consistency	N	Consistency	GM/GC	silty/clayey gravels (gravel/sand/fines mix)	0-2	v. soft	2-4	soft	SW/SP	well-graded/poorly-graded sands	5-8	firm	9-15	stiff				16-30	v. stiff	> 30	hard	SM/SC	silty/clayey sands (sand/fines mix)	Sand and Gravel	N	Relative Density	N	Relative Density	ML	silty fine sands, clayey silts	0-4	v. loose	5-10	loose	CL	gravelly, sandy, silty clays	11-30	medium	31-50	dense				> 50	v. dense		
GW/GP	well-graded/poorly-graded gravels	Fines	N		Consistency	N	Consistency																																														
GM/GC	silty/clayey gravels (gravel/sand/fines mix)		0-2		v. soft	2-4	soft																																														
SW/SP	well-graded/poorly-graded sands		5-8	firm	9-15	stiff																																															
			16-30	v. stiff	> 30	hard																																															
SM/SC	silty/clayey sands (sand/fines mix)	Sand and Gravel	N	Relative Density	N	Relative Density																																															
ML	silty fine sands, clayey silts		0-4	v. loose	5-10	loose																																															
CL	gravelly, sandy, silty clays		11-30	medium	31-50	dense																																															
			> 50	v. dense																																																	

Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color Tec Result	PID/FID (ppm)	Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes
									1					Dark grey clay	
									2						
									3						
									4						
									5					Brown clay	
									6					Brown Clay	
									7					7' Transition light to grey sandy clay	
									8					8' Transition to dark grey sand	
									9						
									10						
									11					Wet, grey sand, large grain size	
									12						
									13						
									14						
									15					Wet, grey sand, large grain size	15' Need to start a different borehole
									16						
									17						
									18					18' Transition to Dark grey sand	
									19						
									20						

END

Cannot advance due to sand bl

BORING LOG SHEET

Project Name Santee Cooper
 Project No. 232922-01-01
 Geologist Christina Patterson, PE
 Driller SAEDACCO, Brian
 Rig Type Geoprobe 7022DT

Weather 60°F, Sunny
 Method Used DPT
 Date Begun 10/17/2024

Sheet 1 of 2
 Borehole Diam. 1 in.
 Total Depth 25 ft
 Groundwater
 Date Completed 10/17/2024

Location Diagram Samples

Task 6: 5'-7.5'
 Task 7: 7.5'-10'
 Archive: 10'-15'

Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT				
RQD: Include only core sections 4" or greater						
USCS (Condensed)						
GW/GP	well-graded/poorly-graded gravels	Fines	N	Consistency	N	Consistency
GM/GC	silty/clayey gravels (gravel/sand/fines mix)		0-2	v. soft	2-4	soft
SW/SP	well-graded/poorly-graded sands		5-8	firm	9-15	stiff
SM/SC	silty/clayey sands (sand/fines mix)	Sand and Gravel	16-30	v. stiff	> 30	hard
ML	silty fine sands, clayey silts		N	Relative Density	N	Relative Density
CL	gravely, sandy, silty clays		0-4	v. loose	5-10	loose
			11-30	medium	31-50	dense
			> 50	v. dense		

Sample										Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color	Tec Result	PID/FID (ppm)							
										1					Grey sandy clay, plasticity high	Difficult to homogenize sample
										2					[Hard augered]	
										3						
										4						
										5					Light brown sandy clay missing	
										6						
										7					Light brown sandy clay	80% recovery
										8				8' transition Grey sand, slightly wet		
										9						
										10						
										11					Wet grey sand, coarse large gran size	70% recovery
										12					Grey sand, large coarse gran size	
										13						
										14						
										15					Wet grey sand, large gran	
										16						
										17						
										18						
										19						
										20					19' 7" transition or light brown staining	



Anchor QEA of North Carolina, PLLC

Boring Name

CLFMA-4

Revised 09/2020

Project Name Santee Cooper
 Project No. 232922-01.01
 Geologist _____
 Driller SAEDACCO, Brian
 Rig Type Geopole 7822DT

BORING LOG SHEET

Weather 80°F, Sunny
 Method Used DPT
 Date Begun 10/17/2024

Sheet 2 of 2
 Borehole Diam. 1 in.
 Total Depth 25 ft
 Groundwater _____
 Date Completed 10/17/2024

Location Diagram

Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT					
RQD: Include only core sections 4" or greater		Fines	N	Consistency	N	Consistency	
USCS (Condensed)			0-2	v. soft	2-4	soft	
GW/GP	well-graded/poorly-graded gravels		5-8	firm	9-15	stiff	
GM/GC	silty/clayey gravels (gravel/sand/fines mix)	16-30	v. stiff	> 30	hard		
SW/SP	well-graded/poorly-graded sands	Sand and Gravel	N	Relative Density	N	Relative Density	
SM/SC	silty/clayey sands (sand/fines mix)		0-4	v. loose	5-10	loose	
ML	silty fine sands, clayey silts		11-30	medium	31-50	dense	
CL	gravely, sandy, silty clays			> 50	v. dense		

Sample							Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt.	RQD	Packet Test							
							20						
							1						
							2						
							3						
							4						
							25						
							6						
							7						
							8						
							9						
							0						
							1						
							2						
							3						
							4						
							5						
							6						
							7						
							8						
							9						
							0						

Wet grey sand, large gran
 70% recovery
 END

Project Name <u>Santee Cooper</u>	BORING LOG SHEET	Sheet <u>1</u> of <u>1</u>
Project No. <u>232922-01-01</u>	Weather <u>60° Sunny</u>	Borehole Diam. <u>1 in.</u>
Geologist <u>Christian Patterson, PE</u>	Method Used <u>DPT</u>	Total Depth <u>16 ft</u>
Driller <u>SAED ACCO, Brian</u>	Date Begun <u>10/18/2024</u>	Groundwater _____
Rig Type <u>Geoprobe 7822 DT</u>		Date Completed <u>10/18/2024</u>

<p><u>Location Diagram Samples</u></p> <p><u>Task 6: 10'-15'</u></p> <p><u>Task 7: 15'-16'</u></p> <p><u>Archive: 0'-5'</u></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Moisture: dry (Dr), damp (Da), moist (M), wet (W)</td> <td colspan="2">N-Value: sum of final 12" of SPT</td> </tr> <tr> <td colspan="2">RQD: Include only core sections 4" or greater</td> <td>N</td> <td>Consistency</td> </tr> <tr> <td colspan="2" style="text-align: center;">USCS (Condensed)</td> <td>N</td> <td>Consistency</td> </tr> <tr> <td>GW/GP</td> <td>well-graded/poorly-graded gravels</td> <td>0-2</td> <td>v. soft</td> </tr> <tr> <td>GM/GC</td> <td>silty/clayey gravels (gravel/sand/fines mix)</td> <td>5-8</td> <td>firm</td> </tr> <tr> <td>SW/SP</td> <td>well-graded/poorly-graded sands</td> <td>16-30</td> <td>v. stiff</td> </tr> <tr> <td>SM/SC</td> <td>silty/clayey sands (sand/fines mix)</td> <td>N</td> <td>Relative Density</td> </tr> <tr> <td>ML</td> <td>silty fine sands, clayey silts</td> <td>N</td> <td>Relative Density</td> </tr> <tr> <td>CL</td> <td>gravely, sandy, silty clays</td> <td>N</td> <td>Relative Density</td> </tr> </table>	Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT		RQD: Include only core sections 4" or greater		N	Consistency	USCS (Condensed)		N	Consistency	GW/GP	well-graded/poorly-graded gravels	0-2	v. soft	GM/GC	silty/clayey gravels (gravel/sand/fines mix)	5-8	firm	SW/SP	well-graded/poorly-graded sands	16-30	v. stiff	SM/SC	silty/clayey sands (sand/fines mix)	N	Relative Density	ML	silty fine sands, clayey silts	N	Relative Density	CL	gravely, sandy, silty clays	N	Relative Density
Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT																																			
RQD: Include only core sections 4" or greater		N	Consistency																																		
USCS (Condensed)		N	Consistency																																		
GW/GP	well-graded/poorly-graded gravels	0-2	v. soft																																		
GM/GC	silty/clayey gravels (gravel/sand/fines mix)	5-8	firm																																		
SW/SP	well-graded/poorly-graded sands	16-30	v. stiff																																		
SM/SC	silty/clayey sands (sand/fines mix)	N	Relative Density																																		
ML	silty fine sands, clayey silts	N	Relative Density																																		
CL	gravely, sandy, silty clays	N	Relative Density																																		

Sample							Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes	
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test								Color
							1					Grey clayey sand, medium gran size		
							2							
							3							
							4							
							5							
							6					Grey clayey sand, more sand content, wet		
							7							10% recovery
							8							
							9					Brown coloration, stringy		
							10							
							11					Grey sand, wet		
							12							
							13							
							14							
							15					Light brown sand to light grey sand.		
							16					END @ 16'		DPT refusal 15'
							17							
							18							
							19							
							20							

Project Name <u>Santee Cooper</u>	BORING LOG SHEET	Sheet <u>1</u> of <u>2</u>
Project No. <u>232922-01.01</u>	Weather <u>60°F Sunny</u>	Borehole Diam. <u>1.10</u>
Geologist <u>Christina Patterson, PE</u>	Method Used <u>DPT</u>	Total Depth <u>25 ft</u>
Driller <u>SAE DACCO, Brian</u>	Date Begun <u>10/18/2024</u>	Groundwater
Rig Type <u>Geoprobe 7822DT</u>		Date Completed <u>10/18/2024</u>

Location Diagram: <u>Samples</u>										Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT							
Task 6: 20'-25'										RQD: Include only core sections 4" or greater		N		Consistency		N		Consistency	
Task 7: 5'-10'										USCS (Condensed)		Fines							
Archive: 10'-15'										GW/GP well-graded/poorly-graded gravels		0-2		v. soft		2-4		soft	
										GM/GC silty/clayey gravels (gravel/sand/fines mix)		5-8		firm		9-15		stiff	
										SW/SP well-graded/poorly-graded sands		16-30		v. stiff		> 30		hard	
										SM/SC silty/clayey sands (sand/fines mix)		N		Relative Density		N		Relative Density	
										ML silty fine sands, clayey silts		0-4		v. loose		5-10		loose	
										CL gravelly, sandy, silty clays		11-30		medium		31-50		dense	
												> 50		v. dense					
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color	Tec Result	PID/FID (ppm)	Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes			
										1					Reddish brown clayey sand with grey sand mixed in				
										2									
										3									
										4									
										5					Reddish brown clayey sand				
										6									
										7					7' Transition to grey, clayey sand, high plasticity				
										8									
										9									
										10					Transition to grey wet sand, lighter grey				
										11					Light grey wet sand, small to medium grain size, wet				
										12									
										13									
										14									
										15					Wet grey sand, small to medium grain size				
										16									
										17									
										18									
										19									
										20									

Secondary 3

Project Name <u>Santee Cooper</u>	BORING LOG SHEET	Sheet <u>2</u> of <u>2</u>
Project No. <u>732922-01.01</u>	Weather <u>60°F, Sunny</u>	Borehole Diam. <u>1.0"</u>
Geologist _____	Method Used <u>DPT</u>	Total Depth <u>25 ft</u>
Driller <u>SAEDACCO Brian</u>	Date Begun <u>10/18/2024</u>	Groundwater _____
Rig Type <u>Geoprobe 7822DT</u>		Date Completed <u>10/18/2024</u>

Location Diagram	Moisture: dry (Dr), damp (Da), moist (M), wet (W)		N-Value: sum of final 12" of SPT				
	RQD: Include only core sections 4" or greater						
	USCS (Condensed)		Fines	N	Consistency	N	Consistency
GW/GP	well-graded/poorly-graded gravels			0-2	v. soft	2-4	soft
GM/GC	silty/clayey gravels (gravel/sand/fines mix)		5-8	firm	9-15	stiff	
SW/SP	well-graded/poorly-graded sands		16-30	v. stiff	> 30	hard	
SM/SC	silty/clayey sands (sand/fines mix)		Sand and Gravel	N	Relative Density	N	Relative Density
ML	silty fine sands, clayey silts			0-4	v. loose	5-10	loose
CL	gravely, sandy, silty clays			11-30	medium	31-50	dense
					> 50	v. dense	

Sample										Depth in Feet	Soil Graph	Moisture	Density or Consistency	USCS	Material Description	Notes
Type	Number	Blow Counts per 6"	N-Value	Rec./Attempt	RQD	Packer Test	Color	Tec Result	PID/FID (ppm)							
										20					Light grey sand, wet	
										1					→ 21"4" distinct transition	
										2					to yellowish brown sand,	
										3					very wet.	
										4					→ 23'8" transition to light grey	
										25					sand, wet	END
										6						
										7						
										8						
										9						
										0						
										1						
										2						
										3						
										4						
										5						
										6						
										7						
										8						
										9						
										0						

Appendix C

Analytical Data

CLFMNA-3-15-20 Powder XRD (embedded PDF)

Profex Refinement Report

file:///C:/Users/rickh/Documents/RCIA/Jobs/AnchorQEA_241217_San...



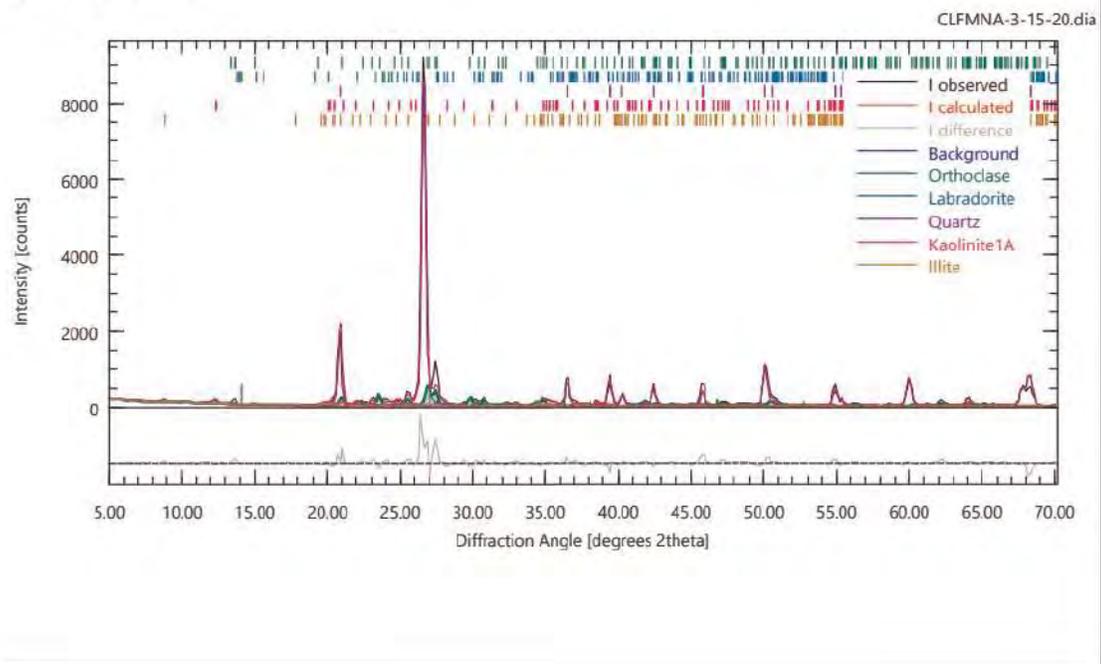
Sample Information

File Name	CLFMNA-3-15-20.dia
Instrument configuration	rigaku-ultima.geq
Wavelength	CU (1.5406 Å)
Directory	C:/Users/rickh/Documents/RCIA/Jobs/AnchorQEA_241217_SanteeCooper-WC/XRD
Date of Refinement	Saturday December 21, 2024
Operator	Rick Hugo

Phase composition

Parameter	Value	ESD
QOrthoclase	17.9	0.6
QLabradorite	4.0	0.5
Qquartz	67.4	0.9
QKaolinite1A	6.9	0.6
QIllite	3.9	0.8

Diffraction Pattern



Powder XRD analysis (embedded PDF)

Profex Refinement Report

file:///C:/Users/rickh/Documents/RCIA/Jobs/AnchorQEA_241217_San...



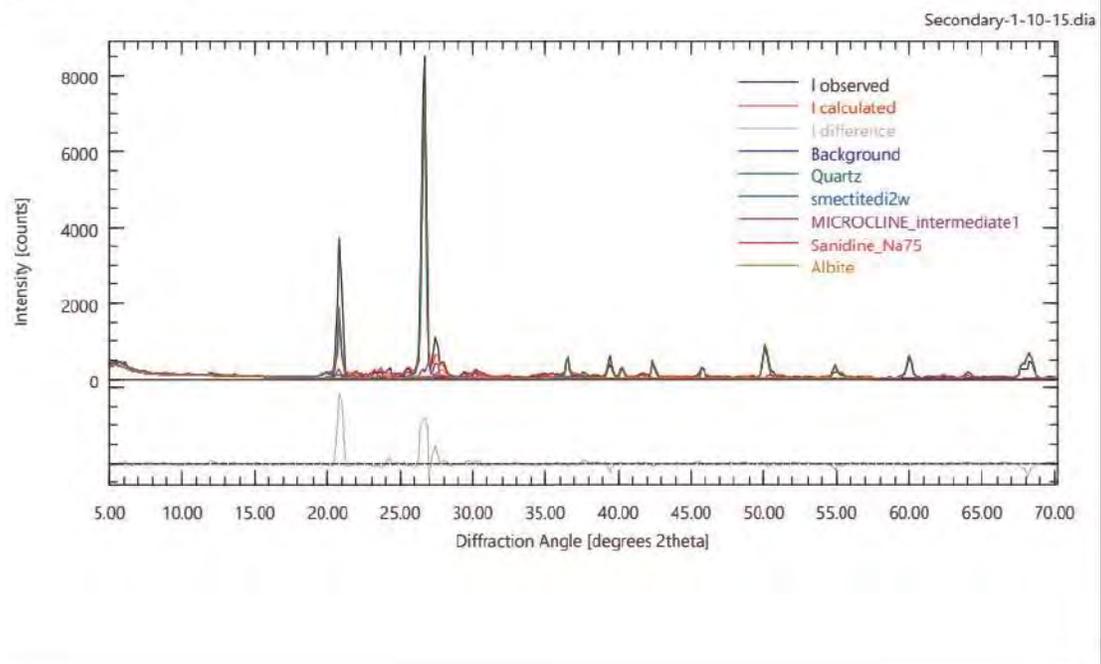
Sample Information

File Name	Secondary-1-10-15.dia
Instrument configuration	rigaku-ultima.geq
Wavelength	CU (1.5406 Å)
Directory	C:/Users/rickh/Documents/RCIA/Jobs/AnchorQEA_241217_SanteeCooper-WC/XRD
Date of Refinement	Saturday December 21, 2024
Operator	Rick Hugo

Phase composition

Parameter	Value	ESD
Qquartz	59	1
Qsmectitedi2wfix	16	1
Qmicroint1	16.6	0.9
Qsanina75	2.8	0.6
QAlbite	5.5	0.9

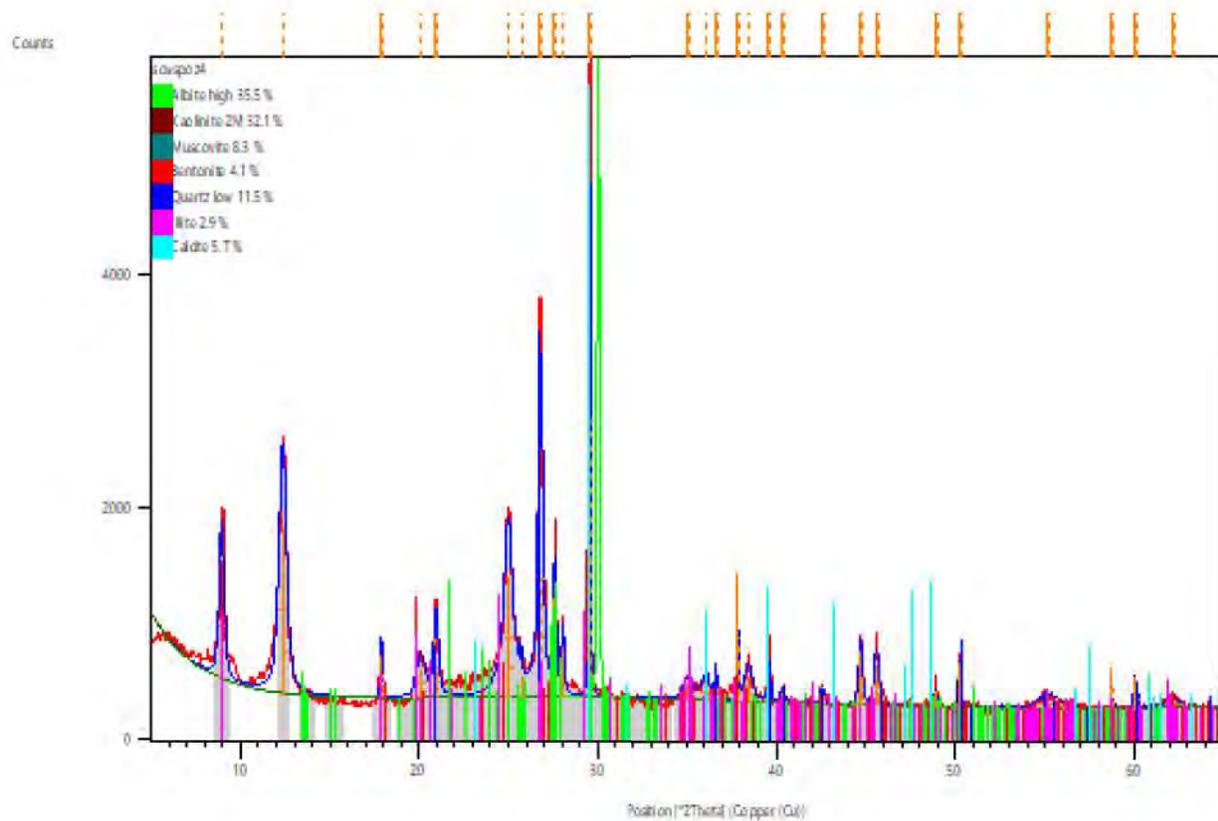
Diffraction Pattern



Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-010-0500	23	Albite high	Al1 Na1 O8 Si3
96-101-1046	36	Kaolinite 2M	Al8.00 Si8.00 O36.00
96-900-4410	34	Muscovite	Al7.76 Si15.44 K3...
98-016-0437	33	Bentonite	H2 Al1.93 Ca0.06 F..
98-016-2609	59	Quartz low	O2 Si1
98-016-6961	26	Illite	H2 Al2.59 Ca0.03 K..
98-004-0107	16	Calcite	C1 Ca1 O3

Graphics

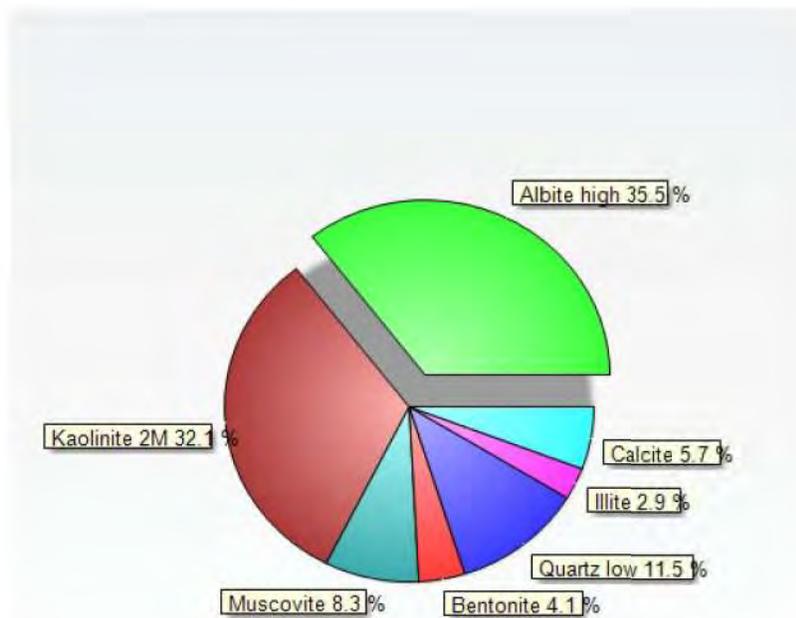


Peak List

Pos. [°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
8.958 (3)	9.86429	19.07	96-900-4410;98..
12.368 (2)	7.15085	29.97	96-101-1046
17.891 (3)	4.95398	7.75	96-900-4410;98..
20.08 (1)	4.41894	5.23	98-010-0500;96..
20.936 (3)	4.23965	10.71	96-101-1046;96..
24.961 (3)	3.56440	21.73	98-010-0500;96..
25.705 (6)	3.46293	3.79	98-010-0500;96..

26.758 (1)	3.32896	42.70	96-900-4410;98..
27.561 (2)	3.23380	17.54	98-010-0500;96..
28.004 (3)	3.18369	9.13	98-010-0500;96..
29.5172 (7)	3.02378	100.00	98-010-0500;96..
35.07 (2)	2.55642	2.72	98-010-0500;96..
36.02 (2)	2.49114	3.00	98-010-0500;96..
36.629 (9)	2.45136	3.38	98-010-0500;96..
37.8035 (6)	2.37786	23.09	98-010-0500;96..
38.415 (8)	2.34138	4.62	98-010-0500;96..
39.571 (7)	2.27564	6.14	98-010-0500;96..
40.30 (1)	2.23602	1.61	98-010-0500;96..
42.545 (8)	2.12320	3.01	98-010-0500;96..
44.682 (3)	2.02648	9.66	98-010-0500;96..
45.573 (4)	1.98889	7.47	98-010-0500;96..
48.886 (7)	1.86157	2.91	98-010-0500;96..
50.213 (3)	1.81546	8.10	98-010-0500;96..
55.17 (3)	1.66340	1.75	98-010-0500;96..
58.718 (1)	1.57114	7.63	98-010-0500;96..
60.032 (4)	1.53986	5.69	98-010-0500;96..
62.09 (3)	1.49367	1.39	96-101-1046;96..

Quantitative Results



Phase Albite high:	Weight fraction/ %:	35
Phase Kaolinite 2M:	Weight fraction/ %:	32
Phase Muscovite:	Weight fraction/ %:	8
Phase Bentonite:	Weight fraction/ %:	4
Phase Quartz low:	Weight fraction/ %:	12
Phase Illite:	Weight fraction/ %:	3
Phase Calcite:	Weight fraction/ %:	6

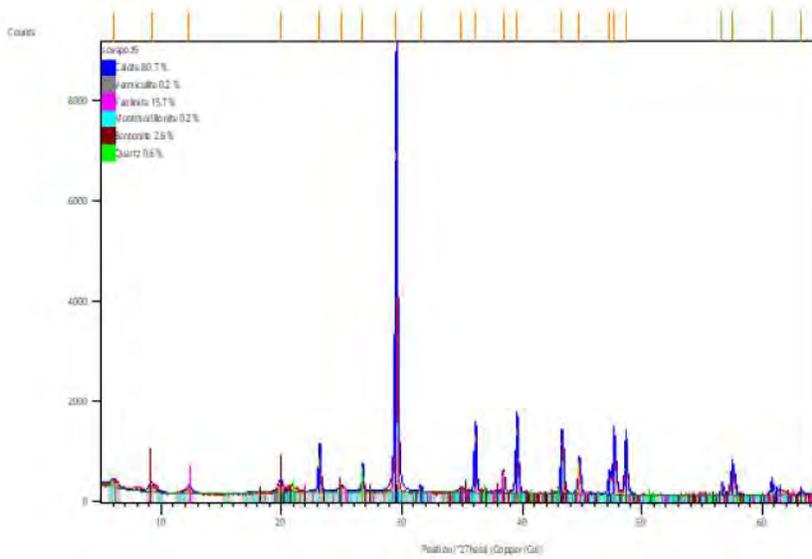
Anchor Scan Parameters

Dataset Name:	scwspoz4
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\AnchorQEA_230920_SanteeCooper\scwspoz4.rd
Sample Identification:	SC-WS-POZ-4 (ground)
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	9/18/2023 2:02:00 PM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [$^{\circ}2\theta$.]:	5.0200
End Position [$^{\circ}2\theta$.]:	64.9800
Step Size [$^{\circ}2\theta$.]:	0.0400
Scan Step Time [s]:	4.5000
Scan Type:	Continuous
Offset [$^{\circ}2\theta$.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [$^{\circ}$]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [$^{\circ}C$]:	0.00
Anode Material:	Cu
K-Alpha1 [\AA]:	1.54060
K-Alpha2 [\AA]:	1.54443
K-Beta [\AA]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractionmeter Type:	XPert MPD
Diffractionmeter Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-003-7241	78	Calcite	Ca1 Ca1 O3
96-900-0017	18	Vermiculite	Mg12.00 O48.00 Si1..
96-901-5000	22	Kaolinite	Al8.00 Si8.00 O36.00
96-900-2780	14	Montmorillonite	Al4.00 Si8.00 O24...
98-016-0437	19	Bentonite	H2 Al1.93 Ca0.06 F..
96-900-0777	16	Quartz	Si6.00 O6.00

Graphics

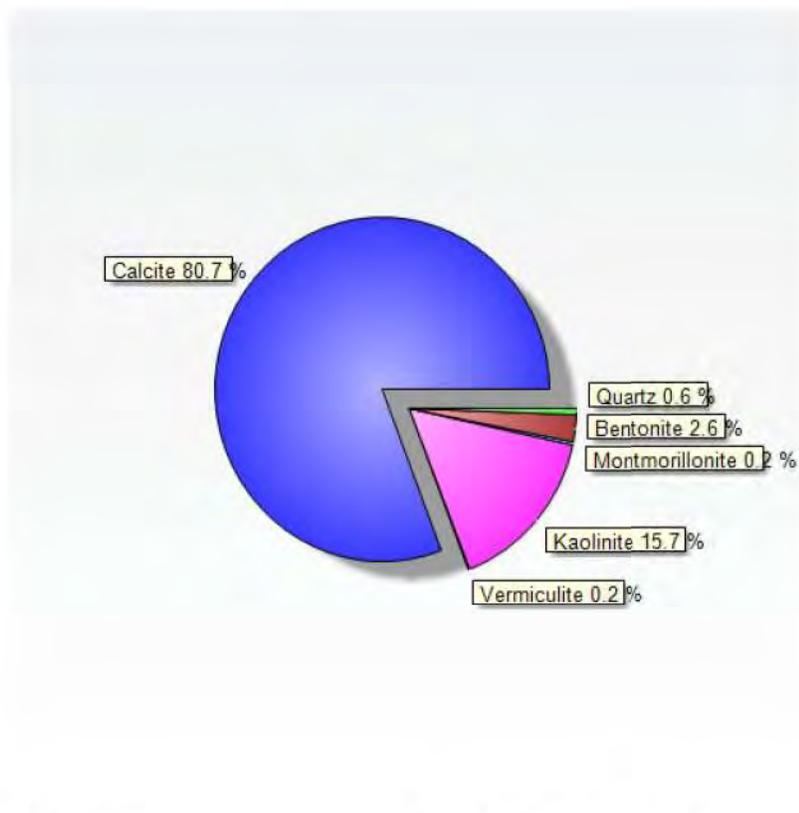


Peak List

Pos. [°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.1210	14.43955	1.71	96-900-0017;96..
9.2229	9.58900	1.90	98-016-0437
12.3326	7.17718	1.40	96-900-0017;96..
19.9224	4.45676	2.58	96-900-0017;96..
23.1617	3.84028	10.38	98-003-7241;96..
24.9837	3.56419	1.30	96-900-0017;96..
26.7403	3.33391	7.24	96-900-0017;96..
29.5263	3.02537	100.00	98-003-7241;96..
31.5400	2.83666	1.59	98-003-7241;96..
34.9281	2.56887	0.96	96-900-0017;96..
36.0918	2.48867	16.99	98-003-7241;96..
38.4259	2.34270	5.95	96-900-0017;96..
39.5366	2.27941	19.21	98-003-7241;96..
43.2775	2.09066	14.80	98-003-7241;96..
44.7111	2.02690	9.21	96-900-0017;96..
47.2012	1.92561	5.50	98-003-7241;96..
47.6241	1.90950	13.78	98-003-7241;96..
48.6113	1.87301	15.14	98-003-7241;96..

56.6542	1.62472	2.93	98-003-7241;96..
57.5172	1.60238	7.46	98-003-7241;96..
60.7621	1.52435	3.82	98-003-7241;96..
63.2612	1.47002	0.93	98-003-7241;96..

Quantitative Results



Phase Calcite:	Weight fraction/ %:	81
Phase Vermiculite:	Weight fraction/ %:	0.2
Phase Kaolinite:	Weight fraction/ %:	16
Phase Montmorillonite:	Weight fraction/ %:	0.2
Phase Bentonite:	Weight fraction/ %:	2
Phase Quartz:	Weight fraction/ %:	0.6

Anchor Scan Parameters

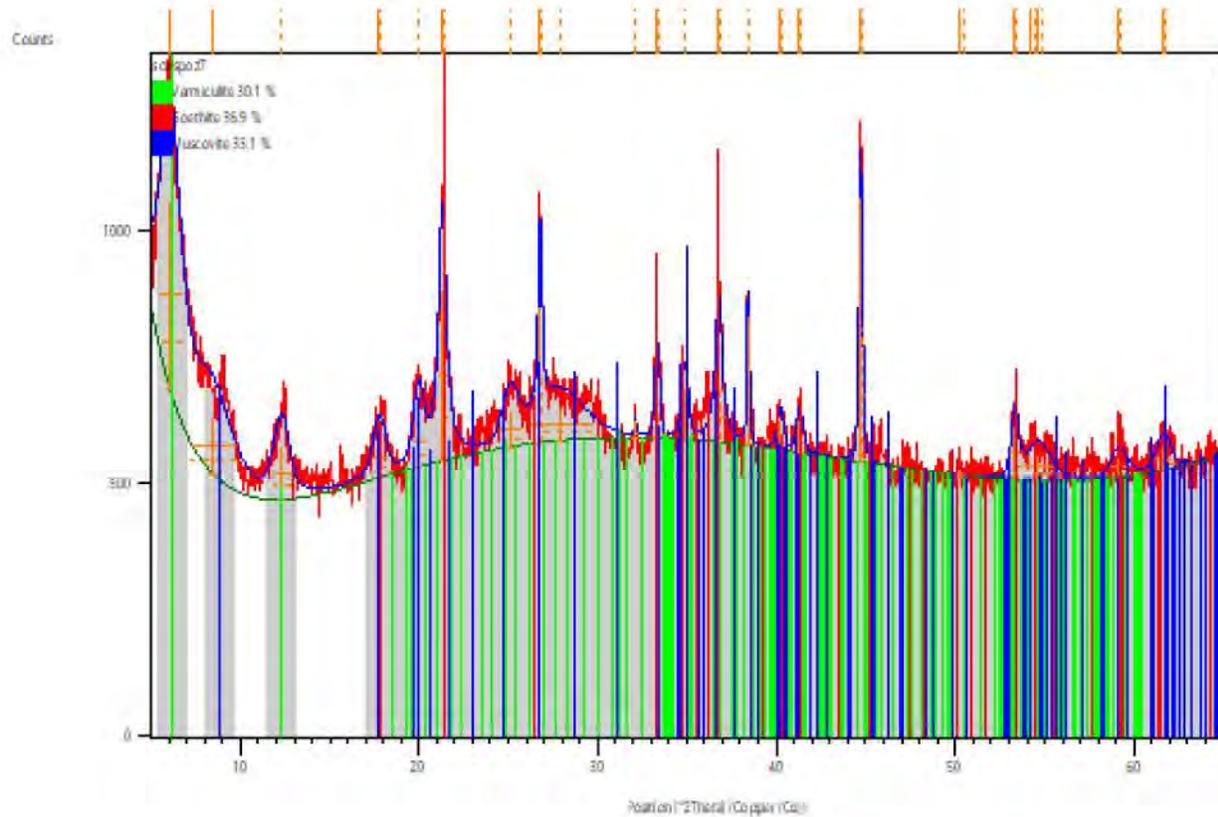
Dataset Name:	scwspoz6
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\AnchorQEA_230920_SanteeCooper\scwspoz6.rd
Sample Identification:	SC-WS-POZ-6
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	9/18/2023 3:59:00 PM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [°2Th.]:	5.0200
End Position [°2Th.]:	64.9800
Step Size [°2Th.]:	0.0400
Scan Step Time [s]:	4.5000
Scan Type:	Continuous

Offset [$^{\circ}2\theta$.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [$^{\circ}$]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [$^{\circ}\text{C}$]:	0.00
Anode Material:	Cu
K-Alpha1 [\AA]:	1.54060
K-Alpha2 [\AA]:	1.54443
K-Beta [\AA]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
96-900-0061	45	Vermiculite	Mg _{5.35} Fe _{0.96} Al _{2...}
96-900-2160	51	Goethite	Fe _{4.00} H _{4.00} O _{8.00}
96-901-4938	15	Muscovite	K _{3.00} Al _{9.00} Si _{9.0...}

Graphics

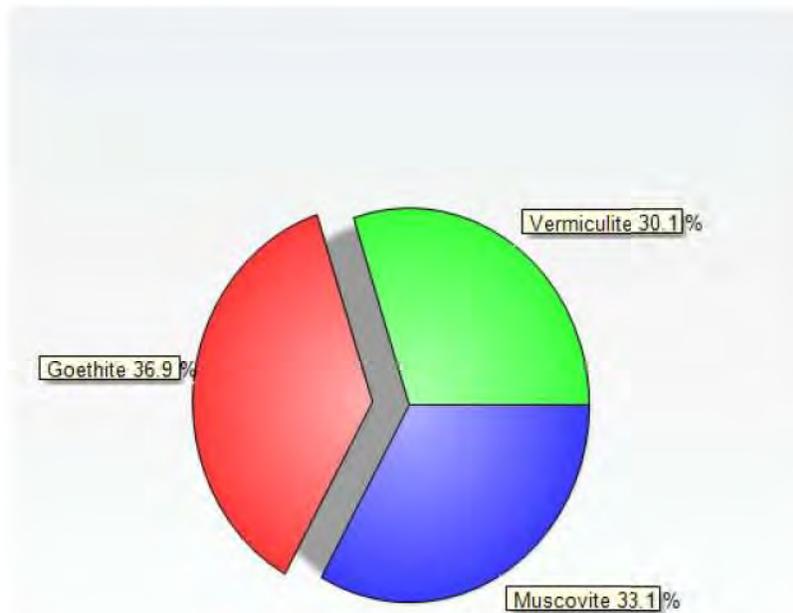


Peak List

Pos. [°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.09 (3)	14.50184	71.62	96-900-0061
8.4 (5)	10.49254	21.03	96-901-4938
12.31 (4)	7.18694	20.20	96-900-0061
17.76 (3)	4.99127	15.41	96-900-0061;96..
19.97 (2)	4.44262	19.49	96-900-0061;96..
21.289 (7)	4.17016	64.85	96-900-0061;96..
25.08 (5)	3.54717	13.43	96-900-0061;96..
26.736 (6)	3.33170	51.48	96-900-0061;96..
27.9 (4)	3.19505	12.55	96-900-0061
32.11 (3)	2.78535	6.33	96-900-0061
33.32 (1)	2.68655	25.69	96-900-0061;96..

34.88 (2)	2.56986	19.42	96-900-0061;96..
36.77 (1)	2.44256	37.82	96-900-0061;96..
38.404 (6)	2.34204	49.35	96-900-0061;96..
40.20 (3)	2.24155	11.24	96-900-0061;96..
41.29 (3)	2.18460	12.26	96-900-0061;96..
44.690 (3)	2.02612	100.00	96-900-0061;96..
50 (16215547491039476)		1.81278	0.00 96-900-0061;96..
53.31 (2)	1.71698	20.08	96-900-0061;96..
54.2 (2)	1.68953	0.90	96-900-0061;96..
54.7 (2)	1.67804	9.57	96-900-0061;96..
59.12 (6)	1.56135	7.67	96-900-0061;96..
61.59 (5)	1.50468	9.63	96-900-2160;96..

Quantitative Results



Phase Vermiculite:	Weight fraction/ %:	30
Phase Goethite:	Weight fraction/ %:	37
Phase Muscovite:	Weight fraction/ %:	33

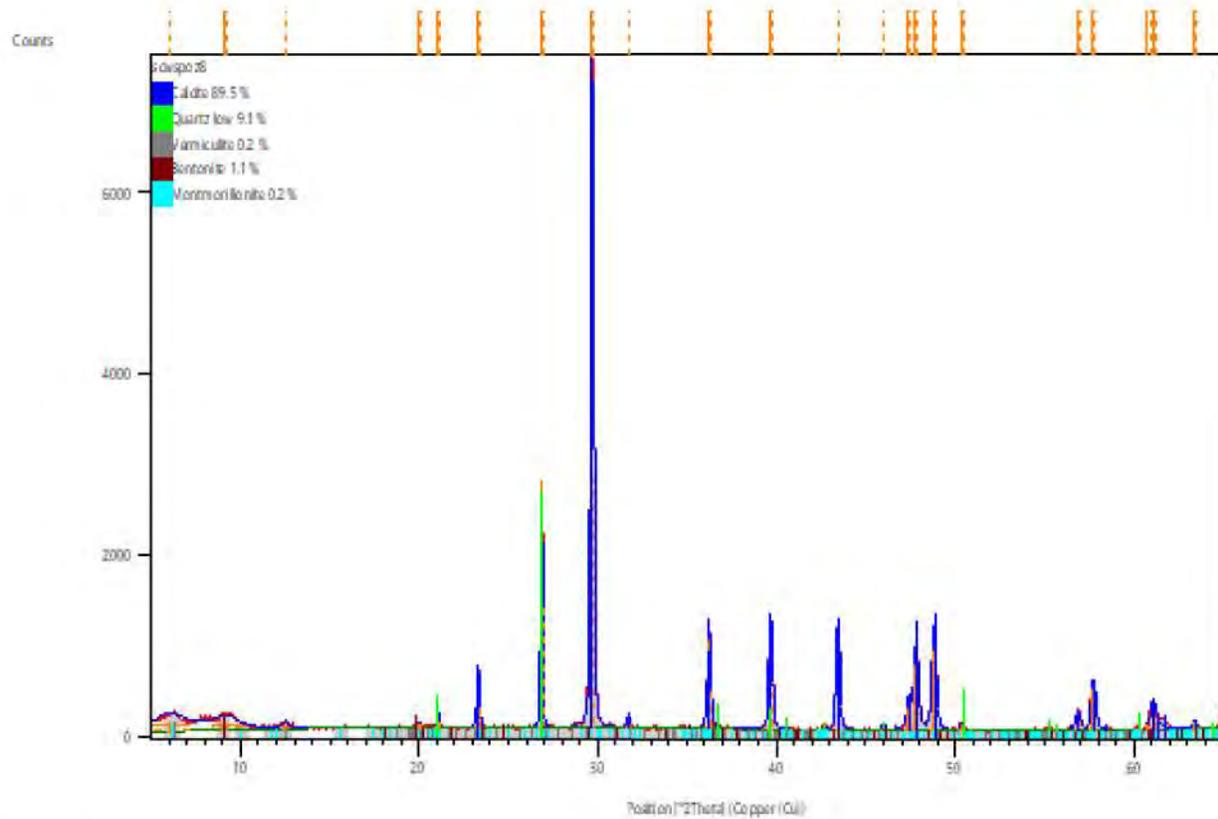
Anchor Scan Parameters

Dataset Name:	scwspoz7
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\AnchorQEA_230920_SanteeCooper\scwspoz7.rd
Sample Identification:	SC-WS-POZ-7
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	9/18/2023 10:04:00 AM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [$^{\circ}$ 2Th.]:	5.0200
End Position [$^{\circ}$ 2Th.]:	64.9800
Step Size [$^{\circ}$ 2Th.]:	0.0400
Scan Step Time [s]:	4.5000
Scan Type:	Continuous
Offset [$^{\circ}$ 2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [$^{\circ}$]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [$^{\circ}$ C]:	0.00
Anode Material:	Cu
K-Alpha1 [\AA]:	1.54060
K-Alpha2 [\AA]:	1.54443
K-Beta [\AA]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
96-900-1298	81	Calcite	Ca _{5.62} Mg _{0.38} C _{6.0} ...
98-009-8628	32	Quartz low	O ₂ Si ₁
96-900-0061	17	Vermiculite	Mg _{5.35} Fe _{0.96} Al ₂ ...
98-016-0437	12	Bentonite	H ₂ Al _{1.93} Ca _{0.06} F...
98-016-1171	34	Montmorillonite	H ₁ Al ₂ Ca _{0.5} O ₁₂ Si ₄

Graphics

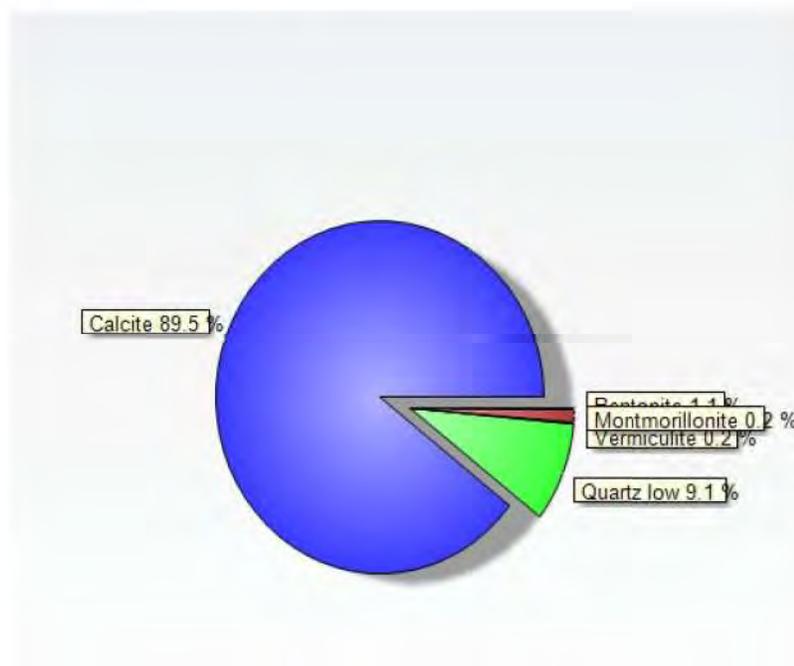


Peak List

Pos. [°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.06 (4)	14.57748	2.39	96-900-0061;98..
9.15 (4)	9.65506	1.82	98-016-0437
12.52 (2)	7.06553	0.85	96-900-0061
20.02 (2)	4.43190	0.58	96-900-0061;98..
21.046 (6)	4.21773	2.42	98-009-8628;96..
23.284 (2)	3.81727	8.82	96-900-1298;96..
26.8323 (7)	3.31994	49.91	98-009-8628;96..
29.6446 (6)	3.01107	100.00	96-900-1298;96..
31.687 (7)	2.82150	2.18	96-900-1298;96..

36.225 (2)	2.47779	18.15	96-900-1298;96..
39.668 (1)	2.27029	18.67	96-900-1298;98..
43.427 (2)	2.08206	18.01	96-900-1298;96..
45.967 (8)	1.97277	1.22	98-009-8628;96..
47.385 (7)	1.91699	4.75	96-900-1298;96..
47.785 (3)	1.90189	13.03	96-900-1298;96..
48.782 (2)	1.86530	16.46	96-900-1298;96..
50.329 (7)	1.81153	1.63	98-009-8628;96..
56.832 (8)	1.61871	3.28	96-900-1298;96..
57.678 (5)	1.59697	8.27	96-900-1298;98..
60.7 (1)	1.52393	1.04	96-900-1298;98..
61.04 (1)	1.51677	4.17	96-900-1298;96..
63.33 (1)	1.46745	1.37	96-900-1298;98..

Quantitative Results



Phase Calcite:	Weight fraction/ %:	89
Phase Quartz low:	Weight fraction/ %:	9
Phase Vermiculite:	Weight fraction/ %:	0.2
Phase Bentonite:	Weight fraction/ %:	1
Phase Montmorillonite:	Weight fraction/ %:	0.2

Anchor Scan Parameters

Dataset Name:	scwspoz8
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\AnchorQEA_230920_SanteeCooper\scwspoz8.rd
Sample Identification:	SC-WS-POZ-8
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	9/18/2023 12:04:00 PM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [$^{\circ}2\theta$.]:	5.0200
End Position [$^{\circ}2\theta$.]:	64.9800
Step Size [$^{\circ}2\theta$.]:	0.0400
Scan Step Time [s]:	4.5000
Scan Type:	Continuous
Offset [$^{\circ}2\theta$.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [$^{\circ}$]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [$^{\circ}C$]:	0.00
Anode Material:	Cu
K-Alpha1 [\AA]:	1.54060
K-Alpha2 [\AA]:	1.54443
K-Beta [\AA]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No



October 24, 2023

Service Request No:K2311691

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Santee Cooper-Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory October 12, 2023
For your reference, these analyses have been assigned our service request number **K2311691**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2311691
Date Received: 10/12/2023

CASE NARRATIVE

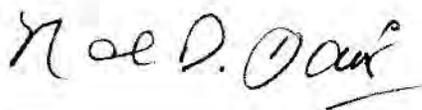
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Four water samples were received for analysis at ALS Environmental on 10/12/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 10/24/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SC-WS-POZ-6-CEC	Lab ID: K2311691-001
-----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	3.1	J	0.5	4.0	ug/L	200.8
Calcium, Dissolved	900000		30	100	ug/L	200.8
Cobalt, Dissolved	4.89		0.05	0.10	ug/L	200.8
Magnesium, Dissolved	9500		10	50	ug/L	200.8
Potassium, Dissolved	11100		100	250	ug/L	200.8
Sodium, Dissolved	31000		100	250	ug/L	200.8

CLIENT ID: SC-WS-POZ-8-CEC	Lab ID: K2311691-002
-----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	4.3		0.5	4.0	ug/L	200.8
Calcium, Dissolved	615000		30	100	ug/L	200.8
Cobalt, Dissolved	7.38		0.05	0.10	ug/L	200.8
Magnesium, Dissolved	7710		10	50	ug/L	200.8
Potassium, Dissolved	8460		100	250	ug/L	200.8
Sodium, Dissolved	19300		100	250	ug/L	200.8

CLIENT ID: SC-WS-POZ-8-DUP-CEC	Lab ID: K2311691-003
---------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	5.6		0.5	4.0	ug/L	200.8
Calcium, Dissolved	605000		30	100	ug/L	200.8
Cobalt, Dissolved	6.77		0.05	0.10	ug/L	200.8
Magnesium, Dissolved	7810		10	50	ug/L	200.8
Potassium, Dissolved	8310		100	250	ug/L	200.8
Sodium, Dissolved	18900		100	250	ug/L	200.8

CLIENT ID: SC-WS-MB-CEC	Lab ID: K2311691-004
--------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	4.5		0.5	4.0	ug/L	200.8
Calcium, Dissolved	390		30	100	ug/L	200.8
Potassium, Dissolved	110	J	100	250	ug/L	200.8
Sodium, Dissolved	270		100	250	ug/L	200.8



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0204

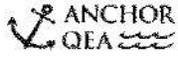
Service Request:K2311691

SAMPLE CROSS-REFERENCE

K2311691-001	SC-WS-POZ-6-CEC	10/11/2023	0840
K2311691-002	SC-WS-POZ-8-CEC	10/11/2023	0845
K2311691-003	SC-WS-POZ-8-DUP-CEC	10/11/2023	0850
K2311691-004	SC-WS-MB-CEC	10/11/2023	0855

Chain of Custody Record & Laboratory Analysis Request

123 11691

Laboratory Number: 503-972-5019					No. of Containers	Parameters										 Masa Kanematsu 6720 SW Macadam Ave Suite 300 Portland OR 97219						
Date:	10/12/2023					Dissolved metals (Al, Ca, K, Mg, Na, Co) via EPA 6020																
Project Name:	Santee Cooper - Winyah and Cross CCR Support																					
Project Number:	232922-01.01 Task 02.0204																					
Project Manager:	Jason Stuckey																					
Phone Number:	(503)924-6184																					
Shipment Method:	ALS Courier																					
Line	Field Sample ID	Collection		Matrix	No. of Containers	Dissolved metals (Al, Ca, K, Mg, Na, Co) via EPA 6020											Comments/Preservation					
		Date	Time																			
1	SC-WS-POZ-6-CEC	10/11/2023	8:40	Water	1	X																
2	SC-WS-POZ-8-CEC	10/11/2023	8:45	Water	1	X																
3	SC-WS-POZ-8 DUP-CEC	10/11/2023	8:50	Water	1	X																
4	SC-WS-MB-CEC	10/11/2023	8:55	Water	1	X																
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

Notes:

Relinquished by:	Company:
Gillian Williams	Anchor QEA
Signature/Print Name:	Date/Time:
<i>Gillian Williams</i>	10/12/2023 1220
Relinquished by:	Company:
<i>Greg Rich</i>	ALS
Signature/Print Name:	Date/Time:
<i>Greg Rich</i>	10-12-23 1415

Received by:
<i>Greg Rich</i>
Signature/Print Name:
<i>Greg Rich</i> 10-12-23 1220 pm
Received by:
<i>Hayleigh Smith</i>
Signature/Print Name:
<i>Hayleigh Smith</i> 10/12/23 1415

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Cooler Receipt and Preservation Form

Client Anchor Service Request K23 11691
 Received: 10/12/23 Opened: 10/12/23 By: HS Unloaded: 10/12/23 By: HS

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with 'X'	PM Notified if out of temp	Tracking Number NA	Filed
3.5		<u>IR06</u>	<u>1 of 3</u>				
2.8			<u>2 of 3</u>				
.9			<u>3 of 3</u>				

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp".
 5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N
 6. If applicable, tissue samples were received: Frozen Partially Thawed Thawed
 7. Packing material: Inserts Raggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
 8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 9. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
 16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not pH due to limited volume



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204

Service Request: K2311691

Sample Name: SC-WS-POZ-6-CEC
Lab Code: K2311691-001
Sample Matrix: Water

Date Collected: 10/11/23
Date Received: 10/12/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
JCHAN

Sample Name: SC-WS-POZ-8-CEC
Lab Code: K2311691-002
Sample Matrix: Water

Date Collected: 10/11/23
Date Received: 10/12/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
JCHAN

Sample Name: SC-WS-POZ-8-DUP-CEC
Lab Code: K2311691-003
Sample Matrix: Water

Date Collected: 10/11/23
Date Received: 10/12/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
JCHAN

Sample Name: SC-WS-MB-CEC
Lab Code: K2311691-004
Sample Matrix: Water

Date Collected: 10/11/23
Date Received: 10/12/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
JCHAN



Sample Results

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Water
Sample Name: SC-WS-POZ-6-CEC
Lab Code: K2311691-001

Service Request: K2311691
Date Collected: 10/11/23 08:40
Date Received: 10/12/23 14:15

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	200.8	3.1 J	ug/L	4.0	0.5	1	10/23/23 08:50	10/19/23	
Calcium	200.8	900000	ug/L	100	30	5	10/23/23 09:08	10/19/23	
Cobalt	200.8	4.89	ug/L	0.10	0.05	5	10/23/23 09:08	10/19/23	
Magnesium	200.8	9500	ug/L	50	10	5	10/23/23 09:08	10/19/23	
Potassium	200.8	11100	ug/L	250	100	5	10/23/23 09:08	10/19/23	
Sodium	200.8	31000	ug/L	250	100	5	10/23/23 09:08	10/19/23	

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dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-CEC
Lab Code: K2311691-002

Service Request: K2311691
Date Collected: 10/11/23 08:45
Date Received: 10/12/23 14:15

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	200.8	4.3	ug/L	4.0	0.5	1	10/23/23 08:52	10/19/23	
Calcium	200.8	615000	ug/L	100	30	5	10/23/23 09:12	10/19/23	
Cobalt	200.8	7.38	ug/L	0.10	0.05	5	10/23/23 09:12	10/19/23	
Magnesium	200.8	7710	ug/L	50	10	5	10/23/23 09:12	10/19/23	
Potassium	200.8	8460	ug/L	250	100	5	10/23/23 09:12	10/19/23	
Sodium	200.8	19300	ug/L	250	100	5	10/23/23 09:12	10/19/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-DUP-CEC
Lab Code: K2311691-003

Service Request: K2311691
Date Collected: 10/11/23 08:50
Date Received: 10/12/23 14:15

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	200.8	5.6	ug/L	4.0	0.5	1	10/23/23 08:54	10/19/23	
Calcium	200.8	605000	ug/L	100	30	5	10/23/23 09:14	10/19/23	
Cobalt	200.8	6.77	ug/L	0.10	0.05	5	10/23/23 09:14	10/19/23	
Magnesium	200.8	7810	ug/L	50	10	5	10/23/23 09:14	10/19/23	
Potassium	200.8	8310	ug/L	250	100	5	10/23/23 09:14	10/19/23	
Sodium	200.8	18900	ug/L	250	100	5	10/23/23 09:14	10/19/23	

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dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Water
Sample Name: SC-WS-MB-CEC
Lab Code: K2311691-004

Service Request: K2311691
Date Collected: 10/11/23 08:55
Date Received: 10/12/23 14:15

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	200.8	4.5	ug/L	4.0	0.5	1	10/23/23 08:57	10/19/23	
Calcium	200.8	390	ug/L	100	30	5	10/23/23 09:25	10/19/23	
Cobalt	200.8	ND U	ug/L	0.10	0.05	5	10/23/23 09:25	10/19/23	
Magnesium	200.8	ND U	ug/L	50	10	5	10/23/23 09:25	10/19/23	
Potassium	200.8	110 J	ug/L	250	100	5	10/23/23 09:25	10/19/23	
Sodium	200.8	270	ug/L	250	100	5	10/23/23 09:25	10/19/23	



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2318288-01

Service Request: K2311691
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	200.8	1.2 J	ug/L	4.0	0.5	1	10/23/23 08:47	10/19/23	
Calcium	200.8	ND U	ug/L	20	6	1	10/23/23 08:47	10/19/23	
Cobalt	200.8	ND U	ug/L	0.020	0.009	1	10/23/23 08:47	10/19/23	
Magnesium	200.8	ND U	ug/L	10	2	1	10/23/23 08:47	10/19/23	
Potassium	200.8	ND U	ug/L	50	20	1	10/23/23 08:47	10/19/23	
Sodium	200.8	ND U	ug/L	50	20	1	10/23/23 08:47	10/19/23	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task
02.0204
Sample Matrix: Water

Service Request: K2311691
Date Analyzed: 10/23/23

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2318288-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	101	100	101	85-115
Calcium	200.8	242	250	97	85-115
Cobalt	200.8	24.4	25.0	98	85-115
Magnesium	200.8	246	250	98	85-115
Potassium	200.8	244	250	98	85-115
Sodium	200.8	239	250	96	85-115



March 05, 2025

Revised Service Request No:K2500521.01

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper-Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory January 16, 2025
For your reference, these analyses have been assigned our service request number **K2500521**.

The report was revised to update the sample ID's as requested.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

REVISED

11:28 am, Mar 05, 2025

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
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Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2500521
Date Received: 01/16/2025

CASE NARRATIVE

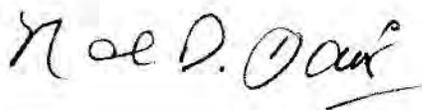
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 01/16/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 03/05/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-3-15-20-CEC	Lab ID: K2500521-001
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	7	J	3	20	ug/L	6020B
Calcium, Dissolved	46600		30	100	ug/L	6020B
Cobalt, Dissolved	308		0.05	0.20	ug/L	6020B
Magnesium, Dissolved	4480		10	50	ug/L	6020B
Potassium, Dissolved	4250		100	250	ug/L	6020B
Sodium, Dissolved	22000		100	500	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CEC	Lab ID: K2500521-002
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	10	J	3	20	ug/L	6020B
Calcium, Dissolved	518000		30	100	ug/L	6020B
Cobalt, Dissolved	19.4		0.05	0.20	ug/L	6020B
Magnesium, Dissolved	2190		10	50	ug/L	6020B
Potassium, Dissolved	7020		100	250	ug/L	6020B
Sodium, Dissolved	26200		100	500	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15	Lab ID: K2500521-003
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	5	J	3	20	ug/L	6020B
Calcium, Dissolved	208000		30	100	ug/L	6020B
Cobalt, Dissolved	1.83		0.05	0.20	ug/L	6020B
Magnesium, Dissolved	2550		10	50	ug/L	6020B
Potassium, Dissolved	5480		100	250	ug/L	6020B
Sodium, Dissolved	22500		100	500	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-DUP-CEC	Lab ID: K2500521-004
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	20	J	3	20	ug/L	6020B
Calcium, Dissolved	498000		30	100	ug/L	6020B
Cobalt, Dissolved	19.7		0.05	0.20	ug/L	6020B
Magnesium, Dissolved	2100		10	50	ug/L	6020B
Potassium, Dissolved	6870		100	250	ug/L	6020B
Sodium, Dissolved	25300		100	500	ug/L	6020B

CLIENT ID: SC-MB-CEC	Lab ID: K2500521-005
-----------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	6	J	3	20	ug/L	6020B
Calcium, Dissolved	80	J	30	100	ug/L	6020B
Cobalt, Dissolved	0.06	J	0.05	0.20	ug/L	6020B
Potassium, Dissolved	1110		100	250	ug/L	6020B
Sodium, Dissolved	21400		100	500	ug/L	6020B



Sample Receipt Information

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www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0206

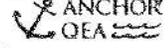
Service Request:K2500521

SAMPLE CROSS-REFERENCE

K2500521-001	CLFMNA-3-15-20-CEC	1/15/2025	0900
K2500521-002	CLFMNA-4-5-7.5-CEC	1/15/2025	0905
K2500521-003	CLFMNA-5-10-15	1/15/2025	0910
K2500521-004	CLFMNA-4-5-7.5-DUP-CEC	1/15/2025	0915
K2500521-005	SC-MB-CEC	1/15/2025	0920

Chain of Custody Record & Laboratory Analysis Request

K2500521

Laboratory Number: 503-972-5019					No. of Containers	Parameters										 Jason Stuckey 6720 S Macadam Ave Suite 300 Portland OR 97219 Comments/Preservation							
Date:	1/16/2025					Dissolved Metals (Al, Ca, Co, Mg, K, Na) via EPA 6020																	
Project Name:	Santee Cooper - Winyah and Cross CCR Support																						
Project Number:	232922-01.01 Task 02.0206																						
Project Manager:	Jason Stuckey																						
Phone Number:	(503)-924-6184																						
Shipment Method:	Currier Pickup																						
Line	Sample ID	Collection		Matrix	No. of Containers															Comments/Preservation			
		Date	Time																				
1	CLFMNA-3-15-20-CEC	1/15/2025	9:00	Aqueous	1	X																	
2	CLFMNA-4-5-7.5-CEC	1/15/2025	9:05	Aqueous	1	X																	
3	Secondary-1-10-15-CEC	1/15/2025	9:10	Aqueous	1	X																	
4	CLFMNA-4-5-7.5-DUP-CEC	1/15/2025	9:15	Aqueous	1	X																	
5	SC-MB-CEC	1/15/2025	9:20	Aqueous	1	X																	
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							

1 M ammonium acetate, 0.45-micron PES filtered, acidified to pH 2

Notes: Please contact Jason (503)-924-6184, jstuckey@anchorqea.com if > 10X dilution is required or if there are any questions about the sample composition. Standard 10-day TAT.

Relinquished by: <u>Erin Nordlund</u>	Company: Anchor QEA
Signature/Print Name: <u>[Signature]</u>	Date/Time: <u>1/16/25 08:34</u>
Relinquished by: <u>Diane Price</u>	Company: <u>ALS</u>
Signature/Print Name: <u>[Signature]</u>	Date/Time: <u>1/16/25 10:50</u>

Received by: <u>[Signature]</u>	<u>1/16/25 8:34</u>
Signature/Print Name: <u>[Signature]</u>	<u>ALS</u>
Received by: <u>[Signature]</u>	<u>ANDREW KECORTE</u>
Signature/Print Name: <u>[Signature]</u>	<u>01/16/2025 10:50</u>

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM Mad

Cooler Receipt and Preservation Form

Client Anchor OEA Service Request K25 00571

Received: 01/16/2025 Opened: 01/16/2025 By: AD Unloaded: 01/16/2025 By: AD

- 1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
- 2. Samples were received in: (circle) Cooler Box Envelope Other NA
- 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID	Out of temp Indicate with 'X'	PM Notified If out of temp	Tracking Number	Filed
-4.3		1K006	NA			NA	

- 4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
- 5. Were samples received within the method specified temperature ranges? NA Y N
If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

- 6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
- 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
- 8. Were samples received in good condition (unbroken) NA Y N
- 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
- 10. Did all sample labels and tags agree with custody papers? NA Y N
- 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
- 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y NO N
- 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
- 14. Was C12/Res negative? NA Y N
- 15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
- 16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
ALL	125	ml			X	HNO3	0.5ml	RE1-70-P	AD	1100
	5	15								

Notes, Discrepancies, Resolutions: _____



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdwlabservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request: K2500521

Sample Name: CLFMNA-3-15-20-CEC
Lab Code: K2500521-001
Sample Matrix: Water

Date Collected: 01/15/25
Date Received: 01/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CEC
Lab Code: K2500521-002
Sample Matrix: Water

Date Collected: 01/15/25
Date Received: 01/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15
Lab Code: K2500521-003
Sample Matrix: Water

Date Collected: 01/15/25
Date Received: 01/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-DUP-CEC
Lab Code: K2500521-004
Sample Matrix: Water

Date Collected: 01/15/25
Date Received: 01/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-CEC
Lab Code: K2500521-005
Sample Matrix: Water

Date Collected: 01/15/25
Date Received: 01/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER



Sample Results

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Metals

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ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-3-15-20-CEC
Lab Code: K2500521-001

Service Request: K2500521
Date Collected: 01/15/25 09:00
Date Received: 01/16/25 10:50

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	7 J	ug/L	20	3	5	01/28/25 17:16	01/24/25	
Calcium	6020B	46600	ug/L	100	30	5	01/28/25 17:16	01/24/25	
Cobalt	6020B	308	ug/L	0.20	0.05	5	01/28/25 17:16	01/24/25	
Magnesium	6020B	4480	ug/L	50	10	5	01/28/25 17:16	01/24/25	
Potassium	6020B	4250	ug/L	250	100	5	01/28/25 17:16	01/24/25	
Sodium	6020B	22000	ug/L	500	100	5	01/28/25 17:16	01/24/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CEC
Lab Code: K2500521-002

Service Request: K2500521
Date Collected: 01/15/25 09:05
Date Received: 01/16/25 10:50

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	10 J	ug/L	20	3	5	01/28/25 17:24	01/24/25	
Calcium	6020B	518000	ug/L	100	30	5	01/28/25 17:24	01/24/25	
Cobalt	6020B	19.4	ug/L	0.20	0.05	5	01/28/25 17:24	01/24/25	
Magnesium	6020B	2190	ug/L	50	10	5	01/28/25 17:24	01/24/25	
Potassium	6020B	7020	ug/L	250	100	5	01/28/25 17:24	01/24/25	
Sodium	6020B	26200	ug/L	500	100	5	01/28/25 17:24	01/24/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15
Lab Code: K2500521-003

Service Request: K2500521
Date Collected: 01/15/25 09:10
Date Received: 01/16/25 10:50

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	5 J	ug/L	20	3	5	01/28/25 17:26	01/24/25	
Calcium	6020B	208000	ug/L	100	30	5	01/28/25 17:26	01/24/25	
Cobalt	6020B	1.83	ug/L	0.20	0.05	5	01/28/25 17:26	01/24/25	
Magnesium	6020B	2550	ug/L	50	10	5	01/28/25 17:26	01/24/25	
Potassium	6020B	5480	ug/L	250	100	5	01/28/25 17:26	01/24/25	
Sodium	6020B	22500	ug/L	500	100	5	01/28/25 17:26	01/24/25	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-DUP-CEC
Lab Code: K2500521-004

Service Request: K2500521
Date Collected: 01/15/25 09:15
Date Received: 01/16/25 10:50

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	20 J	ug/L	20	3	5	01/28/25 17:27	01/24/25	
Calcium	6020B	498000	ug/L	100	30	5	01/28/25 17:27	01/24/25	
Cobalt	6020B	19.7	ug/L	0.20	0.05	5	01/28/25 17:27	01/24/25	
Magnesium	6020B	2100	ug/L	50	10	5	01/28/25 17:27	01/24/25	
Potassium	6020B	6870	ug/L	250	100	5	01/28/25 17:27	01/24/25	
Sodium	6020B	25300	ug/L	500	100	5	01/28/25 17:27	01/24/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: SC-MB-CEC
Lab Code: K2500521-005

Service Request: K2500521
Date Collected: 01/15/25 09:20
Date Received: 01/16/25 10:50

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	6 J	ug/L	20	3	5	01/28/25 17:29	01/24/25	
Calcium	6020B	80 J	ug/L	100	30	5	01/28/25 17:29	01/24/25	
Cobalt	6020B	0.06 J	ug/L	0.20	0.05	5	01/28/25 17:29	01/24/25	
Magnesium	6020B	ND U	ug/L	50	10	5	01/28/25 17:29	01/24/25	
Potassium	6020B	1110	ug/L	250	100	5	01/28/25 17:29	01/24/25	
Sodium	6020B	21400	ug/L	500	100	5	01/28/25 17:29	01/24/25	



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2500838-01

Service Request: K2500521
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	1.2 J	ug/L	4.0	0.5	1	01/28/25 16:46		01/24/25	
Calcium	6020B	ND U	ug/L	20	6	1	01/28/25 16:46		01/24/25	
Cobalt	6020B	ND U	ug/L	0.040	0.009	1	01/28/25 16:46		01/24/25	
Magnesium	6020B	ND U	ug/L	10	2	1	01/28/25 16:46		01/24/25	
Potassium	6020B	ND U	ug/L	50	20	1	01/28/25 16:46		01/24/25	
Sodium	6020B	ND U	ug/L	100	20	1	01/28/25 16:46		01/24/25	

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dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2500521
Date Collected: 01/15/25
Date Received: 01/16/25
Date Analyzed: 01/28/25
Date Extracted: 01/24/25

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-CEC
Lab Code: K2500521-001
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2500838-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	7 J	101	100	94	75-125
Calcium	46600	54700	10300	79 #	75-125
Cobalt	308	337	25.0	113 #	75-125
Magnesium	4480	14600	10300	99	75-125
Potassium	4250	15100	10300	106	75-125
Sodium	22000	32500	10300	103	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2500521
Date Collected: 01/15/25
Date Received: 01/16/25
Date Analyzed: 01/28/25

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-CEC
Lab Code: K2500521-001

Units: ug/L
Basis: NA

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample Result (KQ2500838-03), Average, RPD, RPD Limit. Rows include Aluminum, Calcium, Cobalt, Magnesium, Potassium, and Sodium.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task
02.0206
Sample Matrix: Water

Service Request: K2500521
Date Analyzed: 01/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2500838-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6020B	109	100	109	80-120
Calcium	6020B	10700	10300	104	80-120
Cobalt	6020B	26.2	25.0	105	80-120
Magnesium	6020B	10600	10300	103	80-120
Potassium	6020B	11100	10300	108	80-120
Sodium	6020B	10600	10300	104	80-120



August 30, 2023

Service Request No:K2309159

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory August 15, 2023
For your reference, these analyses have been assigned our service request number **K2309159**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309159
Date Received: 08/15/2023

CASE NARRATIVE

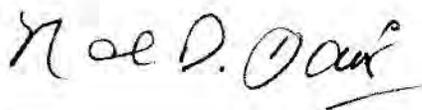
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/15/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 08/30/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SC-WS-POZ-4-SSE-F1		Lab ID: K2309159-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	14.4		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-6-SSE-F1		Lab ID: K2309159-002				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.51		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-7-SSE-F1		Lab ID: K2309159-003				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	3.90		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-8-SSE-F1		Lab ID: K2309159-004				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.59		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-8-DUP-SSE-F1		Lab ID: K2309159-005				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.57		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-4-SSE-F2		Lab ID: K2309159-007				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	777		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-6-SSE-F2		Lab ID: K2309159-008				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	55.3		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-7-SSE-F2		Lab ID: K2309159-009				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	38.8		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-8-SSE-F2		Lab ID: K2309159-010				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	39.8		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-8-DUP-SSE-F2		Lab ID: K2309159-011				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	36.2		0.05	0.20	ug/L	200.8
CLIENT ID: SC-WS-POZ-MB-SSE-F2		Lab ID: K2309159-012				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.08	J	0.05	0.20	ug/L	200.8



Sample Receipt Information

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Service Request:K2309159

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2309159-001	SC-WS-POZ-4-SSE-F1	8/7/2023	1500
K2309159-002	SC-WS-POZ-6-SSE-F1	8/7/2023	1510
K2309159-003	SC-WS-POZ-7-SSE-F1	8/7/2023	1520
K2309159-004	SC-WS-POZ-8-SSE-F1	8/7/2023	1530
K2309159-005	SC-WS-POZ-8-DUP-SSE-F1	8/7/2023	1540
K2309159-006	SC-WS-POZ-MB-SSE-F1	8/7/2023	1550
K2309159-007	SC-WS-POZ-4-SSE-F2	8/9/2023	1500
K2309159-008	SC-WS-POZ-6-SSE-F2	8/9/2023	1510
K2309159-009	SC-WS-POZ-7-SSE-F2	8/9/2023	1520
K2309159-010	SC-WS-POZ-8-SSE-F2	8/9/2023	1530
K2309159-011	SC-WS-POZ-8-DUP-SSE-F2	8/9/2023	1540
K2309159-012	SC-WS-POZ-MB-SSE-F2	8/9/2023	1550

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K2309159
 Received: 8-15-23 Opened: 8-15-23 By: DS Unloaded: 8-15-23 By: DS

1. Samples were received via? **USPS** *Fed Ex* **UPS** *DHL* **PDX** Courier *Hand Delivered*
2. Samples were received in: (circle) Cooler *Box* *Envelope* *Other* NA
3. Were custody seals on coolers? **NA** **Y** N If yes, how many and where? _____
 If present, were custody seals intact? **Y** N If present, were they signed and dated? **Y** N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
	<u>3.9</u>	<u>IDOG</u>					

4. Was a Temperature Blank present in cooler? **NA** **Y** N If yes, notate the temperature in the appropriate column above:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? **NA** Y **N**
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA **Y** **N**
- If applicable, tissue samples were received: **Frozen** **Partially Thawed** **Thawed**
6. Packing material: **Inserts** **Baggies** **Bubble Wrap** **Gel Packs** Wet Ice **Dry Ice** **Sleeves** _____
7. Were custody papers properly filled out (ink, signed, etc.)? **NA** Y **N**
8. Were samples received in good condition (unbroken) **NA** Y **N**
9. Were all sample labels complete (ie, analysis, preservation, etc.)? **NA** Y **N**
10. Did all sample labels and tags agree with custody papers? **NA** Y **N**
11. Were appropriate bottles/containers and volumes received for the tests indicated? **NA** Y **N**
12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA **Y** **N**
13. Were VOA vials received without headspace? Indicate in the table below. NA **Y** **N**
14. Was C12/Res negative? NA **Y** **N**
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA **Y** **N**
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA **Y** **N** Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not pH due to limited volume



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2309159

Sample Name: SC-WS-POZ-4-SSE-F1
Lab Code: K2309159-001
Sample Matrix: Water

Date Collected: 08/7/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-6-SSE-F1
Lab Code: K2309159-002
Sample Matrix: Water

Date Collected: 08/7/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-7-SSE-F1
Lab Code: K2309159-003
Sample Matrix: Water

Date Collected: 08/7/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-SSE-F1
Lab Code: K2309159-004
Sample Matrix: Water

Date Collected: 08/7/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-DUP-SSE-F1
Lab Code: K2309159-005
Sample Matrix: Water

Date Collected: 08/7/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2309159

Sample Name: SC-WS-POZ-MB-SSE-F1
Lab Code: K2309159-006
Sample Matrix: Water

Date Collected: 08/7/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-4-SSE-F2
Lab Code: K2309159-007
Sample Matrix: Water

Date Collected: 08/9/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-6-SSE-F2
Lab Code: K2309159-008
Sample Matrix: Water

Date Collected: 08/9/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-7-SSE-F2
Lab Code: K2309159-009
Sample Matrix: Water

Date Collected: 08/9/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-SSE-F2
Lab Code: K2309159-010
Sample Matrix: Water

Date Collected: 08/9/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2309159

Sample Name: SC-WS-POZ-8-DUP-SSE-F2
Lab Code: K2309159-011
Sample Matrix: Water

Date Collected: 08/9/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
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Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-MB-SSE-F2
Lab Code: K2309159-012
Sample Matrix: Water

Date Collected: 08/9/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
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Analyzed By
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Sample Results

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Metals

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-4-SSE-F1
Lab Code: K2309159-001

Service Request: K2309159
Date Collected: 08/07/23 15:00
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	14.4	ug/L	0.20	0.05	1	08/29/23 16:46	08/23/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-6-SSE-F1
Lab Code: K2309159-002

Service Request: K2309159
Date Collected: 08/07/23 15:10
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.51	ug/L	0.20	0.05	1	08/29/23 16:51	08/23/23	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-7-SSE-F1
Lab Code: K2309159-003

Service Request: K2309159
Date Collected: 08/07/23 15:20
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	3.90	ug/L	0.20	0.05	1	08/29/23 16:53	08/23/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-SSE-F1
Lab Code: K2309159-004

Service Request: K2309159
Date Collected: 08/07/23 15:30
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.59	ug/L	0.20	0.05	1	08/29/23 16:54	08/23/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-DUP-SSE-F1
Lab Code: K2309159-005

Service Request: K2309159
Date Collected: 08/07/23 15:40
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.57	ug/L	0.20	0.05	1	08/29/23 16:56	08/23/23	

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Analytical Report

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Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-MB-SSE-F1
Lab Code: K2309159-006

Service Request: K2309159
Date Collected: 08/07/23 15:50
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	ND U	ug/L	0.20	0.05	1	08/29/23 16:58	08/23/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-4-SSE-F2
Lab Code: K2309159-007

Service Request: K2309159
Date Collected: 08/09/23 15:00
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	777	ug/L	0.20	0.05	1	08/29/23 17:03	08/23/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-6-SSE-F2
Lab Code: K2309159-008

Service Request: K2309159
Date Collected: 08/09/23 15:10
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	55.3	ug/L	0.20	0.05	1	08/29/23 17:08	08/23/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-7-SSE-F2
Lab Code: K2309159-009

Service Request: K2309159
Date Collected: 08/09/23 15:20
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	38.8	ug/L	0.20	0.05	1	08/29/23 17:10	08/23/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-SSE-F2
Lab Code: K2309159-010

Service Request: K2309159
Date Collected: 08/09/23 15:30
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	39.8	ug/L	0.20	0.05	1	08/29/23 17:12	08/23/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-DUP-SSE-F2
Lab Code: K2309159-011

Service Request: K2309159
Date Collected: 08/09/23 15:40
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	36.2	ug/L	0.20	0.05	1	08/29/23 17:14	08/23/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-MB-SSE-F2
Lab Code: K2309159-012

Service Request: K2309159
Date Collected: 08/09/23 15:50
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.08 J	ug/L	0.20	0.05	1	08/29/23 17:15	08/23/23	



QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2314497-01

Service Request: K2309159
Date Collected: NA
Date Received: NA
Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	08/29/23 16:42	08/23/23	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309159
Date Collected: 08/07/23
Date Received: 08/15/23
Date Analyzed: 08/29/23
Date Extracted: 08/23/23

Matrix Spike Summary
Dissolved Metals

Sample Name: SC-WS-POZ-4-SSE-F1
Lab Code: K2309159-001
Analysis Method: 200.8
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2314497-04

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Cobalt	14.4	131	125	93	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309159
Date Collected: 08/09/23
Date Received: 08/15/23
Date Analyzed: 08/29/23
Date Extracted: 08/23/23

Matrix Spike Summary
Dissolved Metals

Sample Name: SC-WS-POZ-4-SSE-F2
Lab Code: K2309159-007
Analysis Method: 200.8
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2314497-06

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Cobalt	777	888	125	89 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309159
Date Collected: 08/07/23
Date Received: 08/15/23
Date Analyzed: 08/29/23

Replicate Sample Summary
Dissolved Metals

Sample Name: SC-WS-POZ-4-SSE-F1
Lab Code: K2309159-001

Units: ug/L
Basis: NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2314497-03			
Cobalt	200.8	0.20	0.05	14.4	14.7	14.6	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309159
Date Collected: 08/09/23
Date Received: 08/15/23
Date Analyzed: 08/29/23

Replicate Sample Summary
Dissolved Metals

Sample Name: SC-WS-POZ-4-SSE-F2
Lab Code: K2309159-007

Units: ug/L
Basis: NA

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample KQ2314497-05 Result, Average, RPD, RPD Limit. Row 1: Cobalt, 200.8, 0.20, 0.05, 777, 768, 773, 1, 20.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309159
Date Analyzed: 08/29/23

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2314497-02

<u>Analyte Name</u>	<u>Analytical Method</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Cobalt	200.8	23.6	25.0	94	85-115



August 30, 2023

Service Request No:K2309163

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory August 15, 2023
For your reference, these analyses have been assigned our service request number **K2309163**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309163
Date Received: 08/15/2023

CASE NARRATIVE

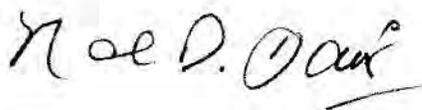
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 08/15/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 08/30/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SC-WS-POZ-4-SSE-F3	Lab ID: K2309163-001
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	132		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	1130		0.009	0.040	ug/L	200.8
Iron, Dissolved	2190		0.3	2.0	ug/L	200.8
Manganese, Dissolved	7250		0.04	0.20	ug/L	200.8

CLIENT ID: SC-WS-POZ-6-SSE-F3	Lab ID: K2309163-002
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	5.0		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	22.1		0.009	0.040	ug/L	200.8
Iron, Dissolved	16.4		0.3	2.0	ug/L	200.8
Manganese, Dissolved	596		0.04	0.20	ug/L	200.8

CLIENT ID: SC-WS-POZ-7-SSE-F3	Lab ID: K2309163-003
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	1650		10	80	ug/L	200.8
Cobalt, Dissolved	2030		0.009	0.040	ug/L	200.8
Iron, Dissolved	607		0.3	2.0	ug/L	200.8
Manganese, Dissolved	68500		0.8	4.0	ug/L	200.8

CLIENT ID: SC-WS-POZ-8-SSE-F3	Lab ID: K2309163-004
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	1.8	J	0.5	4.0	ug/L	200.8
Cobalt, Dissolved	10.6		0.009	0.040	ug/L	200.8
Iron, Dissolved	3.1		0.3	2.0	ug/L	200.8
Manganese, Dissolved	1210		0.04	0.20	ug/L	200.8

CLIENT ID: SC-WS-POZ-8-DUP-SSE-F3	Lab ID: K2309163-005
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	2.4	J	0.5	4.0	ug/L	200.8
Cobalt, Dissolved	11.0		0.009	0.040	ug/L	200.8
Iron, Dissolved	4.2		0.3	2.0	ug/L	200.8
Manganese, Dissolved	1220		0.04	0.20	ug/L	200.8

CLIENT ID: SC-WS-POZ-MB-SSE-F3	Lab ID: K2309163-006
---------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	5.6		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	0.019	J	0.009	0.040	ug/L	200.8
Iron, Dissolved	10.0		0.3	2.0	ug/L	200.8
Manganese, Dissolved	64.3		0.04	0.20	ug/L	200.8

CLIENT ID: SC-WS-POZ-4-SSE-F4	Lab ID: K2309163-007
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	44400		10	80	ug/L	200.8



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SC-WS-POZ-4-SSE-F4	Lab ID: K2309163-007
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	672		0.18	0.80	ug/L	200.8
Iron, Dissolved	137000		6	40	ug/L	200.8
Manganese, Dissolved	2350		0.8	4.0	ug/L	200.8

CLIENT ID: SC-WS-POZ-6-SSE-F4	Lab ID: K2309163-008
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	27900		10	80	ug/L	200.8
Cobalt, Dissolved	180		0.18	0.80	ug/L	200.8
Iron, Dissolved	68500		6	40	ug/L	200.8
Manganese, Dissolved	1900		0.8	4.0	ug/L	200.8

CLIENT ID: SC-WS-POZ-7-SSE-F4	Lab ID: K2309163-009
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	95300		10	80	ug/L	200.8
Cobalt, Dissolved	834		0.18	0.80	ug/L	200.8
Iron, Dissolved	92600		6	40	ug/L	200.8
Manganese, Dissolved	23300		0.8	4.0	ug/L	200.8

CLIENT ID: SC-WS-POZ-8-SSE-F4	Lab ID: K2309163-010
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	9280		10	80	ug/L	200.8
Cobalt, Dissolved	120		0.18	0.80	ug/L	200.8
Iron, Dissolved	88600		6	40	ug/L	200.8
Manganese, Dissolved	4840		0.8	4.0	ug/L	200.8

CLIENT ID: SC-WS-POZ-8-DUP-SSE-F4	Lab ID: K2309163-011
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	9330		10	80	ug/L	200.8
Cobalt, Dissolved	122		0.18	0.80	ug/L	200.8
Iron, Dissolved	87900		6	40	ug/L	200.8
Manganese, Dissolved	4900		0.8	4.0	ug/L	200.8

CLIENT ID: SC-WS-POZ-MB-SSE-F4	Lab ID: K2309163-012
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	33	J	10	80	ug/L	200.8
Cobalt, Dissolved	18.9		0.18	0.80	ug/L	200.8
Iron, Dissolved	17	J	6	40	ug/L	200.8
Manganese, Dissolved	1.4	J	0.8	4.0	ug/L	200.8



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support

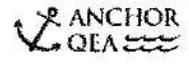
Service Request:K2309163

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2309163-001	SC-WS-POZ-4-SSE-F3	8/10/2023	1500
K2309163-002	SC-WS-POZ-6-SSE-F3	8/10/2023	1510
K2309163-003	SC-WS-POZ-7-SSE-F3	8/10/2023	1520
K2309163-004	SC-WS-POZ-8-SSE-F3	8/10/2023	1530
K2309163-005	SC-WS-POZ-8-DUP-SSE-F3	8/10/2023	1540
K2309163-006	SC-WS-POZ-MB-SSE-F3	8/10/2023	1550
K2309163-007	SC-WS-POZ-4-SSE-F4	8/14/2023	1500
K2309163-008	SC-WS-POZ-6-SSE-F4	8/14/2023	1510
K2309163-009	SC-WS-POZ-7-SSE-F4	8/14/2023	1520
K2309163-010	SC-WS-POZ-8-SSE-F4	8/14/2023	1530
K2309163-011	SC-WS-POZ-8-DUP-SSE-F4	8/14/2023	1540
K2309163-012	SC-WS-POZ-MB-SSE-F4	8/14/2023	1550

K2304163

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019					No. of Containers Dissolved Metals (Al, Co, Fe, Mn) by EPA 200.8	Parameters										 Masa Kanematsu 6720 SW Macadam Ave Suite 300 Portland OR 97219					
Date:	8/15/2023																				
Project Name:	Santee Cooper - Winyah and Cross CCR Support																				
Project Number:	232922-01.01 Task 02.0204																				
Project Manager:	Jason Stuckey																				
Phone Number:	(503)924-6184																				
Shipment Method:	ALS Courier														Comments/Preservation 0.067 HNO3preserved; Contains 0.67 M hydroxylamine hydrochloride; 0.45 µm filtered HNO3preserved; Contains 10.67 N HNO3; 0.45 µm filtered						
Line	Field Sample ID	Collection		Matrix																	
		Date	Time																		
1	SC-WS-POZ-4-SSE-F3	8/10/2023	15:00	Aqueous	1	X															
2	SC-WS-POZ-6-SSE-F3	8/10/2023	15:10	Aqueous	1	X															
3	SC-WS-POZ-7-SSE-F3	8/10/2023	15:20	Aqueous	1	X															
4	SC-WS-POZ-8-SSE-F3	8/10/2023	15:30	Aqueous	1	X															
5	SC-WS-POZ-8-DUP-SSE-F3	8/10/2023	15:40	Aqueous	1	X															
6	SC-WS-POZ-MB-SSE-F3	8/10/2023	15:50	Aqueous	1	X															
7	SC-WS-POZ-4-SSE-F4	8/14/2023	15:00	Aqueous	1	X															
8	SC-WS-POZ-6-SSE-F4	8/14/2023	15:10	Aqueous	1	X															
9	SC-WS-POZ-7-SSE-F4	8/14/2023	15:20	Aqueous	1	X															
10	SC-WS-POZ-8-SSE-F4	8/14/2023	15:30	Aqueous	1	X															
11	SC-WS-POZ-8-DUP-SSE-F4	8/14/2023	15:40	Aqueous	1	X															
12	SC-WS-POZ-MB-SSE-F4	8/14/2023	15:50	Aqueous	1	X															
13																					
14																					
15																					

Notes: Please Contact Jason Stuckey (jstuckey@anchorqea.com) if the samples need to be diluted > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. Please analyze on a 10-day TAT if possible.

Relinquished by:	Company:
Gillian Williams	Anchor QEA
Signature/Print Name:	Date/Time:
<i>Gillian Williams</i>	8/15/2023 11:23
Relinquished by:	Company:
Greg Rich	ALS
Signature/Print Name:	Date/Time:
<i>Greg Rich</i>	8-15-23 1230 PM

Received by:
<i>Greg Rich</i>
Signature/Print Name:
Greg Rich 8-15-23 1125
Received by:
<i>Daniel Swaff</i>
Signature/Print Name:
Daniel Swaff 8-15-23 1505

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Cooler Receipt and Preservation Form

Client Anchor QEA

Service Request K2309163

Received: 8-15-23 Opened: 8-15-23 By: DR Unloaded: 8-15-23 By: DR

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified if out of temp	Tracking Number NA	Filed
	3.9	1206					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N
 If applicable, tissue samples were received: Frozen Partially Thawed Thawed
6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
13. Were VOA vials received without headspace? Indicate in the table below NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not pH due to limited volume



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2309163

Sample Name: SC-WS-POZ-4-SSE-F3
Lab Code: K2309163-001
Sample Matrix: Water

Date Collected: 08/10/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-6-SSE-F3
Lab Code: K2309163-002
Sample Matrix: Water

Date Collected: 08/10/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-7-SSE-F3
Lab Code: K2309163-003
Sample Matrix: Water

Date Collected: 08/10/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-SSE-F3
Lab Code: K2309163-004
Sample Matrix: Water

Date Collected: 08/10/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-DUP-SSE-F3
Lab Code: K2309163-005
Sample Matrix: Water

Date Collected: 08/10/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2309163

Sample Name: SC-WS-POZ-MB-SSE-F3
Lab Code: K2309163-006
Sample Matrix: Water

Date Collected: 08/10/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-4-SSE-F4
Lab Code: K2309163-007
Sample Matrix: Water

Date Collected: 08/14/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-6-SSE-F4
Lab Code: K2309163-008
Sample Matrix: Water

Date Collected: 08/14/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-7-SSE-F4
Lab Code: K2309163-009
Sample Matrix: Water

Date Collected: 08/14/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-SSE-F4
Lab Code: K2309163-010
Sample Matrix: Water

Date Collected: 08/14/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2309163

Sample Name: SC-WS-POZ-8-DUP-SSE-F4
Lab Code: K2309163-011
Sample Matrix: Water

Date Collected: 08/14/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
ABOYER

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-MB-SSE-F4
Lab Code: K2309163-012
Sample Matrix: Water

Date Collected: 08/14/23
Date Received: 08/15/23

Analysis Method
200.8

Extracted/Digested By
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Analyzed By
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Sample Results

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Metals

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-4-SSE-F3
Lab Code: K2309163-001

Service Request: K2309163
Date Collected: 08/10/23 15:00
Date Received: 08/15/23 15:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	132	ug/L	4.0	0.5	1	08/29/23 15:33	08/22/23	
Cobalt	200.8	1130	ug/L	0.040	0.009	1	08/29/23 15:33	08/22/23	
Iron	200.8	2190	ug/L	2.0	0.3	1	08/29/23 15:33	08/22/23	
Manganese	200.8	7250	ug/L	0.20	0.04	1	08/29/23 15:33	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-6-SSE-F3
Lab Code: K2309163-002

Service Request: K2309163
Date Collected: 08/10/23 15:10
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	5.0	ug/L	4.0	0.5	1	08/29/23 15:54	08/22/23	
Cobalt	200.8	22.1	ug/L	0.040	0.009	1	08/29/23 15:54	08/22/23	
Iron	200.8	16.4	ug/L	2.0	0.3	1	08/29/23 15:54	08/22/23	
Manganese	200.8	596	ug/L	0.20	0.04	1	08/29/23 15:54	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-7-SSE-F3
Lab Code: K2309163-003

Service Request: K2309163
Date Collected: 08/10/23 15:20
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	1650	ug/L	80	10	20	08/29/23 15:52	08/22/23	
Cobalt	200.8	2030	ug/L	0.040	0.009	1	08/29/23 15:37	08/22/23	
Iron	200.8	607	ug/L	2.0	0.3	1	08/29/23 15:37	08/22/23	
Manganese	200.8	68500	ug/L	4.0	0.8	20	08/29/23 15:52	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-SSE-F3
Lab Code: K2309163-004

Service Request: K2309163
Date Collected: 08/10/23 15:30
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	1.8 J	ug/L	4.0	0.5	1	08/29/23 15:43	08/22/23	
Cobalt	200.8	10.6	ug/L	0.040	0.009	1	08/29/23 15:43	08/22/23	
Iron	200.8	3.1	ug/L	2.0	0.3	1	08/29/23 15:43	08/22/23	
Manganese	200.8	1210	ug/L	0.20	0.04	1	08/29/23 15:43	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-DUP-SSE-F3
Lab Code: K2309163-005

Service Request: K2309163
Date Collected: 08/10/23 15:40
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	2.4 J	ug/L	4.0	0.5	1	08/29/23 15:44	08/22/23	
Cobalt	200.8	11.0	ug/L	0.040	0.009	1	08/29/23 15:44	08/22/23	
Iron	200.8	4.2	ug/L	2.0	0.3	1	08/29/23 15:44	08/22/23	
Manganese	200.8	1220	ug/L	0.20	0.04	1	08/29/23 15:44	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-MB-SSE-F3
Lab Code: K2309163-006

Service Request: K2309163
Date Collected: 08/10/23 15:50
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	5.6	ug/L	4.0	0.5	1	08/29/23 15:46	08/22/23	
Cobalt	200.8	0.019 J	ug/L	0.040	0.009	1	08/29/23 15:46	08/22/23	
Iron	200.8	10.0	ug/L	2.0	0.3	1	08/29/23 15:46	08/22/23	
Manganese	200.8	64.3	ug/L	0.20	0.04	1	08/29/23 15:46	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-4-SSE-F4
Lab Code: K2309163-007

Service Request: K2309163
Date Collected: 08/14/23 15:00
Date Received: 08/15/23 15:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	44400	ug/L	80	10	1	08/29/23 16:07	08/22/23	
Cobalt	200.8	672	ug/L	0.80	0.18	1	08/29/23 16:07	08/22/23	
Iron	200.8	137000	ug/L	40	6	1	08/29/23 16:07	08/22/23	
Manganese	200.8	2350	ug/L	4.0	0.8	1	08/29/23 16:07	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-6-SSE-F4
Lab Code: K2309163-008

Service Request: K2309163
Date Collected: 08/14/23 15:10
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	27900	ug/L	80	10	1	08/29/23 16:12	08/22/23	
Cobalt	200.8	180	ug/L	0.80	0.18	1	08/29/23 16:12	08/22/23	
Iron	200.8	68500	ug/L	40	6	1	08/29/23 16:12	08/22/23	
Manganese	200.8	1900	ug/L	4.0	0.8	1	08/29/23 16:12	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-7-SSE-F4
Lab Code: K2309163-009

Service Request: K2309163
Date Collected: 08/14/23 15:20
Date Received: 08/15/23 15:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	95300	ug/L	80	10	1	08/29/23 16:14	08/22/23	
Cobalt	200.8	834	ug/L	0.80	0.18	1	08/29/23 16:14	08/22/23	
Iron	200.8	92600	ug/L	40	6	1	08/29/23 16:14	08/22/23	
Manganese	200.8	23300	ug/L	4.0	0.8	1	08/29/23 16:14	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-SSE-F4
Lab Code: K2309163-010

Service Request: K2309163
Date Collected: 08/14/23 15:30
Date Received: 08/15/23 15:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	9280	ug/L	80	10	1	08/29/23 16:15	08/22/23	
Cobalt	200.8	120	ug/L	0.80	0.18	1	08/29/23 16:15	08/22/23	
Iron	200.8	88600	ug/L	40	6	1	08/29/23 16:15	08/22/23	
Manganese	200.8	4840	ug/L	4.0	0.8	1	08/29/23 16:15	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-8-DUP-SSE-F4
Lab Code: K2309163-011

Service Request: K2309163
Date Collected: 08/14/23 15:40
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	9330	ug/L	80	10	1	08/29/23 16:17	08/22/23	
Cobalt	200.8	122	ug/L	0.80	0.18	1	08/29/23 16:17	08/22/23	
Iron	200.8	87900	ug/L	40	6	1	08/29/23 16:17	08/22/23	
Manganese	200.8	4900	ug/L	4.0	0.8	1	08/29/23 16:17	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: SC-WS-POZ-MB-SSE-F4
Lab Code: K2309163-012

Service Request: K2309163
Date Collected: 08/14/23 15:50
Date Received: 08/15/23 15:05
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	33 J	ug/L	80	10	1	08/29/23 16:19	08/22/23	
Cobalt	200.8	18.9	ug/L	0.80	0.18	1	08/29/23 16:19	08/22/23	
Iron	200.8	17 J	ug/L	40	6	1	08/29/23 16:19	08/22/23	
Manganese	200.8	1.4 J	ug/L	4.0	0.8	1	08/29/23 16:19	08/22/23	



QC Summary Forms

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Metals

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2314498-01

Service Request: K2309163
Date Collected: NA
Date Received: NA
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	0.9 J	ug/L	4.0	0.5	1	08/29/23 16:03	08/22/23	
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	08/29/23 16:03	08/22/23	
Iron	200.8	ND U	ug/L	2.0	0.3	1	08/29/23 16:03	08/22/23	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	08/29/23 16:03	08/22/23	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2314499-01

Service Request: K2309163
Date Collected: NA
Date Received: NA
Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	0.9 J	ug/L	4.0	0.5	1	08/29/23 14:10	08/22/23	
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	08/29/23 14:10	08/22/23	
Iron	200.8	ND U	ug/L	2.0	0.3	1	08/29/23 14:10	08/22/23	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	08/29/23 14:10	08/22/23	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309163
Date Collected: 08/14/23
Date Received: 08/15/23
Date Analyzed: 08/29/23
Date Extracted: 08/22/23

Matrix Spike Summary
Dissolved Metals

Sample Name: SC-WS-POZ-4-SSE-F4
Lab Code: K2309163-007
Analysis Method: 200.8
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2314498-04

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Aluminum	44400	47800	2000	174 #	70-130
Cobalt	672	1130	500	91	70-130
Iron	137000	135000	1000	-211 #	70-130
Manganese	2350	2790	500	88 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309163
Date Collected: 08/14/23
Date Received: 08/15/23
Date Analyzed: 08/29/23

Replicate Sample Summary
Dissolved Metals

Sample Name: SC-WS-POZ-4-SSE-F4
Lab Code: K2309163-007

Units: ug/L
Basis: NA

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample KQ2314498-03 Result, Average, RPD, RPD Limit. Rows include Aluminum, Cobalt, Iron, and Manganese.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309163
Date Analyzed: 08/29/23

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2314498-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	102	100	102	85-115
Cobalt	200.8	24.0	25.0	96	85-115
Iron	200.8	48.3	50.0	97	85-115
Manganese	200.8	25.2	25.0	101	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2309163
Date Analyzed: 08/29/23

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2314499-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	98.2	100	98	85-115
Cobalt	200.8	23.4	25.0	93	85-115
Iron	200.8	47.9	50.0	96	85-115
Manganese	200.8	24.3	25.0	97	85-115



September 11, 2023

Service Request No:K2309566

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Santee Cooper-Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory August 25, 2023
For your reference, these analyses have been assigned our service request number **K2309566**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support
Sample Matrix: Soil

Service Request: K2309566
Date Received: 08/25/2023

CASE NARRATIVE

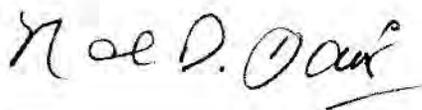
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five soil samples were received for analysis at ALS Environmental on 08/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 09/11/2023



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SC-WS-POZ-4-SSE-F5	Lab ID: K2309566-001
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	10300		0.6	1.9	mg/Kg	200.8
Cobalt	14.2		0.006	0.019	mg/Kg	200.8
Iron	8050		0.38	0.95	mg/Kg	200.8
Manganese	41.0		0.019	0.047	mg/Kg	200.8

CLIENT ID: SC-WS-POZ-6-SSE-F5	Lab ID: K2309566-002
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	14300		0.8	2.6	mg/Kg	200.8
Cobalt	11.3		0.008	0.026	mg/Kg	200.8
Iron	21800		0.5	1.3	mg/Kg	200.8
Manganese	82.5		0.026	0.065	mg/Kg	200.8

CLIENT ID: SC-WS-POZ-7-SSE-F5	Lab ID: K2309566-003
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	14100		0.6	2.0	mg/Kg	200.8
Cobalt	59.5		0.006	0.020	mg/Kg	200.8
Iron	89200		8	20	mg/Kg	200.8
Manganese	642		0.020	0.050	mg/Kg	200.8

CLIENT ID: SC-WS-POZ-8-SSE-F5	Lab ID: K2309566-004
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	11300		2.3	7.7	mg/Kg	200.8
Cobalt	10.1		0.023	0.077	mg/Kg	200.8
Iron	21500		1.5	3.8	mg/Kg	200.8
Manganese	27.3		0.08	0.19	mg/Kg	200.8

CLIENT ID: SC-WS-POZ-8-DUP-SSE-F5	Lab ID: K2309566-005
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	10200		2.0	6.6	mg/Kg	200.8
Cobalt	8.83		0.020	0.066	mg/Kg	200.8
Iron	18500		1.3	3.3	mg/Kg	200.8
Manganese	22.4		0.07	0.17	mg/Kg	200.8



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0204

Service Request:K2309566

SAMPLE CROSS-REFERENCE

K2309566-001	SC-WS-POZ-4-SSE-F5	8/18/2023	0900
K2309566-002	SC-WS-POZ-6-SSE-F5	8/18/2023	0910
K2309566-003	SC-WS-POZ-7-SSE-F5	8/18/2023	0920
K2309566-004	SC-WS-POZ-8-SSE-F5	8/18/2023	0930
K2309566-005	SC-WS-POZ-8-DUP-SSE-F5	8/18/2023	0940

PM MH

Cooler Receipt and Preservation Form

095664

Client Anchor

Service Request K23

Received: 8/25/23 Opened: 8/25/23 By: HS Unloaded: 8/25/23 By: HS

- 1. Samples were received via? **USPS** Fed Ex **UPS** **DHL** **PDX** Courier **Hand Delivered**
- 2. Samples were received in: (circle) Cooler **Box** **Envelope** **Other** **NA**
- 3. Were custody seals on coolers? **NA** **Y** **N** If yes, how many and where? _____
 If present, were custody seals intact? **Y** **N** If present, were they signed and dated? **Y** **N**

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with 'X'	PM Notified If out of temp	Tracking Number NA	Filed
8.0	14.5	1206					

- 4. Was a Temperature Blank present in cooler? **NA** **Y** **N** If yes, note the temperature in the appropriate column above:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
- 5. Were samples received within the method specified temperature ranges? **NA** **Y** **N**
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. **NA** **Y** **N**
- If applicable, tissue samples were received: **Frozen** **Partially Thawed** **Thawed**
- 6. Packing material: **Inserts** **Baggies** **Bubble Wrap** **Gel Packs** **Wet Ice** **Dry Ice** **Sleeves**
- 7. Were custody papers properly filled out (ink, signed, etc.)? **NA** **Y** **N**
- 8. Were samples received in good condition (unbroken) **NA** **Y** **N**
- 9. Were all sample labels complete (ie, analysis, preservation, etc.)? **NA** **Y** **N**
- 10. Did all sample labels and tags agree with custody papers? **NA** **Y** **N**
- 11. Were appropriate bottles/containers and volumes received for the tests indicated? **NA** **Y** **N**
- 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below **NA** **Y** **N**
- 13. Were VOA vials received without headspace? Indicate in the table below **NA** **Y** **N**
- 14. Was C12/Res negative? **NA** **Y** **N**
- 15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM **NA** **Y** **N**
- 16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? **NA** **Y** **N** Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204

Service Request: K2309566

Sample Name: SC-WS-POZ-4-SSE-F5
Lab Code: K2309566-001
Sample Matrix: Soil

Date Collected: 08/18/23
Date Received: 08/25/23

Analysis Method
200.8

Extracted/Digested By
MSOLADEY

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-6-SSE-F5
Lab Code: K2309566-002
Sample Matrix: Soil

Date Collected: 08/18/23
Date Received: 08/25/23

Analysis Method
200.8

Extracted/Digested By
MSOLADEY

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-7-SSE-F5
Lab Code: K2309566-003
Sample Matrix: Soil

Date Collected: 08/18/23
Date Received: 08/25/23

Analysis Method
200.8

Extracted/Digested By
MSOLADEY

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-SSE-F5
Lab Code: K2309566-004
Sample Matrix: Soil

Date Collected: 08/18/23
Date Received: 08/25/23

Analysis Method
200.8

Extracted/Digested By
MSOLADEY

Analyzed By
EMCALLISTER

Sample Name: SC-WS-POZ-8-DUP-SSE-F5
Lab Code: K2309566-005
Sample Matrix: Soil

Date Collected: 08/18/23
Date Received: 08/25/23

Analysis Method
200.8

Extracted/Digested By
MSOLADEY

Analyzed By
EMCALLISTER



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Soil
Sample Name: SC-WS-POZ-4-SSE-F5
Lab Code: K2309566-001

Service Request: K2309566
Date Collected: 08/18/23 09:00
Date Received: 08/25/23 14:00

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	10300	mg/Kg	1.9	0.6	5	09/08/23 12:32	09/06/23		
Cobalt	200.8	14.2	mg/Kg	0.019	0.006	5	09/08/23 12:32	09/06/23		
Iron	200.8	8050	mg/Kg	0.95	0.38	5	09/08/23 12:32	09/06/23		
Manganese	200.8	41.0	mg/Kg	0.047	0.019	5	09/08/23 12:32	09/06/23		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
 Task 02.0204
Sample Matrix: Soil
Sample Name: SC-WS-POZ-6-SSE-F5
Lab Code: K2309566-002

Service Request: K2309566
Date Collected: 08/18/23 09:10
Date Received: 08/25/23 14:00

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	14300	mg/Kg	2.6	0.8	5	09/08/23 12:34	09/06/23		
Cobalt	200.8	11.3	mg/Kg	0.026	0.008	5	09/08/23 12:34	09/06/23		
Iron	200.8	21800	mg/Kg	1.3	0.5	5	09/08/23 12:34	09/06/23		
Manganese	200.8	82.5	mg/Kg	0.065	0.026	5	09/08/23 12:34	09/06/23		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Soil
Sample Name: SC-WS-POZ-7-SSE-F5
Lab Code: K2309566-003

Service Request: K2309566
Date Collected: 08/18/23 09:20
Date Received: 08/25/23 14:00

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	14100	mg/Kg	2.0	0.6	5	09/08/23 12:36	09/06/23		
Cobalt	200.8	59.5	mg/Kg	0.020	0.006	5	09/08/23 12:36	09/06/23		
Iron	200.8	89200	mg/Kg	20	8	100	09/08/23 12:47	09/06/23		
Manganese	200.8	642	mg/Kg	0.050	0.020	5	09/08/23 12:36	09/06/23		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
 Task 02.0204
Sample Matrix: Soil
Sample Name: SC-WS-POZ-8-SSE-F5
Lab Code: K2309566-004

Service Request: K2309566
Date Collected: 08/18/23 09:30
Date Received: 08/25/23 14:00

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	11300	mg/Kg	7.7	2.3	5	09/08/23 12:38		09/06/23	
Cobalt	200.8	10.1	mg/Kg	0.077	0.023	5	09/08/23 12:38		09/06/23	
Iron	200.8	21500	mg/Kg	3.8	1.5	5	09/08/23 12:38		09/06/23	
Manganese	200.8	27.3	mg/Kg	0.19	0.08	5	09/08/23 12:38		09/06/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0204
Sample Matrix: Soil
Sample Name: SC-WS-POZ-8-DUP-SSE-F5
Lab Code: K2309566-005

Service Request: K2309566
Date Collected: 08/18/23 09:40
Date Received: 08/25/23 14:00

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	10200	mg/Kg	6.6	2.0	5	09/08/23 12:40	09/06/23		
Cobalt	200.8	8.83	mg/Kg	0.066	0.020	5	09/08/23 12:40	09/06/23		
Iron	200.8	18500	mg/Kg	3.3	1.3	5	09/08/23 12:40	09/06/23		
Manganese	200.8	22.4	mg/Kg	0.17	0.07	5	09/08/23 12:40	09/06/23		



QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01
 Task 02.0204
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2315597-01

Service Request: K2309566
Date Collected: NA
Date Received: NA

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	ND U	mg/Kg	2.0	0.6	5	09/08/23 12:27	09/06/23		
Cobalt	200.8	ND U	mg/Kg	0.020	0.006	5	09/08/23 12:27	09/06/23		
Iron	200.8	0.4 J	mg/Kg	1.0	0.4	5	09/08/23 12:27	09/06/23		
Manganese	200.8	ND U	mg/Kg	0.050	0.020	5	09/08/23 12:27	09/06/23		

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0204
Sample Matrix: Soil

Service Request: K2309566
Date Analyzed: 09/08/23

Duplicate Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
KQ2315597-02 KQ2315597-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	200.8	381	400	95	360	400	90	85-115	6	30
Cobalt	200.8	98.5	100	98	95.3	100	95	85-115	3	30
Iron	200.8	196	200	98	189	200	94	85-115	4	30
Manganese	200.8	95.4	100	95	92.0	100	92	85-115	4	30



March 05, 2025

Revised Service Request No:K2413509.02

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed is the revised report for the sample(s) submitted to our laboratory December 20, 2024. For your reference, these analyses have been assigned our service request number **K2413509**.

The report was revised to update the sample ID's as requested.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

REVISED
11:25 am, Mar 05, 2025

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2413509
Date Received: 12/20/2024

CASE NARRATIVE

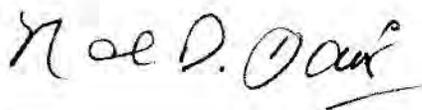
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Fifteen water samples were received for analysis at ALS Environmental on 12/20/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 03/05/2025

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-3-15-20-SSE-F3	Lab ID: K2413509-011
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	638		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	19.7		0.009	0.040	ug/L	200.8
Iron, Dissolved	548		0.3	2.0	ug/L	200.8
Manganese, Dissolved	2.0	J	0.04	2.0	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-SSE-F3	Lab ID: K2413509-012
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	2900		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	1.49		0.009	0.040	ug/L	200.8
Iron, Dissolved	1490		0.3	2.0	ug/L	200.8
Manganese, Dissolved	4.8		0.04	2.0	ug/L	200.8

CLIENT ID: CLFMNA-5-10-15	Lab ID: K2413509-013
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	664		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	1.59		0.009	0.040	ug/L	200.8
Iron, Dissolved	834		0.3	2.0	ug/L	200.8
Manganese, Dissolved	11.6		0.04	2.0	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-DUP-SSE-F3	Lab ID: K2413509-014
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	3050		0.5	4.0	ug/L	200.8
Cobalt, Dissolved	1.26		0.009	0.040	ug/L	200.8
Iron, Dissolved	1500		0.3	2.0	ug/L	200.8
Manganese, Dissolved	3.9		0.04	2.0	ug/L	200.8

CLIENT ID: SC-MB-SSE-F3	Lab ID: K2413509-015
--------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	6.4		0.5	4.0	ug/L	200.8
Iron, Dissolved	8.0		0.3	2.0	ug/L	200.8
Manganese, Dissolved	1.3	J	0.04	2.0	ug/L	200.8

CLIENT ID: CLFMNA-3-15-20-SSE-F1	Lab ID: K2413509-001
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	36.2		0.05	0.20	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-SSE-F1	Lab ID: K2413509-002
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	10.1		0.05	0.20	ug/L	200.8

CLIENT ID: CLFMNA-5-10-15	Lab ID: K2413509-003
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.20	J	0.05	0.20	ug/L	200.8



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-4-5-7.5-DUP-SSE-F1		Lab ID: K2413509-004				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	10.2		0.05	0.20	ug/L	200.8

CLIENT ID: CLFMNA-3-15-20-SSE-F2		Lab ID: K2413509-006				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	281		0.05	0.20	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-SSE-F2		Lab ID: K2413509-007				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	11.4		0.05	0.20	ug/L	200.8

CLIENT ID: CLFMNA-5-10-15		Lab ID: K2413509-008				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	7.83		0.05	0.20	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-DUP-SSE-F2		Lab ID: K2413509-009				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	10.8		0.05	0.20	ug/L	200.8

CLIENT ID: SC-MB-SSE-F2		Lab ID: K2413509-010				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.05	J	0.05	0.20	ug/L	200.8



Sample Receipt Information

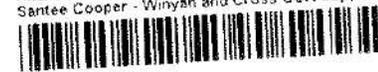
ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request:K2413509

SAMPLE CROSS-REFERENCE

K2413509-001	CLFMNA-3-15-20-SSE-F1	12/16/2024	1630
K2413509-002	CLFMNA-4-5-7.5-SSE-F1	12/16/2024	1645
K2413509-003	CLFMNA-5-10-15	12/16/2024	1700
K2413509-004	CLFMNA-4-5-7.5-DUP-SSE-F1	12/16/2024	1715
K2413509-005	SC-MB-SSE-F1	12/16/2024	1745
K2413509-006	CLFMNA-3-15-20-SSE-F2	12/18/2024	1030
K2413509-007	CLFMNA-4-5-7.5-SSE-F2	12/18/2024	1045
K2413509-008	CLFMNA-5-10-15	12/18/2024	1100
K2413509-009	CLFMNA-4-5-7.5-DUP-SSE-F2	12/18/2024	1115
K2413509-010	SC-MB-SSE-F2	12/18/2024	1145
K2413509-011	CLFMNA-3-15-20-SSE-F3	12/19/2024	1630
K2413509-012	CLFMNA-4-5-7.5-SSE-F3	12/19/2024	1645
K2413509-013	CLFMNA-5-10-15	12/19/2024	1700
K2413509-014	CLFMNA-4-5-7.5-DUP-SSE-F3	12/19/2024	1715
K2413509-015	SC-MB-SSE-F3	12/19/2024	1745



Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019					No. of Containers	Parameters										 Jason Stuckey 6720 S Macadam Ave Suite 300 Portland OR 97219 Comments/Preservation						
Date:	12/20/24					Dissolved metals (Co) via EPA 200.8																
Project Name:	Santee Cooper - Winyah and Cross CCR Support																					
Project Number:	232922-01.01 Task 02.0206																					
Project Manager:	Jason Stuckey																					
Phone Number:	(503)-924-6184																					
Shipment Method:	ALS Carrier																					
Line	Sample ID	Collection		Matrix																0.67 M magnesium chloride solution, 0.45-micron PES filtered		
		Date	Time																			
1	CLFMNA-3-15-20-SSE-F1	12/16/2024	16:30	Water		1	X															
2	CLFMNA-4-5-7.5-SSE-F1	12/16/2024	16:45	Water		1	X															
3	Secondary-1-10-15-SSE-F1	12/16/2024	17:00	Water		1	X															
4	CLFMNA-4-5-7.5-DUP-SSE-F1	12/16/2024	17:15	Water		1	X															
5	SC-MB-SSE-F1	12/16/2024	17:45	Water	1	X																
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						

Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please contact Jason Stuckey (jstuckey@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. If possible, please analyze on a 10-day TAT.

Relinquished by: <i>Keace Gregory</i>	Company: Anchor QEA
Signature/Print Name: <i>Keace Gregory</i>	Date/Time: 12/20/24 0835
Relinquished by: <i>Franklin LaBiche</i>	Company: ALS
Signature/Print Name: <i>Franklin LaBiche</i>	Date/Time: 12/20/24 1205

Received by: <i>Franklin LaBiche</i>
Signature/Print Name: <i>Franklin LaBiche</i> 12/20/24 0835
Received by: <i>Audrey Decort</i>
Signature/Print Name: <i>Audrey Decort</i> 12/20/24 1205

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.



Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019					No. of Containers	Parameters										 Jason Stuckey 6720 S Macadam Ave Suite 300 Portland OR 97219 Comments/Preservation							
Date:	12/20/24					Dissolved metals (Co) via EPA 200.8																	
Project Name:	Santee Cooper - Winyah and Cross CCR Support																						
Project Number:	232922-01.01 Task 02.0206																						
Project Manager:	Jason Stuckey																						
Phone Number:	(503)-924-6184																						
Shipment Method:	Drop off at RC Imaging and Analysis																						
Line	Sample ID	Collection		Matrix	No. of Containers	Dissolved metals (Co) via EPA 200.8	Parameters													Comments/Preservation			
		Date	Time																				
1	CLFMNA-3-15-20-SSE-F2	12/18/2024	10:30	Water	1	X																	
2	CLFMNA-4-5-7.5-SSE-F2	12/18/2024	10:45	Water	1	X																	
3	Secondary-1-10-15-SSE-F2	12/18/2024	11:00	Water	1	X																	
4	CLFMNA-4-5-7.5-DUP-SSE-F2	12/18/2024	11:15	Water	1	X																	
5	SC-MB-SSE-F2	12/18/2024	11:45	Water	1	X																	
6																							
7																							
8																							
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Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please contact Jason Stuckey (jstuckey@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. If possible, please analyze on a 10-day TAT.

Relinquished by: <i>Reese Gregory</i>	Company: Anchor QEA
Signature/Print Name: <i>Reese Gregory</i>	Date/Time: 12/20/24 0805
Relinquished by: <i>Franklin LaBiche</i>	Company: ALS
Signature/Print Name: <i>Franklin LaBiche</i>	Date/Time: 12/20/24 1205

Received by: <i>Franklin LaBiche</i>
Signature/Print Name: <i>Franklin LaBiche</i> 12/20/24 0835
Received by: <i>Stephane Decorte</i>
Signature/Print Name: <i>STEPHANE DECORTE</i> 12/20/24 1205

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM *erfa*

Cooler Receipt and Preservation Form

Client *Puehac QEA* Service Request K24 *135089*

Received: *12 30 2024* Opened: *12 30 2024* By: *AO* Unloaded: *12 30 2024* By: *AO*

- 1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
- 2. Samples were received in: (circle) Cooler Box Envelope Other NA
- 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
- ** If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID (NA)	Out of temp Indicate with 'X'	PM Notified If out of temp	Tracking Number (NA)	Filed
<i>5.2</i>	<i>---</i>	<i>1301</i>					

- 4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
- 5. Were samples received within the method specified temperature ranges? NA Y N
If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N
- If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
- 6. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
- 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
- 8. Were samples received in good condition (unbroken) NA Y N
- 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
- 10. Did all sample labels and tags agree with custody papers? NA Y N
- 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
- 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
- 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
- 14. Was C12/Res negative? NA Y N
- 15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
- 16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: *Decl used Ph due to limited volume.*



Miscellaneous Forms

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request: K2413509

Sample Name: CLFMNA-3-15-20-SSE-F1
Lab Code: K2413509-001
Sample Matrix: Water

Date Collected: 12/16/24
Date Received: 12/20/24

Analysis Method

200.8

Extracted/Digested By

MCHATTICK

Analyzed By

ABOYER

Sample Name: CLFMNA-4-5-7.5-SSE-F1
Lab Code: K2413509-002
Sample Matrix: Water

Date Collected: 12/16/24
Date Received: 12/20/24

Analysis Method

200.8

Extracted/Digested By

MCHATTICK

Analyzed By

ABOYER

Sample Name: CLFMNA-5-10-15
Lab Code: K2413509-003
Sample Matrix: Water

Date Collected: 12/16/24
Date Received: 12/20/24

Analysis Method

200.8

Extracted/Digested By

MCHATTICK

Analyzed By

ABOYER

Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F1
Lab Code: K2413509-004
Sample Matrix: Water

Date Collected: 12/16/24
Date Received: 12/20/24

Analysis Method

200.8

Extracted/Digested By

MCHATTICK

Analyzed By

ABOYER

Sample Name: SC-MB-SSE-F1
Lab Code: K2413509-005
Sample Matrix: Water

Date Collected: 12/16/24
Date Received: 12/20/24

Analysis Method

200.8

Extracted/Digested By

MCHATTICK

Analyzed By

ABOYER

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request: K2413509

Sample Name: CLFMNA-3-15-20-SSE-F2
Lab Code: K2413509-006
Sample Matrix: Water

Date Collected: 12/18/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-SSE-F2
Lab Code: K2413509-007
Sample Matrix: Water

Date Collected: 12/18/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15
Lab Code: K2413509-008
Sample Matrix: Water

Date Collected: 12/18/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F2
Lab Code: K2413509-009
Sample Matrix: Water

Date Collected: 12/18/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-SSE-F2
Lab Code: K2413509-010
Sample Matrix: Water

Date Collected: 12/18/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request: K2413509

Sample Name: CLFMNA-3-15-20-SSE-F3
Lab Code: K2413509-011
Sample Matrix: Water

Date Collected: 12/19/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-SSE-F3
Lab Code: K2413509-012
Sample Matrix: Water

Date Collected: 12/19/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15
Lab Code: K2413509-013
Sample Matrix: Water

Date Collected: 12/19/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F3
Lab Code: K2413509-014
Sample Matrix: Water

Date Collected: 12/19/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-SSE-F3
Lab Code: K2413509-015
Sample Matrix: Water

Date Collected: 12/19/24
Date Received: 12/20/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER



Sample Results

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Metals

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-3-15-20-SSE-F1
Lab Code: K2413509-001

Service Request: K2413509
Date Collected: 12/16/24 16:30
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	36.2	ug/L	0.20	0.05	1	12/26/24 15:26	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-SSE-F1
Lab Code: K2413509-002

Service Request: K2413509
Date Collected: 12/16/24 16:45
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	10.1	ug/L	0.20	0.05	1	12/26/24 15:34	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15
Lab Code: K2413509-003

Service Request: K2413509
Date Collected: 12/16/24 17:00
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.20 J	ug/L	0.20	0.05	1	12/26/24 15:35	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F1
Lab Code: K2413509-004

Service Request: K2413509
Date Collected: 12/16/24 17:15
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	10.2	ug/L	0.20	0.05	1	12/26/24 15:37	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: SC-MB-SSE-F1
Lab Code: K2413509-005

Service Request: K2413509
Date Collected: 12/16/24 17:45
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	ND U	ug/L	0.20	0.05	1	12/26/24 15:38	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-3-15-20-SSE-F2
Lab Code: K2413509-006

Service Request: K2413509
Date Collected: 12/18/24 10:30
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	281	ug/L	0.20	0.05	1	12/26/24 15:40	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-SSE-F2
Lab Code: K2413509-007

Service Request: K2413509
Date Collected: 12/18/24 10:45
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	11.4	ug/L	0.20	0.05	1	12/26/24 15:42	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15
Lab Code: K2413509-008

Service Request: K2413509
Date Collected: 12/18/24 11:00
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	7.83	ug/L	0.20	0.05	1	12/26/24 15:43	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F2
Lab Code: K2413509-009

Service Request: K2413509
Date Collected: 12/18/24 11:15
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	10.8	ug/L	0.20	0.05	1	12/26/24 16:11	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: SC-MB-SSE-F2
Lab Code: K2413509-010

Service Request: K2413509
Date Collected: 12/18/24 11:45
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.05 J	ug/L	0.20	0.05	1	12/26/24 16:13	12/23/24	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-3-15-20-SSE-F3
Lab Code: K2413509-011

Service Request: K2413509
Date Collected: 12/19/24 16:30
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	638	ug/L	4.0	0.5	1	12/26/24 17:46	12/23/24		
Cobalt	200.8	19.7	ug/L	0.040	0.009	1	12/26/24 17:46	12/23/24		
Iron	200.8	548	ug/L	2.0	0.3	1	12/26/24 17:46	12/23/24		
Manganese	200.8	2.0 J	ug/L	2.0	0.04	1	12/26/24 17:46	12/23/24		

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-SSE-F3
Lab Code: K2413509-012

Service Request: K2413509
Date Collected: 12/19/24 16:45
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	2900	ug/L	4.0	0.5	1	12/26/24 17:24	12/23/24		
Cobalt	200.8	1.49	ug/L	0.040	0.009	1	12/26/24 17:24	12/23/24		
Iron	200.8	1490	ug/L	2.0	0.3	1	12/26/24 17:24	12/23/24		
Manganese	200.8	4.8	ug/L	2.0	0.04	1	12/26/24 17:24	12/23/24		

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15
Lab Code: K2413509-013

Service Request: K2413509
Date Collected: 12/19/24 17:00
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	664	ug/L	4.0	0.5	1	12/26/24 17:26	12/23/24		
Cobalt	200.8	1.59	ug/L	0.040	0.009	1	12/26/24 17:26	12/23/24		
Iron	200.8	834	ug/L	2.0	0.3	1	12/26/24 17:26	12/23/24		
Manganese	200.8	11.6	ug/L	2.0	0.04	1	12/26/24 17:26	12/23/24		

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F3
Lab Code: K2413509-014

Service Request: K2413509
Date Collected: 12/19/24 17:15
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	200.8	3050	ug/L	4.0	0.5	1	12/26/24 17:27	12/23/24	
Cobalt	200.8	1.26	ug/L	0.040	0.009	1	12/26/24 17:27	12/23/24	
Iron	200.8	1500	ug/L	2.0	0.3	1	12/26/24 17:27	12/23/24	
Manganese	200.8	3.9	ug/L	2.0	0.04	1	12/26/24 17:27	12/23/24	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Water
Sample Name: SC-MB-SSE-F3
Lab Code: K2413509-015

Service Request: K2413509
Date Collected: 12/19/24 17:45
Date Received: 12/20/24 12:05

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	6.4	ug/L	4.0	0.5	1	12/26/24 17:29	12/23/24		
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	12/26/24 17:29	12/23/24		
Iron	200.8	8.0	ug/L	2.0	0.3	1	12/26/24 17:29	12/23/24		
Manganese	200.8	1.3 J	ug/L	2.0	0.04	1	12/26/24 17:29	12/23/24		



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2420754-01

Service Request: K2413509
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	12/26/24 15:16	12/23/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2420768-01

Service Request: K2413509
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	0.9 J	ug/L	4.0	0.5	1	12/26/24 16:47	12/23/24		
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	12/26/24 16:47	12/23/24		
Iron	200.8	ND U	ug/L	2.0	0.3	1	12/26/24 16:47	12/23/24		
Manganese	200.8	ND U	ug/L	2.0	0.04	1	12/26/24 16:47	12/23/24		

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2413509
Date Collected: 12/16/24
Date Received: 12/20/24
Date Analyzed: 12/26/24
Date Extracted: 12/23/24

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-SSE-F1
Lab Code: K2413509-001
Analysis Method: 200.8
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2420754-04

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Cobalt	36.2	162	125	100	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2413509
Date Collected: 12/19/24
Date Received: 12/20/24
Date Analyzed: 12/26/24
Date Extracted: 12/23/24

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-SSE-F3
Lab Code: K2413509-011
Analysis Method: 200.8
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2420768-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	638	744	100	106 #	70-130
Cobalt	19.7	43.9	25.0	97	70-130
Iron	548	578	50.0	61 #	70-130
Manganese	2.0 J	25.2	25.0	93	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2413509
Date Collected: 12/16/24
Date Received: 12/20/24
Date Analyzed: 12/26/24

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-SSE-F1
Lab Code: K2413509-001

Units: ug/L
Basis: NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2420754-03 Result			
Cobalt	200.8	0.20	0.05	36.2	36.5	36.4	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2413509
Date Collected: 12/19/24
Date Received: 12/20/24
Date Analyzed: 12/26/24

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-SSE-F3
Lab Code: K2413509-011

Units: ug/L
Basis: NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2420768-05 Result			
Aluminum	200.8	4.0	0.5	638	647	643	1	20
Cobalt	200.8	0.040	0.009	19.7	19.8	19.8	<1	20
Iron	200.8	2.0	0.3	548	542	545	1	20
Manganese	200.8	2.0	0.04	2.0 J	1.8 J	1.9	11	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task
02.0206
Sample Matrix: Water

Service Request: K2413509
Date Analyzed: 12/26/24

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2420754-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	25.7	25.0	103	85-115

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task
02.0206
Sample Matrix: Water

Service Request: K2413509
Date Analyzed: 12/26/24

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2420768-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	110	100	110	85-115
Cobalt	200.8	25.2	25.0	101	85-115
Iron	200.8	50.5	50.0	101	85-115
Manganese	200.8	24.5	25.0	98	85-115



March 05, 2025

Revised Service Request No:K2413671.01

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory December 30, 2024
For your reference, these analyses have been assigned our service request number **K2413671**.

The report was revised to update the sample ID's as requested.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

REVISED
11:26 am, Mar 05, 2025

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2413671
Date Received: 12/30/2024

CASE NARRATIVE

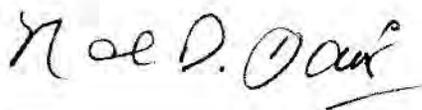
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 12/30/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 03/05/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-3-15-20-SSE-F4	Lab ID: K2413671-001
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	2780		10	80	ug/L	200.8
Cobalt, Dissolved	200		0.18	0.80	ug/L	200.8
Iron, Dissolved	55300		6	40	ug/L	200.8
Manganese, Dissolved	85.7		0.8	4.0	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-SSE-F4	Lab ID: K2413671-002
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	17400		10	80	ug/L	200.8
Cobalt, Dissolved	3.71		0.18	0.80	ug/L	200.8
Iron, Dissolved	9000		6	40	ug/L	200.8
Manganese, Dissolved	7.6		0.8	4.0	ug/L	200.8

CLIENT ID: CLFMNA-5-10-15	Lab ID: K2413671-003
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	4690		10	80	ug/L	200.8
Cobalt, Dissolved	4.65		0.18	0.80	ug/L	200.8
Iron, Dissolved	1630		6	40	ug/L	200.8
Manganese, Dissolved	15.6		0.8	4.0	ug/L	200.8

CLIENT ID: CLFMNA-4-5-7.5-DUP-SSE-F4	Lab ID: K2413671-004
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	15400		10	80	ug/L	200.8
Cobalt, Dissolved	3.36		0.18	0.80	ug/L	200.8
Iron, Dissolved	7860		6	40	ug/L	200.8
Manganese, Dissolved	4.6		0.8	4.0	ug/L	200.8

CLIENT ID: SC-MB-SSE-F4	Lab ID: K2413671-005
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	46	J	10	80	ug/L	200.8



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request:K2413671

SAMPLE CROSS-REFERENCE

K2413671-001	CLFMNA-3-15-20-SSE-F4	12/20/2024	1630
K2413671-002	CLFMNA-4-5-7.5-SSE-F4	12/20/2024	1645
K2413671-003	CLFMNA-5-10-15	12/20/2024	1700
K2413671-004	CLFMNA-4-5-7.5-DUP-SSE-F4	12/20/2024	1715
K2413671-005	SC-MB-SSE-F4	12/20/2024	1745



Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019					No. of Containers	Parameters										<p>Jason Stuckey 6720 S Macadam Ave Suite 300 Portland OR 97219</p> <p>Comments/Preservation</p> <p>10.7 M nitric acid solution, 0.45-micron, PTFE filtered</p>							
Date:	12/30/2024					Dissolved metals (Co, Al, Fe, Mn) via EPA 200.8																	
Project Name:	Santee Cooper - Winyah and Cross CCR Support																						
Project Number:	232922-01.01 Task 02.0206																						
Project Manager:	Jason Stuckey																						
Phone Number:	(503)-924-6184																						
Shipment Method:	ALS Carrier																						
Line	Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation			
		Date	Time																				
1	CLFMNA-3-15-20-SSE-F4	12/20/2024	16:30	Water	1	X																	
2	CLFMNA-4-5-7.5-SSE-F4	12/20/2024	16:45	Water	1	X																	
3	Secondary-1-10-15-SSE-F4	12/20/2024	17:00	Water	1	X																	
4	CLFMNA-4-5-7.5-DUP-SSE-F4	12/20/2024	17:15	Water	1	X																	
5	SC-MB-SSE-F4	12/20/2024	17:45	Water	1	X																	
6																							
7																							
8																							
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20																							

Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please contact Jason Stuckey (jstuckey@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. If possible, please analyze on a 10-day TAT.

Relinquished by: <i>Reece Gregory</i>	Company: Anchor QEA
Signature/Print Name: <i>Reece Gregory</i>	Date/Time: 12/30/24 10:04
Relinquished by: <i>Diane Prill</i>	Company: ALS
Signature/Print Name: <i>PPrill</i>	Date/Time: 12/30/24 11:55

Received by: <i>ALS</i>	12/30/24 10:04
Signature/Print Name: <i>PPrill Diane Prill</i>	
Received by: <i>ALS</i>	11:55 12/30/24
Signature/Print Name: <i>ALOREN QEA RITE</i>	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request: K2413671

Sample Name: CLFMNA-3-15-20-SSE-F4
Lab Code: K2413671-001
Sample Matrix: Water

Date Collected: 12/20/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
JCHAN

Sample Name: CLFMNA-4-5-7.5-SSE-F4
Lab Code: K2413671-002
Sample Matrix: Water

Date Collected: 12/20/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
JCHAN

Sample Name: CLFMNA-5-10-15
Lab Code: K2413671-003
Sample Matrix: Water

Date Collected: 12/20/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
JCHAN

Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F4
Lab Code: K2413671-004
Sample Matrix: Water

Date Collected: 12/20/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
JCHAN

Sample Name: SC-MB-SSE-F4
Lab Code: K2413671-005
Sample Matrix: Water

Date Collected: 12/20/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
MCHATTICK

Analyzed By
JCHAN



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-3-15-20-SSE-F4
Lab Code: K2413671-001

Service Request: K2413671
Date Collected: 12/20/24 16:30
Date Received: 12/30/24 11:55

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	2780	ug/L	80	10	1	01/02/25 12:01	12/31/24		
Cobalt	200.8	200	ug/L	0.80	0.18	1	01/02/25 12:01	12/31/24		
Iron	200.8	55300	ug/L	40	6	1	01/02/25 12:01	12/31/24		
Manganese	200.8	85.7	ug/L	4.0	0.8	1	01/02/25 12:01	12/31/24		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-SSE-F4
Lab Code: K2413671-002

Service Request: K2413671
Date Collected: 12/20/24 16:45
Date Received: 12/30/24 11:55

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	17400	ug/L	80	10	1	01/02/25 12:06	12/31/24		
Cobalt	200.8	3.71	ug/L	0.80	0.18	1	01/02/25 12:06	12/31/24		
Iron	200.8	9000	ug/L	40	6	1	01/02/25 12:06	12/31/24		
Manganese	200.8	7.6	ug/L	4.0	0.8	1	01/02/25 12:06	12/31/24		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15
Lab Code: K2413671-003

Service Request: K2413671
Date Collected: 12/20/24 17:00
Date Received: 12/30/24 11:55

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	4690	ug/L	80	10	1	01/02/25 12:08	12/31/24		
Cobalt	200.8	4.65	ug/L	0.80	0.18	1	01/02/25 12:08	12/31/24		
Iron	200.8	1630	ug/L	40	6	1	01/02/25 12:08	12/31/24		
Manganese	200.8	15.6	ug/L	4.0	0.8	1	01/02/25 12:08	12/31/24		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F4
Lab Code: K2413671-004

Service Request: K2413671
Date Collected: 12/20/24 17:15
Date Received: 12/30/24 11:55

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	15400	ug/L	80	10	1	01/02/25 12:10	12/31/24		
Cobalt	200.8	3.36	ug/L	0.80	0.18	1	01/02/25 12:10	12/31/24		
Iron	200.8	7860	ug/L	40	6	1	01/02/25 12:10	12/31/24		
Manganese	200.8	4.6	ug/L	4.0	0.8	1	01/02/25 12:10	12/31/24		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: SC-MB-SSE-F4
Lab Code: K2413671-005

Service Request: K2413671
Date Collected: 12/20/24 17:45
Date Received: 12/30/24 11:55

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	46 J	ug/L	80	10	1	01/02/25 12:12	12/31/24		
Cobalt	200.8	ND U	ug/L	0.80	0.18	1	01/02/25 12:12	12/31/24		
Iron	200.8	ND U	ug/L	40	6	1	01/02/25 12:12	12/31/24		
Manganese	200.8	ND U	ug/L	4.0	0.8	1	01/02/25 12:12	12/31/24		



QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2421057-01

Service Request: K2413671
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	1.1 J	ug/L	4.0	0.5	1	01/02/25 11:38	12/31/24	
Cobalt	200.8	ND U	ug/L	0.040	0.009	1	01/02/25 11:38	12/31/24	
Iron	200.8	ND U	ug/L	2.0	0.3	1	01/02/25 11:38	12/31/24	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	01/02/25 11:38	12/31/24	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2413671
Date Collected: 12/20/24
Date Received: 12/30/24
Date Analyzed: 01/2/25
Date Extracted: 12/31/24

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-SSE-F4
Lab Code: K2413671-001
Analysis Method: 200.8
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2421057-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	2780	4790	2000	101	70-130
Cobalt	200	697	500	100	70-130
Iron	55300	56500	1000	121 #	70-130
Manganese	85.7	600	500	103	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Water

Service Request: K2413671
Date Collected: 12/20/24
Date Received: 12/30/24
Date Analyzed: 01/02/25

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-3-15-20-SSE-F4
Lab Code: K2413671-001

Units: ug/L
Basis: NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2421057-05 Result			
Aluminum	200.8	80	10	2780	2800	2790	<1	20
Cobalt	200.8	0.80	0.18	200	203	202	1	20
Iron	200.8	40	6	55300	56800	56100	3	20
Manganese	200.8	4.0	0.8	85.7	97.1	91.4	12	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task
02.0206
Sample Matrix: Water

Service Request: K2413671
Date Analyzed: 01/02/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2421057-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	104	100	104	85-115
Cobalt	200.8	25.0	25.0	100	85-115
Iron	200.8	50.9	50.0	102	85-115
Manganese	200.8	25.8	25.0	103	85-115



March 05, 2025

Revised Service Request No:K2413672.01

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory December 30, 2024
For your reference, these analyses have been assigned our service request number **K2413672**.

The report was revised to update the sample ID's as requested.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

REVISED

11:27 am, Mar 05, 2025

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Soil

Service Request: K2413672
Date Received: 12/30/2024

CASE NARRATIVE

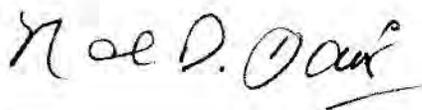
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Four soil samples were received for analysis at ALS Environmental on 12/30/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 03/05/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-3-15-20-SSE-F5 **Lab ID: K2413672-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	1600		0.6	2.1	mg/Kg	200.8
Cobalt	0.436		0.006	0.021	mg/Kg	200.8
Iron	318		0.4	2.1	mg/Kg	200.8
Manganese	1.97		0.021	0.051	mg/Kg	200.8

CLIENT ID: CLFMNA-4-5-7.5-SSE-F5 **Lab ID: K2413672-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	4860		0.5	1.8	mg/Kg	200.8
Cobalt	0.998		0.005	0.018	mg/Kg	200.8
Iron	3370		0.4	1.8	mg/Kg	200.8
Manganese	4.00		0.018	0.044	mg/Kg	200.8

CLIENT ID: CLFMNA-5-10-15 **Lab ID: K2413672-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	1400		0.6	2.0	mg/Kg	200.8
Cobalt	2.42		0.006	0.020	mg/Kg	200.8
Iron	2180		0.4	2.0	mg/Kg	200.8
Manganese	7.16		0.020	0.051	mg/Kg	200.8

CLIENT ID: CLFMNA-4-5-7.5-DUP-SSE-F5 **Lab ID: K2413672-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	4450		0.5	1.8	mg/Kg	200.8
Cobalt	0.912		0.005	0.018	mg/Kg	200.8
Iron	3020		0.4	1.8	mg/Kg	200.8
Manganese	3.52		0.018	0.044	mg/Kg	200.8



Sample Receipt Information

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
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Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request:K2413672

SAMPLE CROSS-REFERENCE

K2413672-001	CLFMNA-3-15-20-SSE-F5	12/23/2024	1030
K2413672-002	CLFMNA-4-5-7.5-SSE-F5	12/23/2024	1045
K2413672-003	CLFMNA-5-10-15	12/23/2024	1100
K2413672-004	CLFMNA-4-5-7.5-DUP-SSE-F5	12/23/2024	1115

Chain of Custody Record & Laboratory Analysis Request

H241367Z

Laboratory Number: 503-972-5019					No. of Containers	Parameters										 Jason Stuckey 6720 S Macadam Ave Suite 300 Portland OR 97219 Comments/Preservation						
Date:	12/30/2024					Total metals (Co, Al, Fe, Mn) via EPA 200.8																
Project Name:	Santee Cooper - Winyah and Cross CCR Support																					
Project Number:	232922-01.01 Task 02.0206																					
Project Manager:	Jason Stuckey																					
Phone Number:	(503)-924-6184																					
Shipment Method:	ALS Carrier																					
Line	Sample ID	Collection		Matrix	No. of Containers	Total metals (Co, Al, Fe, Mn) via EPA 200.8														Comments/Preservation		
		Date	Time																			
1	CLFMNA-3-15-20-SSE-F5	12/23/2024	10:30	Water	1	X																
2	CLFMNA-4-5-7.5-SSE-F5	12/23/2024	10:45	Water	1	X																
3	Secondary-1-10-15-SSE-F5	12/23/2024	11:00	Water	1	X																
4	CLFMNA-4-5-7.5-DUP-SSE-F5	12/23/2024	11:15	Water	1	X																
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						

Notes: Please digest solids via 3050B. Please contact Jason Stuckey (jstuckey@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. If possible, please analyze on a 10-day TAT.

Relinquished by: <i>Kesse Gregory</i>	Company: Anchor QEA
Signature/Print Name: <i>[Signature]</i>	Date/Time: 12/30/24 9:51
Relinquished by: <i>ALS Diane Phil</i>	Company: ALS
Signature/Print Name: <i>[Signature]</i>	Date/Time: 12/30/24 1155

Received by: <i>ALS</i>	12/30/24 951
Signature/Print Name: <i>[Signature]</i>	
Received by: <i>ALS</i>	12/30/24 1155
Signature/Print Name: <i>[Signature]</i>	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K24 13672
 Received: 12/30/24 Opened: 12/30/24 By: R Unloaded: 12/30/24 By: R

1. Samples were received via? USPS Fed Ex UPS DHL PDX ~~Courier~~ Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified if out of temp	Tracking Number <u>NA</u>	Filed
<input checked="" type="checkbox"/>	<u>0.2</u>	<u>IR-06</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column above:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
 5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N
 If applicable, tissue samples were received: Frozen Partially Thawed Thawed
 6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 8. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
 13. Were VOA vials received without headspace? Indicate in the table below NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
 16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Mainly wrong on COC Should be rock



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206

Service Request: K2413672

Sample Name: CLFMNA-3-15-20-SSE-F5
Lab Code: K2413672-001
Sample Matrix: Soil

Date Collected: 12/23/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
KLawson

Analyzed By
JCHAN

Sample Name: CLFMNA-4-5-7.5-SSE-F5
Lab Code: K2413672-002
Sample Matrix: Soil

Date Collected: 12/23/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
KLawson

Analyzed By
JCHAN

Sample Name: CLFMNA-5-10-15
Lab Code: K2413672-003
Sample Matrix: Soil

Date Collected: 12/23/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
KLawson

Analyzed By
JCHAN

Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F5
Lab Code: K2413672-004
Sample Matrix: Soil

Date Collected: 12/23/24
Date Received: 12/30/24

Analysis Method
200.8

Extracted/Digested By
KLawson

Analyzed By
JCHAN



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-3-15-20-SSE-F5
Lab Code: K2413672-001

Service Request: K2413672
Date Collected: 12/23/24 10:30
Date Received: 12/30/24 11:55

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	1600	mg/Kg	2.1	0.6	5	01/06/25 13:35	01/03/25		
Cobalt	200.8	0.436	mg/Kg	0.021	0.006	5	01/06/25 13:35	01/03/25		
Iron	200.8	318	mg/Kg	2.1	0.4	5	01/06/25 13:35	01/03/25		
Manganese	200.8	1.97	mg/Kg	0.051	0.021	5	01/06/25 13:35	01/03/25		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-4-5-7.5-SSE-F5
Lab Code: K2413672-002

Service Request: K2413672
Date Collected: 12/23/24 10:45
Date Received: 12/30/24 11:55

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	4860	mg/Kg	1.8	0.5	5	01/06/25 13:37	01/03/25		
Cobalt	200.8	0.998	mg/Kg	0.018	0.005	5	01/06/25 13:37	01/03/25		
Iron	200.8	3370	mg/Kg	1.8	0.4	5	01/06/25 13:37	01/03/25		
Manganese	200.8	4.00	mg/Kg	0.044	0.018	5	01/06/25 13:37	01/03/25		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-5-10-15
Lab Code: K2413672-003

Service Request: K2413672
Date Collected: 12/23/24 11:00
Date Received: 12/30/24 11:55

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	1400	mg/Kg	2.0	0.6	5	01/06/25 13:39	01/03/25		
Cobalt	200.8	2.42	mg/Kg	0.020	0.006	5	01/06/25 13:39	01/03/25		
Iron	200.8	2180	mg/Kg	2.0	0.4	5	01/06/25 13:39	01/03/25		
Manganese	200.8	7.16	mg/Kg	0.051	0.020	5	01/06/25 13:39	01/03/25		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-4-5-7.5-DUP-SSE-F5
Lab Code: K2413672-004

Service Request: K2413672
Date Collected: 12/23/24 11:15
Date Received: 12/30/24 11:55

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	4450	mg/Kg	1.8	0.5	5	01/06/25 13:40	01/03/25		
Cobalt	200.8	0.912	mg/Kg	0.018	0.005	5	01/06/25 13:40	01/03/25		
Iron	200.8	3020	mg/Kg	1.8	0.4	5	01/06/25 13:40	01/03/25		
Manganese	200.8	3.52	mg/Kg	0.044	0.018	5	01/06/25 13:40	01/03/25		



QC Summary Forms

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ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0206
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2500066-01

Service Request: K2413672
Date Collected: NA
Date Received: NA

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	200.8	ND U	mg/Kg	2.0	0.6	5	01/06/25 13:30	01/03/25		
Cobalt	200.8	ND U	mg/Kg	0.020	0.006	5	01/06/25 13:30	01/03/25		
Iron	200.8	0.5 J	mg/Kg	2.0	0.4	5	01/06/25 13:30	01/03/25		
Manganese	200.8	ND U	mg/Kg	0.050	0.020	5	01/06/25 13:30	01/03/25		

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0206
Sample Matrix: Soil

Service Request: K2413672
Date Analyzed: 01/06/25

Duplicate Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
KQ2500066-02 KQ2500066-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	200.8	417	400	104	417	400	104	85-115	<1	30
Cobalt	200.8	105	100	105	103	100	103	85-115	2	30
Iron	200.8	209	200	104	206	200	103	85-115	1	30
Manganese	200.8	103	100	103	101	100	101	85-115	2	30



May 29, 2025

Service Request No:K2505057

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: 2025Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory May 16, 2025
For your reference, these analyses have been assigned our service request number **K2505057**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2505057
Date Received: 05/16/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twelve water samples were received for analysis at ALS Environmental on 05/16/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

05/29/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-4-5-7.5-CT-SSE-F3	Lab ID: K2505057-009
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	1030		1.4	4.0	ug/L	6020B
Cobalt, Dissolved	4.13		0.013	0.040	ug/L	6020B
Iron, Dissolved	624		0.4	2.0	ug/L	6020B
Manganese, Dissolved	12.7		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-SSE-F3	Lab ID: K2505057-010
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	580		1.4	4.0	ug/L	6020B
Cobalt, Dissolved	15.6		0.013	0.040	ug/L	6020B
Iron, Dissolved	851		0.4	2.0	ug/L	6020B
Manganese, Dissolved	36.0		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-DUP-CT-SSE-F3	Lab ID: K2505057-011
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	447		1.4	4.0	ug/L	6020B
Cobalt, Dissolved	10.7		0.013	0.040	ug/L	6020B
Iron, Dissolved	562		0.4	2.0	ug/L	6020B
Manganese, Dissolved	25.2		0.09	0.20	ug/L	6020B

CLIENT ID: SC-MB-CT-SSE-F3	Lab ID: K2505057-012
-----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	4.3		1.4	4.0	ug/L	6020B
Iron, Dissolved	7.2		0.4	2.0	ug/L	6020B
Manganese, Dissolved	0.39		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-SSE-F1	Lab ID: K2505057-001
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	5.66		0.07	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-SSE-F1	Lab ID: K2505057-002
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	8.22		0.07	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-DUP-CT-SSE-F1	Lab ID: K2505057-003
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	6.44		0.07	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-SSE-F2	Lab ID: K2505057-005
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	69.4		0.07	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-SSE-F2	Lab ID: K2505057-006
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	88.1		0.07	0.20	ug/L	6020B



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-5-10-15-DUP-CT-SSE-F2		Lab ID: K2505057-007				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	71.3		0.07	0.20	ug/L	6020B

CLIENT ID: SC-MB-CT-SSE-F2		Lab ID: K2505057-008				
Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.11	J	0.07	0.20	ug/L	6020B



Sample Receipt Information

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing

Service Request:K2505057

SAMPLE CROSS-REFERENCE

K2505057-001	CLFMNA-4-5-7.5-CT-SSE-F1	5/12/2025	1430
K2505057-002	CLFMNA-5-10-15-CT-SSE-F1	5/12/2025	1435
K2505057-003	CLFMNA-5-10-15-DUP-CT-SSE-F1	5/12/2025	1440
K2505057-004	SC-MB-CT-SSE-F1	5/12/2025	1445
K2505057-005	CLFMNA-4-5-7.5-CT-SSE-F2	5/14/2025	1630
K2505057-006	CLFMNA-5-10-15-CT-SSE-F2	5/14/2025	1635
K2505057-007	CLFMNA-5-10-15-DUP-CT-SSE-F2	5/14/2025	1640
K2505057-008	SC-MB-CT-SSE-F2	5/14/2025	1645
K2505057-009	CLFMNA-4-5-7.5-CT-SSE-F3	5/15/2025	1630
K2505057-010	CLFMNA-5-10-15-CT-SSE-F3	5/15/2025	1635
K2505057-011	CLFMNA-5-10-15-DUP-CT-SSE-F3	5/15/2025	1640
K2505057-012	SC-MB-CT-SSE-F3	5/15/2025	1645

42505057

Environmental Sample Chain of Custody													 6720 S Macadam Ave, Ste 300 Portland, OR 97219 Send report to: jstuckey@anchorqea.com labdata@anchorqea.com Preservative/Notes:					
Date:	5/16/2025		No. of Containers	TAT (days)	Parameters													
Project:	2025 Santee Cooper - Winyah and Cross CCR Support				Dissolved Metals via 6020B (Co)	Dissolved Metals via 6020B (Co, Al, Fe, Mn)												
Client:	SynTerra Corporation																	
Project Number:	232922-01.01 Task 02.0207 - Column Testing																	
Point of Contact:	Jason Stuckey (jstuckey@anchorqea.com)																	
Sample Custodian:	Gillian Williams (971-645-9520)																	
Shipment Method:	ALS Courier																	
Line	Client Sample ID	Collection Date	Time	Matrix														
1	CLFMNA-4-5-7.5-CT-SSE-F1	5/12/2025	14:30	AQ	1	10	X											0.67 M magnesium chloride
2	CLFMNA-5-10-15-CT-SSE-F1	5/12/2025	14:35	AQ	1	10	X											0.67 M magnesium chloride
3	CLFMNA-5-10-15-DUP-CT-SSE-F1	5/12/2025	14:40	AQ	1	10	X											0.67 M magnesium chloride
4	SC-MB-CT-SSE-F1	5/12/2025	14:45	AQ	1	10	X											0.67 M magnesium chloride
5	CLFMNA-4-5-7.5-CT-SSE-F2	5/14/2025	16:30	AQ	1	10	X											0.67 M monosodium phosphate
6	CLFMNA-5-10-15-CT-SSE-F2	5/14/2025	16:35	AQ	1	10	X											0.67 M monosodium phosphate
7	CLFMNA-5-10-15-DUP-CT-SSE-F2	5/14/2025	16:40	AQ	1	10	X											0.67 M monosodium phosphate
8	SC-MB-CT-SSE-F2	5/14/2025	16:45	AQ	1	10	X											0.67 M monosodium phosphate
9	CLFMNA-4-5-7.5-CT-SSE-F3	5/15/2025	16:30	AQ	1	10		X										0.067 M hydroxylamine hydrochloride
10	CLFMNA-5-10-15-CT-SSE-F3	5/15/2025	16:35	AQ	1	10		X										0.067 M hydroxylamine hydrochloride
11	CLFMNA-5-10-15-DUP-CT-SSE-F3	5/15/2025	16:40	AQ	1	10		X										0.067 M hydroxylamine hydrochloride
12	SC-MB-CT-SSE-F3	5/15/2025	16:45	AQ	1	10		X										0.067 M hydroxylamine hydrochloride
13																		
14																		
15																		

Comment:
 All samples field filtered through 0.45-um PES filter into HNO₃-pre preserved analysis bottles. Please contact Jason Stuckey (jstuckey@anchorqea.com) or Jackie Munden (jmunden@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 6020B to achieve the MDL < 1 ppb.

Relinquished by: <i>Abigail</i>	Received by:	Relinquished by:	Received by:
Signature: <i>Abigail Williams</i>	Signature: <i>Diane Prue</i>	Signature: <i>Diane Prue</i>	Signature: <i>Jackie Munden</i>
Print Name: <i>Abigail Williams</i>	Print Name: <i>Diane Prue</i>	Print Name: <i>Diane Prue</i>	Print Name: <i>Jackie Munden</i>
Company: <i>Anchor QEA</i>	Company: <i>ALS</i>	Company: <i>ALS</i>	Company: <i>ALS</i>
Date/Time: <i>05/16/25 10:08</i>	Date/Time: <i>5/16/25 1008</i>	Date/Time: <i>5/16/25 1400</i>	Date/Time: <i>5-16-25 1400</i>

Cooler Receipt and Preservation Form

PM LR

Client Anchor OEA Service Request K25 05657

Received: 5-16-25 Opened: 5-16-25 By: AR Unloaded: 5-16-25 By: AR

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other _____ NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
- If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number <input checked="" type="checkbox"/> NA	Filed
3.1		IR-01					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA Y N
If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: *Frozen Partially Thawed Thawed*

6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not pH due to limited available volume of samples



Miscellaneous Forms

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Phone (360) 577-7222 Fax (360) 425-9096
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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing

Service Request: K2505057

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F1
Lab Code: K2505057-001
Sample Matrix: Water

Date Collected: 05/12/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-SSE-F1
Lab Code: K2505057-002
Sample Matrix: Water

Date Collected: 05/12/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F1
Lab Code: K2505057-003
Sample Matrix: Water

Date Collected: 05/12/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-CT-SSE-F1
Lab Code: K2505057-004
Sample Matrix: Water

Date Collected: 05/12/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F2
Lab Code: K2505057-005
Sample Matrix: Water

Date Collected: 05/14/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing

Service Request: K2505057

Sample Name: CLFMNA-5-10-15-CT-SSE-F2
Lab Code: K2505057-006
Sample Matrix: Water

Date Collected: 05/14/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F2
Lab Code: K2505057-007
Sample Matrix: Water

Date Collected: 05/14/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-CT-SSE-F2
Lab Code: K2505057-008
Sample Matrix: Water

Date Collected: 05/14/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F3
Lab Code: K2505057-009
Sample Matrix: Water

Date Collected: 05/15/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-SSE-F3
Lab Code: K2505057-010
Sample Matrix: Water

Date Collected: 05/15/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing

Service Request: K2505057

Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F3
Lab Code: K2505057-011
Sample Matrix: Water

Date Collected: 05/15/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-CT-SSE-F3
Lab Code: K2505057-012
Sample Matrix: Water

Date Collected: 05/15/25
Date Received: 05/16/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER



Sample Results

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-SSE-F1
Lab Code: K2505057-001

Service Request: K2505057
Date Collected: 05/12/25 14:30
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	5.66	ug/L	0.20	0.07	1	05/28/25 14:08	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-SSE-F1
Lab Code: K2505057-002

Service Request: K2505057
Date Collected: 05/12/25 14:35
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	8.22	ug/L	0.20	0.07	1	05/28/25 14:47	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F1
Lab Code: K2505057-003

Service Request: K2505057
Date Collected: 05/12/25 14:40
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	6.44	ug/L	0.20	0.07	1	05/28/25 14:49	05/21/25	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: SC-MB-CT-SSE-F1
Lab Code: K2505057-004

Service Request: K2505057
Date Collected: 05/12/25 14:45
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	ND U	ug/L	0.20	0.07	1	05/28/25 14:52	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-SSE-F2
Lab Code: K2505057-005

Service Request: K2505057
Date Collected: 05/14/25 16:30
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	69.4	ug/L	0.20	0.07	1	05/28/25 15:20	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-SSE-F2
Lab Code: K2505057-006

Service Request: K2505057
Date Collected: 05/14/25 16:35
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	88.1	ug/L	0.20	0.07	1	05/28/25 15:44	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F2
Lab Code: K2505057-007

Service Request: K2505057
Date Collected: 05/14/25 16:40
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	71.3	ug/L	0.20	0.07	1	05/28/25 15:46	05/21/25	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: SC-MB-CT-SSE-F2
Lab Code: K2505057-008

Service Request: K2505057
Date Collected: 05/14/25 16:45
Date Received: 05/16/25 14:00

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	0.11 J	ug/L	0.20	0.07	1	05/28/25 15:49	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-SSE-F3
Lab Code: K2505057-009

Service Request: K2505057
Date Collected: 05/15/25 16:30
Date Received: 05/16/25 15:34

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	1030	ug/L	4.0	1.4	1	05/28/25 13:35	05/21/25	
Cobalt	6020B	4.13	ug/L	0.040	0.013	1	05/28/25 13:35	05/21/25	
Iron	6020B	624	ug/L	2.0	0.4	1	05/28/25 13:35	05/21/25	
Manganese	6020B	12.7	ug/L	0.20	0.09	1	05/28/25 13:35	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-SSE-F3
Lab Code: K2505057-010

Service Request: K2505057
Date Collected: 05/15/25 16:35
Date Received: 05/16/25 15:34

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	580	ug/L	4.0	1.4	1	05/28/25 13:47	05/21/25	
Cobalt	6020B	15.6	ug/L	0.040	0.013	1	05/28/25 13:47	05/21/25	
Iron	6020B	851	ug/L	2.0	0.4	1	05/28/25 13:47	05/21/25	
Manganese	6020B	36.0	ug/L	0.20	0.09	1	05/28/25 13:47	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F3
Lab Code: K2505057-011

Service Request: K2505057
Date Collected: 05/15/25 16:40
Date Received: 05/16/25 15:34

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	447	ug/L	4.0	1.4	1	05/28/25 13:49	05/21/25	
Cobalt	6020B	10.7	ug/L	0.040	0.013	1	05/28/25 13:49	05/21/25	
Iron	6020B	562	ug/L	2.0	0.4	1	05/28/25 13:49	05/21/25	
Manganese	6020B	25.2	ug/L	0.20	0.09	1	05/28/25 13:49	05/21/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: SC-MB-CT-SSE-F3
Lab Code: K2505057-012

Service Request: K2505057
Date Collected: 05/15/25 16:45
Date Received: 05/16/25 15:34

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	4.3	ug/L	4.0	1.4	1	05/28/25 13:51	05/21/25	
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	05/28/25 13:51	05/21/25	
Iron	6020B	7.2	ug/L	2.0	0.4	1	05/28/25 13:51	05/21/25	
Manganese	6020B	0.39	ug/L	0.20	0.09	1	05/28/25 13:51	05/21/25	



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2508536-01

Service Request: K2505057
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	ND U	ug/L	4.0	1.4	1	05/28/25 13:30	05/21/25		
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	05/28/25 13:30	05/21/25		
Iron	6020B	ND U	ug/L	2.0	0.4	1	05/28/25 13:30	05/21/25		
Manganese	6020B	ND U	ug/L	0.20	0.09	1	05/28/25 13:30	05/21/25		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2508553-01

Service Request: K2505057
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	05/28/25 13:58	05/21/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207 - Column Testing
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2508554-01

Service Request: K2505057
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	05/28/25 15:00	05/21/25	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Collected: 05/15/25
Date Received: 05/16/25
Date Analyzed: 05/28/25
Date Extracted: 05/21/25

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F3
Lab Code: K2505057-009
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2508536-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	1030	1090	100	62 #	75-125
Cobalt	4.13	30.7	25.0	106	75-125
Iron	624	687	50.0	125 #	75-125
Manganese	12.7	39.2	25.0	106	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Collected: 05/12/25
Date Received: 05/16/25
Date Analyzed: 05/28/25
Date Extracted: 05/21/25

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F1
Lab Code: K2505057-001
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2508553-04

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Cobalt	5.66	125	125	96	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Collected: 05/14/25
Date Received: 05/16/25
Date Analyzed: 05/28/25
Date Extracted: 05/21/25

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F2
Lab Code: K2505057-005
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2508554-04

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Cobalt	69.4	191	125	97	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Collected: 05/15/25
Date Received: 05/16/25
Date Analyzed: 05/28/25

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F3
Lab Code: K2505057-009

Units: ug/L
Basis: NA

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample Result (KQ2508536-03), Average, RPD, RPD Limit. Rows include Aluminum, Cobalt, Iron, and Manganese.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Collected: 05/12/25
Date Received: 05/16/25
Date Analyzed: 05/28/25

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F1 Units: ug/L
Lab Code: K2505057-001 Basis: NA

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample Result (KQ2508553-03), Average, RPD, RPD Limit. Row 1: Cobalt, 6020B, 0.20, 0.07, 5.66, 5.56, 5.61, 2, 20.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Collected: 05/14/25
Date Received: 05/16/25
Date Analyzed: 05/28/25

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F2 **Units:** ug/L
Lab Code: K2505057-005 **Basis:** NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2508554-03 Result			
Cobalt	6020B	0.20	0.07	69.4	71.2	70.3	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Analyzed: 05/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2508536-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6020B	109	100	109	80-120
Cobalt	6020B	25.4	25.0	102	80-120
Iron	6020B	52.7	50.0	105	80-120
Manganese	6020B	25.5	25.0	102	80-120

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Analyzed: 05/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2508553-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	6020B	26.0	25.0	104	80-120

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207 - Column Testing
Sample Matrix: Water

Service Request: K2505057
Date Analyzed: 05/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2508554-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	6020B	24.2	25.0	97	80-120



May 31, 2025

Service Request No:K2505273

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: 2025 Santee Cooper-Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory May 23, 2025
For your reference, these analyses have been assigned our service request number **K2505273**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

for Luke Rahn
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support
Sample Matrix: Soil, Water

Service Request: K2505273
Date Received: 05/23/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

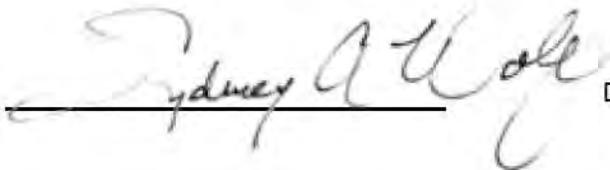
Sample Receipt:

Seven soil, water samples were received for analysis at ALS Environmental on 05/23/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

05/31/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-4-5-7.5-CT-SSE-F5	Lab ID: K2505273-005
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	1670		1.4	5.0	mg/Kg	6020B
Cobalt	0.737		0.012	0.050	mg/Kg	6020B
Iron	2340		4	10	mg/Kg	6020B
Manganese	14.1		0.06	0.13	mg/Kg	6020B

CLIENT ID: CLFMNA-5-10-15-CT-SSE-F5	Lab ID: K2505273-006
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	1880		1.3	4.6	mg/Kg	6020B
Cobalt	3.80		0.011	0.046	mg/Kg	6020B
Iron	3720		3.5	9.1	mg/Kg	6020B
Manganese	16.4		0.05	0.11	mg/Kg	6020B

CLIENT ID: CLFMNA-5-10-15-DUP-CT-SSE-F5	Lab ID: K2505273-007
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	1370		1.2	4.4	mg/Kg	6020B
Cobalt	2.77		0.010	0.044	mg/Kg	6020B
Iron	2660		3.4	8.7	mg/Kg	6020B
Manganese	11.0		0.05	0.11	mg/Kg	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-SSE-F4	Lab ID: K2505273-001
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	6250		14	40	ug/L	6020B
Cobalt, Dissolved	3.66		0.13	0.40	ug/L	6020B
Iron, Dissolved	3120		4	20	ug/L	6020B
Manganese, Dissolved	7.6		0.9	3.0	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-SSE-F4	Lab ID: K2505273-002
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	7810		14	40	ug/L	6020B
Cobalt, Dissolved	27.3		0.13	0.40	ug/L	6020B
Iron, Dissolved	3840		4	20	ug/L	6020B
Manganese, Dissolved	32.6		0.9	3.0	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-DUP-CT-SSE-F4	Lab ID: K2505273-003
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	6230		14	40	ug/L	6020B
Cobalt, Dissolved	22.2		0.13	0.40	ug/L	6020B
Iron, Dissolved	3070		4	20	ug/L	6020B
Manganese, Dissolved	26.6		0.9	3.0	ug/L	6020B

CLIENT ID: SC-MB-CT-SSE-F4	Lab ID: K2505273-004
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Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	30	J	14	40	ug/L	6020B



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: SC-MB-CT-SSE-F4		Lab ID: K2505273-004				
Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	6	J	4	20	ug/L	6020B



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request:K2505273

SAMPLE CROSS-REFERENCE

K2505273-001	CLFMNA-4-5-7.5-CT-SSE-F4	5/16/2025	1500
K2505273-002	CLFMNA-5-10-15-CT-SSE-F4	5/16/2025	1510
K2505273-003	CLFMNA-5-10-15-DUP-CT-SSE-F4	5/16/2025	1520
K2505273-004	SC-MB-CT-SSE-F4	5/16/2025	1530
K2505273-005	CLFMNA-4-5-7.5-CT-SSE-F5	5/21/2025	1400
K2505273-006	CLFMNA-5-10-15-CT-SSE-F5	5/21/2025	1405
K2505273-007	CLFMNA-5-10-15-DUP-CT-SSE-F5	5/21/2025	1410

K2505273

Environmental Sample Chain of Custody																					
Date:		5/22/2025			No. of Containers	TAT (days)	Dissolved Metals via 6020B (Co, Al, Fe, Mn)	Digestion via 3050B	Parameters												
Project:		2025 Santee Cooper - Winyah and Cross CCR Support																			
Client:		SynTerra Corporation																			
Project Number:		232922-01.01 Task 02.0207 - Column Testing																			
Point of Contact:		Jason Stuckey (jstuckey@anchorqea.com)																			
Sample Custodian:		Gillian Williams (971-645-9520)																			
Shipment Method:		ALS Courier																			
Line	Client Sample ID	Collection		Matrix	No. of Containers	TAT (days)	Dissolved Metals via 6020B (Co, Al, Fe, Mn)	Digestion via 3050B	Parameters										Preservative/Notes:		
		Date	Time																		
1	CLFMNA-4-5-7.5-CT-SSE-F4	5/16/2025	15:00	AQ	1	10	X														0.45µm PTFE field-filtered. 10.7 N HNO ₃ -preserved.
2	CLFMNA-5-10-15-CT-SSE-F4	5/16/2025	15:10	AQ	1	10	X														0.45µm PTFE field-filtered. 10.7 N HNO ₃ -preserved.
3	CLFMNA-5-10-15-DUP-CT-SSE-F4	5/16/2025	15:20	AQ	1	10	X														0.45µm PTFE field-filtered. 10.7 N HNO ₃ -preserved.
4	SC-MB-CT-SSE-F4	5/16/2025	15:30	AQ	1	10	X														0.45µm PTFE field-filtered. 10.7 N HNO ₃ -preserved.
5	CLFMNA-4-5-7.5-CT-SSE-F5	5/21/2025	14:00	SO	1	10	X	X													Residual dried solids
6	CLFMNA-5-10-15-CT-SSE-F5	5/21/2025	14:05	SO	1	10	X	X													Residual dried solids
7	CLFMNA-5-10-15-DUP-CT-SSE-F5	5/21/2025	14:10	SO	1	10	X	X													Residual dried solids
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					



6720 S Macadam Ave, Ste 300
Portland, OR 97219

Send report to:
jstuckey@anchorqea.com
labdata@anchorqea.com

Comment:
AQ = Aqueous, SO = Soil. All AQ samples field filtered through 0.45-um PTFE filter into HNO₃-pre preserved analysis bottles. Please contact Jason Stuckey (jstuckey@anchorqea.com) or Jackie Munden (jmunden@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 6020B to achieve the MDL < 1 ppb.

Relinquished by:		Received by:		Relinquished by:		Received by:	
Signature	<i>Aligail Williams</i>	Signature	<i>DPML</i>	Signature	<i>DPML</i>	Signature	<i>m. mulligan</i>
Print Name	Aligail Williams	Print Name	DPML	Print Name	DPML	Print Name	m. mulligan
Company	Anchor QEA	Company	ALS	Company	ALS	Company	ALS
Date/Time	05/22/2025 9:20	Date/Time	5/22/25 920	Date/Time	5/22/25 1130	Date/Time	5/22/25 1130

Cooler Receipt and Preservation Form

Client Anchor Service Request K25 05273 PM LD
 Received: 5/22/25 Opened: 5/22/25 By: rdp Unloaded: 5/22/25 By: rdp

1. Samples were received via? USPS ~~Fed Ex~~ ~~UPS~~ ~~DHL~~ ~~PDX~~ Courier ~~Hand Delivered~~
 2. Samples were received in: (circle) Cooler ~~Box~~ ~~Envelope~~ ~~Other~~ ~~NA~~
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
<u>2.2</u>	<u>-0.8</u>	<u>IK01</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
 5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: Frozen ~~Partially Thawed~~ ~~Thawed~~

6. Packing material: ~~Inserts~~ Baggies ~~Bubble Wrap~~ ~~Gel Packs~~ Wet Ice ~~Dry Ice~~ ~~Sleeves~~ _____
 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 8. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
 16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request: K2505273

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F4
Lab Code: K2505273-001
Sample Matrix: Water

Date Collected: 05/16/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-SSE-F4
Lab Code: K2505273-002
Sample Matrix: Water

Date Collected: 05/16/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F4
Lab Code: K2505273-003
Sample Matrix: Water

Date Collected: 05/16/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: SC-MB-CT-SSE-F4
Lab Code: K2505273-004
Sample Matrix: Water

Date Collected: 05/16/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F5
Lab Code: K2505273-005
Sample Matrix: Soil

Date Collected: 05/21/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
KLAWSON

Analyzed By
JCHAN

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request: K2505273

Sample Name: CLFMNA-5-10-15-CT-SSE-F5
Lab Code: K2505273-006
Sample Matrix: Soil

Date Collected: 05/21/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
KLAWSON

Analyzed By
JCHAN

Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F5
Lab Code: K2505273-007
Sample Matrix: Soil

Date Collected: 05/21/25
Date Received: 05/23/25

Analysis Method
6020B

Extracted/Digested By
KLAWSON

Analyzed By
JCHAN



Sample Results

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-SSE-F4
Lab Code: K2505273-001

Service Request: K2505273
Date Collected: 05/16/25 15:00
Date Received: 05/23/25 11:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	6250	ug/L	40	14	10	05/28/25 16:48	05/27/25	
Cobalt	6020B	3.66	ug/L	0.40	0.13	10	05/28/25 16:48	05/27/25	
Iron	6020B	3120	ug/L	20	4	10	05/28/25 16:48	05/27/25	
Manganese	6020B	7.6	ug/L	3.0	0.9	10	05/28/25 16:48	05/27/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-SSE-F4
Lab Code: K2505273-002

Service Request: K2505273
Date Collected: 05/16/25 15:10
Date Received: 05/23/25 11:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	7810	ug/L	40	14	10	05/28/25 16:56	05/27/25	
Cobalt	6020B	27.3	ug/L	0.40	0.13	10	05/28/25 16:56	05/27/25	
Iron	6020B	3840	ug/L	20	4	10	05/28/25 16:56	05/27/25	
Manganese	6020B	32.6	ug/L	3.0	0.9	10	05/28/25 16:56	05/27/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F4
Lab Code: K2505273-003

Service Request: K2505273
Date Collected: 05/16/25 15:20
Date Received: 05/23/25 11:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Aluminum	6020B	6230	ug/L	40	14	10	05/28/25 16:57	05/27/25	
Cobalt	6020B	22.2	ug/L	0.40	0.13	10	05/28/25 16:57	05/27/25	
Iron	6020B	3070	ug/L	20	4	10	05/28/25 16:57	05/27/25	
Manganese	6020B	26.6	ug/L	3.0	0.9	10	05/28/25 16:57	05/27/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: SC-MB-CT-SSE-F4
Lab Code: K2505273-004

Service Request: K2505273
Date Collected: 05/16/25 15:30
Date Received: 05/23/25 11:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	30 J	ug/L	40	14	10	05/28/25 16:59	05/27/25		
Cobalt	6020B	ND U	ug/L	0.40	0.13	10	05/28/25 16:59	05/27/25		
Iron	6020B	6 J	ug/L	20	4	10	05/28/25 16:59	05/27/25		
Manganese	6020B	ND U	ug/L	3.0	0.9	10	05/28/25 16:59	05/27/25		

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Soil
Sample Name: CLFMNA-4-5-7.5-CT-SSE-F5
Lab Code: K2505273-005

Service Request: K2505273
Date Collected: 05/21/25 14:00
Date Received: 05/23/25 11:30

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	1670	mg/Kg	5.0	1.4	10	05/30/25 13:03	05/28/25		
Cobalt	6020B	0.737	mg/Kg	0.050	0.012	10	05/30/25 13:03	05/28/25		
Iron	6020B	2340	mg/Kg	10	4	10	05/30/25 13:03	05/28/25		
Manganese	6020B	14.1	mg/Kg	0.13	0.06	10	05/30/25 13:03	05/28/25		

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Soil
Sample Name: CLFMNA-5-10-15-CT-SSE-F5
Lab Code: K2505273-006

Service Request: K2505273
Date Collected: 05/21/25 14:05
Date Received: 05/23/25 11:30

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	1880	mg/Kg	4.6	1.3	10	05/30/25 13:06	05/28/25		
Cobalt	6020B	3.80	mg/Kg	0.046	0.011	10	05/30/25 13:06	05/28/25		
Iron	6020B	3720	mg/Kg	9.1	3.5	10	05/30/25 13:06	05/28/25		
Manganese	6020B	16.4	mg/Kg	0.11	0.05	10	05/30/25 13:06	05/28/25		

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Soil
Sample Name: CLFMNA-5-10-15-DUP-CT-SSE-F5
Lab Code: K2505273-007

Service Request: K2505273
Date Collected: 05/21/25 14:10
Date Received: 05/23/25 11:30

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	1370	mg/Kg	4.4	1.2	10	05/30/25 13:09	05/28/25		
Cobalt	6020B	2.77	mg/Kg	0.044	0.010	10	05/30/25 13:09	05/28/25		
Iron	6020B	2660	mg/Kg	8.7	3.4	10	05/30/25 13:09	05/28/25		
Manganese	6020B	11.0	mg/Kg	0.11	0.05	10	05/30/25 13:09	05/28/25		



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2508868-01

Service Request: K2505273
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	ND U	ug/L	4.0	1.4	1	05/28/25 16:35		05/27/25	
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	05/28/25 16:35		05/27/25	
Iron	6020B	0.5 J	ug/L	2.0	0.4	1	05/28/25 16:35		05/27/25	
Manganese	6020B	ND U	ug/L	0.30	0.09	1	05/28/25 16:35		05/27/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2508939-01

Service Request: K2505273
Date Collected: NA
Date Received: NA

Basis: As Received

Total Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	ND U	mg/Kg	4.0	1.1	10	05/30/25 12:54	05/28/25		
Cobalt	6020B	ND U	mg/Kg	0.040	0.009	10	05/30/25 12:54	05/28/25		
Iron	6020B	ND U	mg/Kg	8.0	3.1	10	05/30/25 12:54	05/28/25		
Manganese	6020B	ND U	mg/Kg	0.10	0.05	10	05/30/25 12:54	05/28/25		

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QA/QC Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0207-Column Testing
Sample Matrix: Water

Service Request: K2505273
Date Collected: 05/16/25
Date Received: 05/23/25
Date Analyzed: 05/28/25
Date Extracted: 05/27/25

Matrix Spike Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F4
Lab Code: K2505273-001
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2508868-04

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Aluminum	6250	6240	100	-6 #	75-125
Cobalt	3.66	28.6	25.0	100	75-125
Iron	3120	3160	50	87 #	75-125
Manganese	7.6	31.6	25.0	96	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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QA/QC Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0207-Column Testing
Sample Matrix: Water

Service Request: K2505273
Date Collected: 05/16/25
Date Received: 05/23/25
Date Analyzed: 05/28/25

Replicate Sample Summary
Dissolved Metals

Sample Name: CLFMNA-4-5-7.5-CT-SSE-F4
Lab Code: K2505273-001

Units: ug/L
Basis: NA

Table with 9 columns: Analyte Name, Analysis Method, MRL, MDL, Sample Result, Duplicate Sample Result (KQ2508868-03), Average, RPD, RPD Limit. Rows include Aluminum, Cobalt, Iron, and Manganese.

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01
Task 02.0207-Column Testing
Sample Matrix: Water

Service Request: K2505273
Date Analyzed: 05/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2508868-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6020B	115	100	115	80-120
Cobalt	6020B	25.4	25.0	102	80-120
Iron	6020B	53.1	50.0	106	80-120
Manganese	6020B	25.0	25.0	100	80-120

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QA/QC Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper-Winyah and Cross CCR Support/232922-01.01
 Task 02.0207-Column Testing
Sample Matrix: Soil

Service Request: K2505273
Date Analyzed: 05/30/25

Duplicate Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:As Received

Lab Control Sample **Duplicate Lab Control Sample**
 KQ2508939-02 KQ2508939-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aluminum	6020B	412	400	103	409	400	102	80-120	<1	20
Cobalt	6020B	109	100	109	109	100	109	80-120	<1	20
Iron	6020B	219	200	110	223	200	111	80-120	2	20
Manganese	6020B	104	100	104	104	100	104	80-120	<1	20



April 30, 2025

Service Request No:K2504217

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: 2025-Santee Cooper-Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory April 24, 2025
For your reference, these analyses have been assigned our service request number **K2504217**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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Narrative Documents

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SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-POZ-4-CT-INF-1	Lab ID: K2504217-001
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	140		0.013	0.040	ug/L	6020B
Iron, Dissolved	51.7		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2610		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-1	Lab ID: K2504217-002
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	72.6		0.013	0.040	ug/L	6020B
Iron, Dissolved	18.9		0.4	2.0	ug/L	6020B
Manganese, Dissolved	685		0.4	1.0	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-1	Lab ID: K2504217-003
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.716		0.013	0.040	ug/L	6020B
Iron, Dissolved	2.9		0.4	2.0	ug/L	6020B
Manganese, Dissolved	235		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-5	Lab ID: K2504217-004
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	140		0.013	0.040	ug/L	6020B
Iron, Dissolved	28.6		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2610		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-5	Lab ID: K2504217-005
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	72.7		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.2	J	0.4	2.0	ug/L	6020B
Manganese, Dissolved	2440		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-5	Lab ID: K2504217-006
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	46.2		0.013	0.040	ug/L	6020B
Iron, Dissolved	10.8		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2110		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-8	Lab ID: K2504217-007
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	142		0.013	0.040	ug/L	6020B
Iron, Dissolved	6.7		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2620		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-8	Lab ID: K2504217-008
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	96.3		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.9	J	0.4	2.0	ug/L	6020B



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-8	Lab ID: K2504217-008
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Manganese, Dissolved	2500		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-8	Lab ID: K2504217-009
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	70.8		0.013	0.040	ug/L	6020B
Iron, Dissolved	5.7		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2390		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-9	Lab ID: K2504217-010
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	142		0.013	0.040	ug/L	6020B
Iron, Dissolved	2.0		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2630		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-9	Lab ID: K2504217-011
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	95.6		0.013	0.040	ug/L	6020B
Iron, Dissolved	2.1		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2480		0.9	2.0	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-9	Lab ID: K2504217-012
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	84.2		0.013	0.040	ug/L	6020B
Iron, Dissolved	6.2		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2470		0.9	2.0	ug/L	6020B



Sample Receipt Information

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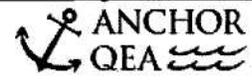
Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request:K2504217

SAMPLE CROSS-REFERENCE

K2504217-001	CLFMNA-POZ-4-CT-INF-1	4/14/2025	1420
K2504217-002	CLFMNA-4-5-7.5-CT-EFF-1	4/14/2025	1410
K2504217-003	CLFMNA-5-10-15-CT-EFF-1	4/14/2025	1410
K2504217-004	CLFMNA-POZ-4-CT-INF-5	4/16/2025	1520
K2504217-005	CLFMNA-4-5-7.5-CT-EFF-5	4/16/2025	1510
K2504217-006	CLFMNA-5-10-15-CT-EFF-5	4/16/2025	1510
K2504217-007	CLFMNA-POZ-4-CT-INF-8	4/18/2025	1355
K2504217-008	CLFMNA-4-5-7.5-CT-EFF-8	4/18/2025	1345
K2504217-009	CLFMNA-5-10-15-CT-EFF-8	4/18/2025	1345
K2504217-010	CLFMNA-POZ-4-CT-INF-9	4/21/2025	1315
K2504217-011	CLFMNA-4-5-7.5-CT-EFF-9	4/21/2025	1310
K2504217-012	CLFMNA-5-10-15-CT-EFF-9	4/21/2025	1310

K2504217



6720 S Macadam Ave, Ste 300
Portland, OR 97219

Send report to:
jstuckey@anchorqea.com
labdata@anchorqea.com

Environmental Sample Chain of Custody

Date:	4/24/2025
Project:	2025 Santee Cooper - Winyah and Cross CCR Support
Client:	SynTerra Corporation
Project Number:	232922-01.01 Task 02.0207 - Column Testing
Point of Contact:	Jason Stuckey (jstuckey@anchorqea.com)
Sample Custodian:	Gillian Williams (503-972-5042)
Shipment Method:	ALS Courier

Line	Client Sample ID	Collection		Matrix	No. of Containers	TAT (days)	Dissolved Metals via 6020B (Co, Fe, Mn)	Parameters													
		Date	Time																		
1	CLFMNA-POZ-4-CT-INF-1	4/14/2025	14:20	AQ	1	10	X														
2	CLFMNA-4-5-7.5-CT-EFF-1	4/14/2025	14:10	AQ	1	10	X														
3	CLFMNA-5-10-15-CT-EFF-1	4/14/2025	14:10	AQ	1	10	X														
4	CLFMNA-POZ-4-CT-INF-5	4/16/2025	15:20	AQ	1	10	X														
5	CLFMNA-4-5-7.5-CT-EFF-5	4/16/2025	15:10	AQ	1	10	X														
6	CLFMNA-5-10-15-CT-EFF-5	4/16/2025	15:10	AQ	1	10	X														
7	CLFMNA-POZ-4-CT-INF-8	4/18/2025	13:55	AQ	1	10	X														
8	CLFMNA-4-5-7.5-CT-EFF-8	4/18/2025	13:45	AQ	1	10	X														
9	CLFMNA-5-10-15-CT-EFF-8	4/18/2025	13:45	AQ	1	10	X														
10	CLFMNA-POZ-4-CT-INF-9	4/21/2025	13:15	AQ	1	10	X														
11	CLFMNA-4-5-7.5-CT-EFF-9	4/21/2025	13:10	AQ	1	10	X														
12	CLFMNA-5-10-15-CT-EFF-9	4/21/2025	13:10	AQ	1	10	X														
13																					
14																					
15																					

Preservative/Notes:

0.45 µm PES field filtered,
HNO₃-preserved

Comment:

Please contact Jason Stuckey (jstuckey@anchorqea.com) or Jackie Munden (jmunden@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 6020B to achieve the MDL < 1 ppb.

Relinquished by: Signature: <i>Gillian Williams</i>	Received by: Signature: <i>Andrea Carpenter</i>	Relinquished by: Signature: <i>Andrew Decore</i>	Received by: Signature: <i>Andrew Decore</i>
Print Name: Gillian Williams	Print Name: Andrea Carpenter	Print Name: Andrew Decore	Print Name: Andrew Decore
Company: Anchor QEA	Company: ALS	Company: ALS	Company: ALS
Date/Time: 04/24/2025 09:28	Date/Time: 4/24/25 09:28	Date/Time: 04/24/25 12:30	Date/Time: 04/24/25 12:30

Required analytes are documented in ALS Quote #58092.

Cooler Receipt and Preservation Form

Client Aurora Service Request K25 PM 04217
 Received: 04/24/25 Opened: 04/24/25 By: AD Unloaded: 04/24/25 By: AD

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp.	IR Gun	Cooler #/COC ID/NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number <u>NA</u>	Filed
<u>7.2</u>	<u>4.7</u>	<u>1500</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column below:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
 5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N
 If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 8. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
 13. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
 16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp blank away from cooling components.



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request: K2504217

Sample Name: CLFMNA-POZ-4-CT-INF-1
Lab Code: K2504217-001
Sample Matrix: Water

Date Collected: 04/14/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-1
Lab Code: K2504217-002
Sample Matrix: Water

Date Collected: 04/14/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-1
Lab Code: K2504217-003
Sample Matrix: Water

Date Collected: 04/14/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-5
Lab Code: K2504217-004
Sample Matrix: Water

Date Collected: 04/16/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-5
Lab Code: K2504217-005
Sample Matrix: Water

Date Collected: 04/16/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request: K2504217

Sample Name: CLFMNA-5-10-15-CT-EFF-5
Lab Code: K2504217-006
Sample Matrix: Water

Date Collected: 04/16/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-8
Lab Code: K2504217-007
Sample Matrix: Water

Date Collected: 04/18/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-8
Lab Code: K2504217-008
Sample Matrix: Water

Date Collected: 04/18/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-8
Lab Code: K2504217-009
Sample Matrix: Water

Date Collected: 04/18/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-9
Lab Code: K2504217-010
Sample Matrix: Water

Date Collected: 04/21/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing

Service Request: K2504217

Sample Name: CLFMNA-4-5-7.5-CT-EFF-9
Lab Code: K2504217-011
Sample Matrix: Water

Date Collected: 04/21/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-9
Lab Code: K2504217-012
Sample Matrix: Water

Date Collected: 04/21/25
Date Received: 04/24/25

Analysis Method
6020B

Extracted/Digested By
SSOLADEY

Analyzed By
ABOYER



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-1
Lab Code: K2504217-001

Service Request: K2504217
Date Collected: 04/14/25 14:20
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	140	ug/L	0.040	0.013	1	04/30/25 11:37	04/29/25	
Iron	6020B	51.7	ug/L	2.0	0.4	1	04/30/25 11:37	04/29/25	
Manganese	6020B	2610	ug/L	2.0	0.9	10	04/30/25 12:45	04/29/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-1
Lab Code: K2504217-002

Service Request: K2504217
Date Collected: 04/14/25 14:10
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	72.6	ug/L	0.040	0.013	1	04/30/25 11:39	04/29/25	
Iron	6020B	18.9	ug/L	2.0	0.4	1	04/30/25 11:39	04/29/25	
Manganese	6020B	685	ug/L	1.0	0.4	5	04/30/25 12:47	04/29/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-1
Lab Code: K2504217-003

Service Request: K2504217
Date Collected: 04/14/25 14:10
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Cobalt	6020B	0.716	ug/L	0.040	0.013	1	04/30/25 11:41	04/29/25		
Iron	6020B	2.9	ug/L	2.0	0.4	1	04/30/25 11:41	04/29/25		
Manganese	6020B	235	ug/L	0.20	0.09	1	04/30/25 11:41	04/29/25		

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-5
Lab Code: K2504217-004

Service Request: K2504217
Date Collected: 04/16/25 15:20
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	140	ug/L	0.040	0.013	1	04/30/25 11:43	04/29/25	
Iron	6020B	28.6	ug/L	2.0	0.4	1	04/30/25 11:43	04/29/25	
Manganese	6020B	2610	ug/L	2.0	0.9	10	04/30/25 12:49	04/29/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-5
Lab Code: K2504217-005

Service Request: K2504217
Date Collected: 04/16/25 15:10
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	72.7	ug/L	0.040	0.013	1	04/30/25 11:45	04/29/25	
Iron	6020B	1.2 J	ug/L	2.0	0.4	1	04/30/25 11:45	04/29/25	
Manganese	6020B	2440	ug/L	2.0	0.9	10	04/30/25 12:51	04/29/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-5
Lab Code: K2504217-006

Service Request: K2504217
Date Collected: 04/16/25 15:10
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Cobalt	6020B	46.2	ug/L	0.040	0.013	1	04/30/25 11:47	04/29/25		
Iron	6020B	10.8	ug/L	2.0	0.4	1	04/30/25 11:47	04/29/25		
Manganese	6020B	2110	ug/L	2.0	0.9	10	04/30/25 12:53	04/29/25		

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-8
Lab Code: K2504217-007

Service Request: K2504217
Date Collected: 04/18/25 13:55
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	142	ug/L	0.040	0.013	1	04/30/25 11:49	04/29/25	
Iron	6020B	6.7	ug/L	2.0	0.4	1	04/30/25 11:49	04/29/25	
Manganese	6020B	2620	ug/L	2.0	0.9	10	04/30/25 12:55	04/29/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-8
Lab Code: K2504217-008

Service Request: K2504217
Date Collected: 04/18/25 13:45
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	96.3	ug/L	0.040	0.013	1	04/30/25 11:51	04/29/25	
Iron	6020B	1.9 J	ug/L	2.0	0.4	1	04/30/25 11:51	04/29/25	
Manganese	6020B	2500	ug/L	2.0	0.9	10	04/30/25 12:57	04/29/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-8
Lab Code: K2504217-009

Service Request: K2504217
Date Collected: 04/18/25 13:45
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	70.8	ug/L	0.040	0.013	1	04/30/25 11:54	04/29/25	
Iron	6020B	5.7	ug/L	2.0	0.4	1	04/30/25 11:54	04/29/25	
Manganese	6020B	2390	ug/L	2.0	0.9	10	04/30/25 13:00	04/29/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-9
Lab Code: K2504217-010

Service Request: K2504217
Date Collected: 04/21/25 13:15
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	142	ug/L	0.040	0.013	1	04/30/25 11:56	04/29/25	
Iron	6020B	2.0	ug/L	2.0	0.4	1	04/30/25 11:56	04/29/25	
Manganese	6020B	2630	ug/L	2.0	0.9	10	04/30/25 13:02	04/29/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-9
Lab Code: K2504217-011

Service Request: K2504217
Date Collected: 04/21/25 13:10
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	95.6	ug/L	0.040	0.013	1	04/30/25 12:02	04/29/25	
Iron	6020B	2.1	ug/L	2.0	0.4	1	04/30/25 12:02	04/29/25	
Manganese	6020B	2480	ug/L	2.0	0.9	10	04/30/25 13:04	04/29/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-9
Lab Code: K2504217-012

Service Request: K2504217
Date Collected: 04/21/25 13:10
Date Received: 04/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	84.2	ug/L	0.040	0.013	1	04/30/25 12:04	04/29/25	
Iron	6020B	6.2	ug/L	2.0	0.4	1	04/30/25 12:04	04/29/25	
Manganese	6020B	2470	ug/L	2.0	0.9	10	04/30/25 13:17	04/29/25	



QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01 Task 02.0207-Column Testing
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2506864-01

Service Request: K2504217
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	04/30/25 11:26	04/29/25		
Iron	6020B	ND U	ug/L	2.0	0.4	1	04/30/25 11:26	04/29/25		
Manganese	6020B	ND U	ug/L	0.20	0.09	1	04/30/25 11:26	04/29/25		

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025-Santee Cooper-Winyah and Cross CCR Support/232922-01.01
 Task 02.0207-Column Testing
Sample Matrix: Water

Service Request: K2504217
Date Analyzed: 04/30/25

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample **Duplicate Lab Control Sample**
 KQ2506864-02 KQ2506864-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Cobalt	6020B	25.2	25.0	101	25.4	25.0	102	80-120	<1	20
Iron	6020B	50.6	50.0	101	51.3	50.0	103	80-120	1	20
Manganese	6020B	26.3	25.0	105	26.5	25.0	106	80-120	<1	20



May 22, 2025

Service Request No:K2504864.01

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: 2025 Santee Cooper- Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory May 12, 2025
For your reference, these analyses have been assigned our service request number **K2504864**.

Sample ID's have been updated per client request.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

REVISED

3:57 pm, May 22, 2025

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2504864
Date Received: 05/12/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Eighteen water samples were received for analysis at ALS Environmental on 05/12/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

05/21/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-POZ-4-CT-INF-2	Lab ID: K2504864-001
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	144		0.013	0.040	ug/L	6020B
Iron, Dissolved	49.8		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2630		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-2	Lab ID: K2504864-002
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	40.1		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.4	J	0.4	2.0	ug/L	6020B
Manganese, Dissolved	1780		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-2	Lab ID: K2504864-003
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	26.3		0.013	0.040	ug/L	6020B
Iron, Dissolved	22.9		0.4	2.0	ug/L	6020B
Manganese, Dissolved	1780		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-3	Lab ID: K2504864-004
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	146		0.013	0.040	ug/L	6020B
Iron, Dissolved	49.9		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2670		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-3	Lab ID: K2504864-005
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	43.9		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.3	J	0.4	2.0	ug/L	6020B
Manganese, Dissolved	2020		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-3	Lab ID: K2504864-006
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	30.4		0.013	0.040	ug/L	6020B
Iron, Dissolved	19.9		0.4	2.0	ug/L	6020B
Manganese, Dissolved	1860		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-13	Lab ID: K2504864-007
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	139		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.3	J	0.4	2.0	ug/L	6020B
Manganese, Dissolved	2570		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-13	Lab ID: K2504864-008
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	85.0		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.3	J	0.4	2.0	ug/L	6020B



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-13	Lab ID: K2504864-008
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Analyte	Results	Flag	MDL	MRL	Units	Method
Manganese, Dissolved	2380		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-13	Lab ID: K2504864-009
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	84.6		0.013	0.040	ug/L	6020B
Iron, Dissolved	10.2		0.4	2.0	ug/L	6020B
Manganese, Dissolved	2430		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-15	Lab ID: K2504864-010
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.084		0.013	0.040	ug/L	6020B
Iron, Dissolved	3.7		0.4	2.0	ug/L	6020B
Manganese, Dissolved	7.50		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-15	Lab ID: K2504864-011
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	21.2		0.013	0.040	ug/L	6020B
Iron, Dissolved	4.2		0.4	2.0	ug/L	6020B
Manganese, Dissolved	520		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-15	Lab ID: K2504864-012
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	14.3		0.013	0.040	ug/L	6020B
Iron, Dissolved	17.2		0.4	2.0	ug/L	6020B
Manganese, Dissolved	316		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-POZ-4-CT-INF-16	Lab ID: K2504864-013
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.066		0.013	0.040	ug/L	6020B
Iron, Dissolved	4.6		0.4	2.0	ug/L	6020B
Manganese, Dissolved	6.98		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-16	Lab ID: K2504864-014
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	10.1		0.013	0.040	ug/L	6020B
Iron, Dissolved	14.9		0.4	2.0	ug/L	6020B
Manganese, Dissolved	141		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-16	Lab ID: K2504864-015
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	17.4		0.013	0.040	ug/L	6020B
Iron, Dissolved	7.2		0.4	2.0	ug/L	6020B
Manganese, Dissolved	167		0.09	0.20	ug/L	6020B



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-POZ-4-CT-INF-17	Lab ID: K2504864-016
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.063		0.013	0.040	ug/L	6020B
Iron, Dissolved	3.1		0.4	2.0	ug/L	6020B
Manganese, Dissolved	6.89		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-4-5-7.5-CT-EFF-17	Lab ID: K2504864-017
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	11.0		0.013	0.040	ug/L	6020B
Iron, Dissolved	1.4	J	0.4	2.0	ug/L	6020B
Manganese, Dissolved	113		0.09	0.20	ug/L	6020B

CLIENT ID: CLFMNA-5-10-15-CT-EFF-17	Lab ID: K2504864-018
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	17.7		0.013	0.040	ug/L	6020B
Iron, Dissolved	8.4		0.4	2.0	ug/L	6020B
Manganese, Dissolved	152		0.09	0.20	ug/L	6020B



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing

Service Request:K2504864

SAMPLE CROSS-REFERENCE

K2504864-001	CLFMNA-POZ-4-CT-INF-2	4/15/2025	1120
K2504864-002	CLFMNA-4-5-7.5-CT-EFF-2	4/15/2025	1113
K2504864-003	CLFMNA-5-10-15-CT-EFF-2	4/15/2025	1113
K2504864-004	CLFMNA-POZ-4-CT-INF-3	4/15/2025	1605
K2504864-005	CLFMNA-4-5-7.5-CT-EFF-3	4/15/2025	1600
K2504864-006	CLFMNA-5-10-15-CT-EFF-3	4/15/2025	1600
K2504864-007	CLFMNA-POZ-4-CT-INF-13	4/25/2025	1335
K2504864-008	CLFMNA-4-5-7.5-CT-EFF-13	4/25/2025	1330
K2504864-009	CLFMNA-5-10-15-CT-EFF-13	4/25/2025	1330
K2504864-010	CLFMNA-POZ-4-CT-INF-15	4/28/2025	1755
K2504864-011	CLFMNA-4-5-7.5-CT-EFF-15	4/28/2025	1750
K2504864-012	CLFMNA-5-10-15-CT-EFF-15	4/28/2025	1750
K2504864-013	CLFMNA-POZ-4-CT-INF-16	4/29/2025	1412
K2504864-014	CLFMNA-4-5-7.5-CT-EFF-16	4/29/2025	1409
K2504864-015	CLFMNA-5-10-15-CT-EFF-16	4/29/2025	1409
K2504864-016	CLFMNA-POZ-4-CT-INF-17	4/30/2025	1430
K2504864-017	CLFMNA-4-5-7.5-CT-EFF-17	4/30/2025	1420
K2504864-018	CLFMNA-5-10-15-CT-EFF-17	4/30/2025	1420

K2504864

Environmental Sample Chain of Custody																			
Date:		5/12/2025			No. of Containers	TAT (days)	Dissolved Metals via 6020B (Co, Fe, Mn)	Parameters											
Project:		2025 Santee Cooper - Winyah and Cross CCR Support																	
Client:		SynTerra Corporation																	
Project Number:		232922-01.01 Task 02.0207 - Column Testing																	
Point of Contact:		Jason Stuckey (jstuckey@anchorqea.com)																	
Sample Custodian:		Reece Gregory (503)-830-8504																	
Shipment Method:		ALS Courier																	
Line	Client Sample ID	Collection		Matrix															
		Date	Time																
1	CLFMNA-POZ-4-CT-INF-1	4/30/2025	14:30	AQ	1	10	X												
2	CLFMNA-4-5-7.5-CT-EFF-1	4/30/2025	14:20	AQ	1	10	X												
3	CLFMNA-5-10-15-CT-EFF-1	4/30/2025	14:20	AQ	1	10	X												
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

ANCHOR QEA
 6720 S Macadam Ave, Ste 300
 Portland, OR 97219
 Send report to:
 jstuckey@anchorqea.com
 labdata@anchorqea.com

Preservative/Notes:
 0.45 µm PES field filtered,
 HNO₃-preserved

Comment:
 Please contact Jason Stuckey (jstuckey@anchorqea.com) or Jackie Munden (jmunden@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 6020B to achieve the MDL < 1 ppb.

Relinquished by: Signature <i>Gillian Williams</i>	Received by: Signature <i>Diana Pnu</i>	Relinquished by: Signature <i>Diana Pnu</i>	Received by: Signature <i>Katelyn Mitolo</i>
Print Name Gillian Williams	Print Name Diana Pnu	Print Name Diana Pnu	Print Name Katelyn Mitolo
Company Anchor QEA	Company ALS	Company ALS	Company ALS
Date/Time 5/12/25 0958	Date/Time 5/12/25 958	Date/Time 5/12/25 1245	Date/Time 5/12/25 1245

Required analytes are documented in ALS Quote #58092.

Cooler Receipt and Preservation Form

PM LR

Client Anchor Service Request K25 04804
 Received: 5/12/25 Opened: 5/12/25 By: hm Unloaded: 5/12/25 By: hm

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
<u>10.3</u>	<u>11.7</u>	<u>IR02</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____

7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 8. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
 13. Were VOA vials received without headspace? Indicate in the table below NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
 16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:
<u>CLMNA-CCMLF-2-CT-INF-15</u>	<u>CLMNA-POZ-4-CT-INF-15</u>	<u>Date/h.m.p</u>
<u>CLMNA-CCMLF-2-CT-INF-16</u>	<u>CLMNA-POZ-4-CT-INF-16</u>	↓
<u>CLMNA-CCMLF-2-CT-INF-17</u>	<u>CLMNA-POZ-4-CT-INF-1</u>	↓

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: TEMP not an issue due to analysis. Dicht pH due to limited volume



Cooler Receipt and Preservation Form

Client Anchor

Service Request ~~K24~~ K2504804

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed

Sample ID on Bottle	Sample ID on COC	Identified by:
<u>CLFMNA-4-5-7.5-CT-EFF-1</u>	<u>CLFMNA-4-5-7.5-CT-EFF-1</u>	<u>Date/Time</u>
<u>CLFMNA-5-10-15-CT-EFF-1</u>	<u>CLFMNA-5-10-15-CT-EFF-1</u>	<u>↓</u>

Sample ID	Bottle Count Bottle Type	Out of Temp	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies & Resolutions: _____



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing

Service Request: K2504864

Sample Name: CLFMNA-POZ-4-CT-INF-2
Lab Code: K2504864-001
Sample Matrix: Water

Date Collected: 04/15/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-2
Lab Code: K2504864-002
Sample Matrix: Water

Date Collected: 04/15/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-2
Lab Code: K2504864-003
Sample Matrix: Water

Date Collected: 04/15/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-3
Lab Code: K2504864-004
Sample Matrix: Water

Date Collected: 04/15/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-3
Lab Code: K2504864-005
Sample Matrix: Water

Date Collected: 04/15/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing

Service Request: K2504864

Sample Name: CLFMNA-5-10-15-CT-EFF-3
Lab Code: K2504864-006
Sample Matrix: Water

Date Collected: 04/15/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-13
Lab Code: K2504864-007
Sample Matrix: Water

Date Collected: 04/25/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-13
Lab Code: K2504864-008
Sample Matrix: Water

Date Collected: 04/25/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-13
Lab Code: K2504864-009
Sample Matrix: Water

Date Collected: 04/25/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-15
Lab Code: K2504864-010
Sample Matrix: Water

Date Collected: 04/28/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing

Service Request: K2504864

Sample Name: CLFMNA-4-5-7.5-CT-EFF-15
Lab Code: K2504864-011
Sample Matrix: Water

Date Collected: 04/28/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-15
Lab Code: K2504864-012
Sample Matrix: Water

Date Collected: 04/28/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-POZ-4-CT-INF-16
Lab Code: K2504864-013
Sample Matrix: Water

Date Collected: 04/29/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-16
Lab Code: K2504864-014
Sample Matrix: Water

Date Collected: 04/29/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-16
Lab Code: K2504864-015
Sample Matrix: Water

Date Collected: 04/29/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing

Service Request: K2504864

Sample Name: CLFMNA-POZ-4-CT-INF-17
Lab Code: K2504864-016
Sample Matrix: Water

Date Collected: 04/30/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-4-5-7.5-CT-EFF-17
Lab Code: K2504864-017
Sample Matrix: Water

Date Collected: 04/30/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER

Sample Name: CLFMNA-5-10-15-CT-EFF-17
Lab Code: K2504864-018
Sample Matrix: Water

Date Collected: 04/30/25
Date Received: 05/12/25

Analysis Method
6020B

Extracted/Digested By
MCHATTICK

Analyzed By
ABOYER



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-2
Lab Code: K2504864-001

Service Request: K2504864
Date Collected: 04/15/25 11:20
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	144	ug/L	0.040	0.013	1	05/20/25 13:29	05/15/25	
Iron	6020B	49.8	ug/L	2.0	0.4	1	05/20/25 13:29	05/15/25	
Manganese	6020B	2630	ug/L	0.20	0.09	1	05/20/25 13:29	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-2
Lab Code: K2504864-002

Service Request: K2504864
Date Collected: 04/15/25 11:13
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	40.1	ug/L	0.040	0.013	1	05/20/25 13:31	05/15/25	
Iron	6020B	1.4 J	ug/L	2.0	0.4	1	05/20/25 13:31	05/15/25	
Manganese	6020B	1780	ug/L	0.20	0.09	1	05/20/25 13:31	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-2
Lab Code: K2504864-003

Service Request: K2504864
Date Collected: 04/15/25 11:13
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	26.3	ug/L	0.040	0.013	1	05/20/25 13:32	05/15/25	
Iron	6020B	22.9	ug/L	2.0	0.4	1	05/20/25 13:32	05/15/25	
Manganese	6020B	1780	ug/L	0.20	0.09	1	05/20/25 13:32	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-3
Lab Code: K2504864-004

Service Request: K2504864
Date Collected: 04/15/25 16:05
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	146	ug/L	0.040	0.013	1	05/20/25 13:34	05/15/25	
Iron	6020B	49.9	ug/L	2.0	0.4	1	05/20/25 13:34	05/15/25	
Manganese	6020B	2670	ug/L	0.20	0.09	1	05/20/25 13:34	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-3
Lab Code: K2504864-005

Service Request: K2504864
Date Collected: 04/15/25 16:00
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	43.9	ug/L	0.040	0.013	1	05/20/25 13:35	05/15/25	
Iron	6020B	1.3 J	ug/L	2.0	0.4	1	05/20/25 13:35	05/15/25	
Manganese	6020B	2020	ug/L	0.20	0.09	1	05/20/25 13:35	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-3
Lab Code: K2504864-006

Service Request: K2504864
Date Collected: 04/15/25 16:00
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	30.4	ug/L	0.040	0.013	1	05/20/25 13:37	05/15/25	
Iron	6020B	19.9	ug/L	2.0	0.4	1	05/20/25 13:37	05/15/25	
Manganese	6020B	1860	ug/L	0.20	0.09	1	05/20/25 13:37	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-13
Lab Code: K2504864-007

Service Request: K2504864
Date Collected: 04/25/25 13:35
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	139	ug/L	0.040	0.013	1	05/20/25 13:38	05/15/25	
Iron	6020B	1.3 J	ug/L	2.0	0.4	1	05/20/25 13:38	05/15/25	
Manganese	6020B	2570	ug/L	0.20	0.09	1	05/20/25 13:38	05/15/25	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-13
Lab Code: K2504864-008

Service Request: K2504864
Date Collected: 04/25/25 13:30
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	85.0	ug/L	0.040	0.013	1	05/20/25 13:40	05/15/25	
Iron	6020B	1.3 J	ug/L	2.0	0.4	1	05/20/25 13:40	05/15/25	
Manganese	6020B	2380	ug/L	0.20	0.09	1	05/20/25 13:40	05/15/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-13
Lab Code: K2504864-009

Service Request: K2504864
Date Collected: 04/25/25 13:30
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	84.6	ug/L	0.040	0.013	1	05/20/25 13:41	05/15/25	
Iron	6020B	10.2	ug/L	2.0	0.4	1	05/20/25 13:41	05/15/25	
Manganese	6020B	2430	ug/L	0.20	0.09	1	05/20/25 13:41	05/15/25	

ALS Group USA, Corp.
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Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-15
Lab Code: K2504864-010

Service Request: K2504864
Date Collected: 04/28/25 17:55
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	0.084	ug/L	0.040	0.013	1	05/20/25 13:43	05/15/25	
Iron	6020B	3.7	ug/L	2.0	0.4	1	05/20/25 13:43	05/15/25	
Manganese	6020B	7.50	ug/L	0.20	0.09	1	05/20/25 13:43	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-15
Lab Code: K2504864-011

Service Request: K2504864
Date Collected: 04/28/25 17:50
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	21.2	ug/L	0.040	0.013	1	05/20/25 13:47	05/15/25	
Iron	6020B	4.2	ug/L	2.0	0.4	1	05/20/25 13:47	05/15/25	
Manganese	6020B	520	ug/L	0.20	0.09	1	05/20/25 13:47	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-15
Lab Code: K2504864-012

Service Request: K2504864
Date Collected: 04/28/25 17:50
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	14.3	ug/L	0.040	0.013	1	05/20/25 13:49	05/15/25	
Iron	6020B	17.2	ug/L	2.0	0.4	1	05/20/25 13:49	05/15/25	
Manganese	6020B	316	ug/L	0.20	0.09	1	05/20/25 13:49	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-16
Lab Code: K2504864-013

Service Request: K2504864
Date Collected: 04/29/25 14:12
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	0.066	ug/L	0.040	0.013	1	05/20/25 13:50	05/15/25	
Iron	6020B	4.6	ug/L	2.0	0.4	1	05/20/25 13:50	05/15/25	
Manganese	6020B	6.98	ug/L	0.20	0.09	1	05/20/25 13:50	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-16
Lab Code: K2504864-014

Service Request: K2504864
Date Collected: 04/29/25 14:09
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	10.1	ug/L	0.040	0.013	1	05/20/25 13:52	05/15/25	
Iron	6020B	14.9	ug/L	2.0	0.4	1	05/20/25 13:52	05/15/25	
Manganese	6020B	141	ug/L	0.20	0.09	1	05/20/25 13:52	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-16
Lab Code: K2504864-015

Service Request: K2504864
Date Collected: 04/29/25 14:09
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	17.4	ug/L	0.040	0.013	1	05/20/25 13:53	05/15/25	
Iron	6020B	7.2	ug/L	2.0	0.4	1	05/20/25 13:53	05/15/25	
Manganese	6020B	167	ug/L	0.20	0.09	1	05/20/25 13:53	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-POZ-4-CT-INF-17
Lab Code: K2504864-016

Service Request: K2504864
Date Collected: 04/30/25 14:30
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Cobalt	6020B	0.063	ug/L	0.040	0.013	1	05/20/25 13:55	05/15/25	
Iron	6020B	3.1	ug/L	2.0	0.4	1	05/20/25 13:55	05/15/25	
Manganese	6020B	6.89	ug/L	0.20	0.09	1	05/20/25 13:55	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-4-5-7.5-CT-EFF-17
Lab Code: K2504864-017

Service Request: K2504864
Date Collected: 04/30/25 14:20
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	11.0	ug/L	0.040	0.013	1	05/20/25 13:56	05/15/25	
Iron	6020B	1.4 J	ug/L	2.0	0.4	1	05/20/25 13:56	05/15/25	
Manganese	6020B	113	ug/L	0.20	0.09	1	05/20/25 13:56	05/15/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: CLFMNA-5-10-15-CT-EFF-17
Lab Code: K2504864-018

Service Request: K2504864
Date Collected: 04/30/25 14:20
Date Received: 05/12/25 12:45

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method	Result						Extracted	Q
Cobalt	6020B	17.7	ug/L	0.040	0.013	1	05/20/25 13:58	05/15/25	
Iron	6020B	8.4	ug/L	2.0	0.4	1	05/20/25 13:58	05/15/25	
Manganese	6020B	152	ug/L	0.20	0.09	1	05/20/25 13:58	05/15/25	



QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01 Task 02.0207- Column Testing
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2508088-01

Service Request: K2504864
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	05/20/25 13:22	05/15/25		
Iron	6020B	ND U	ug/L	2.0	0.4	1	05/20/25 13:22	05/15/25		
Manganese	6020B	ND U	ug/L	0.20	0.09	1	05/20/25 13:22	05/15/25		

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: 2025 Santee Cooper- Winyah and Cross CCR Support/232922-01.01
Task 02.0207- Column Testing
Sample Matrix: Water

Service Request: K2504864
Date Analyzed: 05/20/25

Duplicate Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2508088-02

Duplicate Lab Control Sample
KQ2508088-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Cobalt	6020B	25.6	25.0	102	26.0	25.0	104	80-120	2	20
Iron	6020B	53.3	50.0	107	53.5	50.0	107	80-120	<1	20
Manganese	6020B	25.5	25.0	102	26.0	25.0	104	80-120	2	20



March 05, 2025

Revised Service Request No:K2412320.01

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed is the revised report for the sample(s) submitted to our laboratory November 19, 2024. For your reference, these analyses have been assigned our service request number **K2412320**.

The report was revised to update the sample ID's as requested.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

REVISED

11:23 am, Mar 05, 2025

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Soil

Service Request: K2412320
Date Received: 11/19/2024

CASE NARRATIVE

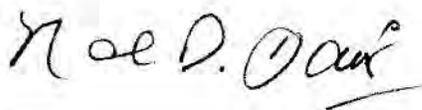
All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Six soil samples were received for analysis at ALS Environmental on 11/19/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by 

Date 12/03/2024



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: CLFMNA-1-5-7.5	Lab ID: K2412320-001
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	0.167		0.005	0.018	mg/Kg	200.8
Solids, Total	99.6				Percent	160.3 Modified

CLIENT ID: CLFMNA-2-5-10	Lab ID: K2412320-002
---------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	0.545		0.005	0.016	mg/Kg	200.8
Solids, Total	99.6				Percent	160.3 Modified

CLIENT ID: CLFMNA-3-15-20	Lab ID: K2412320-003
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	9.22		0.005	0.015	mg/Kg	200.8
Solids, Total	99.9				Percent	160.3 Modified

CLIENT ID: CLFMNA-4-5-7.5	Lab ID: K2412320-004
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	1.24		0.005	0.016	mg/Kg	200.8
Solids, Total	99.5				Percent	160.3 Modified

CLIENT ID: CLFMNA-5-10-15	Lab ID: K2412320-005
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	1.47		0.005	0.017	mg/Kg	200.8
Solids, Total	99.8				Percent	160.3 Modified

CLIENT ID: CLFMNA-6-20-25	Lab ID: K2412320-006
----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt	0.056		0.005	0.016	mg/Kg	200.8
Solids, Total	99.9				Percent	160.3 Modified



Sample Receipt Information

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206

Service Request:K2412320

SAMPLE CROSS-REFERENCE

K2412320-001	CLFMNA-1-5-7.5	11/13/2024	1630
K2412320-002	CLFMNA-2-5-10	11/13/2024	1635
K2412320-003	CLFMNA-3-15-20	11/13/2024	1640
K2412320-004	CLFMNA-4-5-7.5	11/13/2024	1645
K2412320-005	CLFMNA-5-10-15	11/13/2024	1650
K2412320-005	CLFMNA-5-10-15	11/13/2024	1650
K2412320-006	CLFMNA-6-20-25	11/13/2024	1655
K2412320-006	CLFMNA-6-20-25	11/13/2024	1655

PM 11/19/24

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K24 13320
Received: 11/19/24 Opened: 11/19/24 By: pdp Unloaded: 11/19/24 By: pdp

- 1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
- 2. Samples were received in: (circle) Cooler Box Envelope Other small tote NA
- 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
- 4. If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with 'X'	PM Notified if out of temp	Tracking Number NA	Filed
		<u>NA</u>					

- 4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
- 5. Were samples received within the method specified temperature ranges? NA Y N
If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

- 6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
- 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
- 8. Were samples received in good condition (unbroken) NA Y N
- 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
- 10. Did all sample labels and tags agree with custody papers? NA Y N
- 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
- 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
- 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
- 14. Was C12/Res negative? NA Y N
- 15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
- 16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206

Service Request: K2412320

Sample Name: CLFMNA-1-5-7.5
Lab Code: K2412320-001
Sample Matrix: Soil

Date Collected: 11/13/24
Date Received: 11/19/24

Analysis Method
160.3 Modified
200.8

Extracted/Digested By

KLawson

Analyzed By
ZBIBI
JCHAN

Sample Name: CLFMNA-2-5-10
Lab Code: K2412320-002
Sample Matrix: Soil

Date Collected: 11/13/24
Date Received: 11/19/24

Analysis Method
160.3 Modified
200.8

Extracted/Digested By

KLawson

Analyzed By
ZBIBI
JCHAN

Sample Name: CLFMNA-3-15-20
Lab Code: K2412320-003
Sample Matrix: Soil

Date Collected: 11/13/24
Date Received: 11/19/24

Analysis Method
160.3 Modified
200.8

Extracted/Digested By

KLawson

Analyzed By
ZBIBI
JCHAN

Sample Name: CLFMNA-4-5-7.5
Lab Code: K2412320-004
Sample Matrix: Soil

Date Collected: 11/13/24
Date Received: 11/19/24

Analysis Method
160.3 Modified
200.8

Extracted/Digested By

KLawson

Analyzed By
ZBIBI
JCHAN

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206

Service Request: K2412320

Sample Name: CLFMNA-5-10-15
Lab Code: K2412320-005
Sample Matrix: Soil

Date Collected: 11/13/24
Date Received: 11/19/24

Analysis Method

160.3 Modified
200.8

Extracted/Digested By

KLAWSON

Analyzed By

ZBIBI
JCHAN

Sample Name: CLFMNA-6-20-25
Lab Code: K2412320-006
Sample Matrix: Soil

Date Collected: 11/13/24
Date Received: 11/19/24

Analysis Method

160.3 Modified
200.8

Extracted/Digested By

KLAWSON

Analyzed By

ZBIBI
JCHAN



Sample Results

ALS Environmental—Kelso Laboratory
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Metals

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dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-1-5-7.5
Lab Code: K2412320-001

Service Request: K2412320
Date Collected: 11/13/24 16:30
Date Received: 11/19/24 10:50

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.167	mg/Kg	0.018	0.005	5	12/03/24 07:34	11/21/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-2-5-10
Lab Code: K2412320-002

Service Request: K2412320
Date Collected: 11/13/24 16:35
Date Received: 11/19/24 10:50

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.545	mg/Kg	0.016	0.005	5	12/03/24 07:38	11/21/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-3-15-20
Lab Code: K2412320-003

Service Request: K2412320
Date Collected: 11/13/24 16:40
Date Received: 11/19/24 10:50

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	9.22	mg/Kg	0.015	0.005	5	12/03/24 07:39	11/21/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-4-5-7.5
Lab Code: K2412320-004

Service Request: K2412320
Date Collected: 11/13/24 16:45
Date Received: 11/19/24 10:50

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	1.24	mg/Kg	0.016	0.005	5	12/03/24 07:41	11/21/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-5-10-15
Lab Code: K2412320-005

Service Request: K2412320
Date Collected: 11/13/24 16:50
Date Received: 11/19/24 10:50

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	1.47	mg/Kg	0.017	0.005	5	12/03/24 07:42	11/21/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-6-20-25
Lab Code: K2412320-006

Service Request: K2412320
Date Collected: 11/13/24 16:55
Date Received: 11/19/24 10:50

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	0.056	mg/Kg	0.016	0.005	5	12/03/24 07:43	11/21/24	



General Chemistry

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dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-1-5-7.5
Lab Code: K2412320-001

Service Request: K2412320
Date Collected: 11/13/24 16:30
Date Received: 11/19/24 10:50

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total	160.3 Modified	99.6	Percent	-	-	1	11/20/24 10:14	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-2-5-10
Lab Code: K2412320-002

Service Request: K2412320
Date Collected: 11/13/24 16:35
Date Received: 11/19/24 10:50

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total	160.3 Modified	99.6	Percent	-	-	1	11/20/24 10:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-3-15-20
Lab Code: K2412320-003

Service Request: K2412320
Date Collected: 11/13/24 16:40
Date Received: 11/19/24 10:50

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total	160.3 Modified	99.9	Percent	-	-	1	11/20/24 10:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-4-5-7.5
Lab Code: K2412320-004

Service Request: K2412320
Date Collected: 11/13/24 16:45
Date Received: 11/19/24 10:50

Basis: As Received

Inorganic Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Solids, Total	160.3 Modified	99.5	Percent	-	-	1	11/20/24 10:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-5-10-15
Lab Code: K2412320-005

Service Request: K2412320
Date Collected: 11/13/24 16:50
Date Received: 11/19/24 10:50

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total	160.3 Modified	99.8	Percent	-	-	1	11/20/24 10:14	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: CLFMNA-6-20-25
Lab Code: K2412320-006

Service Request: K2412320
Date Collected: 11/13/24 16:55
Date Received: 11/19/24 10:50

Basis: As Received

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Q
Solids, Total	160.3 Modified	99.9	Percent	-	-	1	11/20/24 10:14	



QC Summary Forms

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Metals

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02
Task 02.0206
Sample Matrix: Soil
Sample Name: Method Blank
Lab Code: KQ2418888-03

Service Request: K2412320
Date Collected: NA
Date Received: NA

Basis: Dry

Total Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	200.8	ND U	mg/Kg	0.020	0.006	5	12/03/24 07:31	11/21/24	

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QA/QC Report

Client:	Anchor QEA, LLC	Service Request:	K2412320
Project:	Santee Cooper - Winyah and Cross CCR Support/232922-10.02 Task 02.0206	Date Collected:	11/13/24
Sample Matrix:	Soil	Date Received:	11/19/24
		Date Analyzed:	12/3/24
		Date Extracted:	11/21/24

Matrix Spike Summary
Total Metals

Sample Name:	CLFMNA-1-5-7.5	Units:	µg/Kg
Lab Code:	K2412320-001	Basis:	Dry
Analysis Method:	200.8		
Prep Method:	EPA 3050B		

Matrix Spike
KQ2418888-02

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	0.167	88.4	85.6	103	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02 Task 02.0206
Sample Matrix: Soil

Service Request: K2412320
Date Collected: 11/13/24
Date Received: 11/19/24
Date Analyzed: 12/03/24

Replicate Sample Summary
Total Metals

Sample Name: CLFMNA-1-5-7.5
Lab Code: K2412320-001

Units: mg/Kg
Basis: Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2418888-01 Result			
Cobalt	200.8	0.017	0.005	0.167	0.166	0.167	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-10.02 Task
02.0206
Sample Matrix: Soil

Service Request: K2412320
Date Analyzed: 12/03/24

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2418888-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	200.8	106	100	106	85-115



March 31, 2025

Service Request No:K2503015

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory March 24, 2025
For your reference, these analyses have been assigned our service request number **K2503015**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

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Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2503015
Date Received: 03/24/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

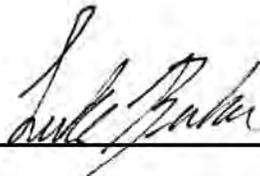
Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 03/24/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

03/31/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: POZ-4-2		Lab ID: K2503015-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	2.2	J	1.4	4.0	ug/L	6020B
Arsenic, Dissolved	0.49	J	0.06	0.50	ug/L	6020B
Barium, Dissolved	77.0		0.024	0.050	ug/L	6020B
Beryllium, Dissolved	0.314		0.008	0.020	ug/L	6020B
Boron, Dissolved	28.9		0.4	4.0	ug/L	6020B
Cadmium, Dissolved	0.266		0.006	0.020	ug/L	6020B
Calcium, Dissolved	333000		60	200	ug/L	6020B
Chromium, Dissolved	0.18	J	0.06	0.20	ug/L	6020B
Iron, Dissolved	222		0.4	2.0	ug/L	6020B
Lithium, Dissolved	10.1		0.10	0.10	ug/L	6020B
Magnesium, Dissolved	6180		2	10	ug/L	6020B
Manganese, Dissolved	2580		0.09	0.20	ug/L	6020B
Molybdenum, Dissolved	0.04	J	0.03	0.10	ug/L	6020B
Nickel, Dissolved	12.5		0.04	0.20	ug/L	6020B
Potassium, Dissolved	5650		8	50	ug/L	6020B
Silicon, Dissolved	10100		400	2000	ug/L	6020B
Sodium, Dissolved	73600		40	100	ug/L	6020B
Thallium, Dissolved	0.095		0.009	0.040	ug/L	6020B
Zinc, Dissolved	10.0		0.3	2.0	ug/L	6020B

CLIENT ID: CCMLF-2-2		Lab ID: K2503015-002				
Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	3.3	J	1.4	4.0	ug/L	6020B
Barium, Dissolved	30.6		0.024	0.050	ug/L	6020B
Beryllium, Dissolved	0.048		0.008	0.020	ug/L	6020B
Boron, Dissolved	13.7		0.4	4.0	ug/L	6020B
Cadmium, Dissolved	0.011	J	0.006	0.020	ug/L	6020B
Calcium, Dissolved	9210		6	20	ug/L	6020B
Chromium, Dissolved	0.47		0.06	0.20	ug/L	6020B
Iron, Dissolved	10.7		0.4	2.0	ug/L	6020B
Lead, Dissolved	0.022		0.007	0.020	ug/L	6020B
Lithium, Dissolved	1.78		0.10	0.10	ug/L	6020B
Magnesium, Dissolved	250		2	10	ug/L	6020B
Manganese, Dissolved	7.84		0.09	0.20	ug/L	6020B
Nickel, Dissolved	0.23		0.04	0.20	ug/L	6020B
Potassium, Dissolved	790		8	50	ug/L	6020B
Silicon, Dissolved	6370		40	200	ug/L	6020B
Sodium, Dissolved	3900		40	100	ug/L	6020B
Thallium, Dissolved	0.021	J	0.009	0.040	ug/L	6020B
Zinc, Dissolved	2.2		0.3	2.0	ug/L	6020B



Sample Receipt Information

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Phone (360) 577-7222 Fax (360) 425-9096
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Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207

Service Request:K2503015

SAMPLE CROSS-REFERENCE

K2503015-001	POZ-4-2	3/21/2025	1635
K2503015-002	CCMLF-2-2	3/21/2025	1735

Cooler Receipt and Preservation Form

PM Uh

Client Anchor Service Request K25 03015
 Received: 3/24/25 Opened: 3/24/25 By: AR Unloaded: 3/24/25 By: AR

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number <u>NA</u>	Filed
<u>10.9</u>	<u>6.8</u>	<u>IR-06</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
 5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N
 If applicable, tissue samples were received: Frozen Partially Thawed Thawed
 6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 8. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
 16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not receive unpreserved bottles or bottles for TOC and ammonia. Received HNO3 bottles



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207

Service Request: K2503015

Sample Name: POZ-4-2
Lab Code: K2503015-001
Sample Matrix: Water

Date Collected: 03/21/25
Date Received: 03/24/25

Analysis Method
6020B

Extracted/Digested By
ABOYER

Analyzed By
ABOYER

Sample Name: CCMLF-2-2
Lab Code: K2503015-002
Sample Matrix: Water

Date Collected: 03/21/25
Date Received: 03/24/25

Analysis Method
6020B

Extracted/Digested By
ABOYER

Analyzed By
ABOYER



Sample Results

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0207
Sample Matrix: Water
Sample Name: POZ-4-2
Lab Code: K2503015-001

Service Request: K2503015
Date Collected: 03/21/25 16:35
Date Received: 03/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
	Method	Result							
Aluminum	6020B	2.2 J	ug/L	4.0	1.4	1	03/28/25 16:41	03/27/25	
Antimony	6020B	ND U	ug/L	0.050	0.022	1	03/28/25 16:41	03/27/25	
Arsenic	6020B	0.49 J	ug/L	0.50	0.06	1	03/28/25 16:41	03/27/25	
Barium	6020B	77.0	ug/L	0.050	0.024	1	03/28/25 16:41	03/27/25	
Beryllium	6020B	0.314	ug/L	0.020	0.008	1	03/28/25 16:41	03/27/25	
Boron	6020B	28.9	ug/L	4.0	0.4	1	03/28/25 16:41	03/27/25	
Cadmium	6020B	0.266	ug/L	0.020	0.006	1	03/28/25 16:41	03/27/25	
Calcium	6020B	333000	ug/L	200	60	10	03/28/25 17:30	03/27/25	
Chromium	6020B	0.18 J	ug/L	0.20	0.06	1	03/28/25 16:41	03/27/25	
Iron	6020B	222	ug/L	2.0	0.4	1	03/28/25 16:41	03/27/25	
Lead	6020B	ND U	ug/L	0.020	0.007	1	03/28/25 16:41	03/27/25	
Lithium	6020B	10.1	ug/L	0.10	0.10	1	03/28/25 16:41	03/27/25	
Magnesium	6020B	6180	ug/L	10	2	1	03/28/25 16:41	03/27/25	
Manganese	6020B	2580	ug/L	0.20	0.09	1	03/28/25 16:41	03/27/25	
Molybdenum	6020B	0.04 J	ug/L	0.10	0.03	1	03/28/25 16:41	03/27/25	
Nickel	6020B	12.5	ug/L	0.20	0.04	1	03/28/25 16:41	03/27/25	
Potassium	6020B	5650	ug/L	50	8	1	03/28/25 16:41	03/27/25	
Selenium	6020B	ND U	ug/L	1.0	0.2	1	03/28/25 16:41	03/27/25	
Silicon	6020B	10100	ug/L	2000	400	10	03/28/25 17:30	03/27/25	
Silver	6020B	ND U	ug/L	0.020	0.006	1	03/28/25 16:41	03/27/25	
Sodium	6020B	73600	ug/L	100	40	1	03/28/25 16:41	03/27/25	
Thallium	6020B	0.095	ug/L	0.040	0.009	1	03/28/25 16:41	03/27/25	
Zinc	6020B	10.0	ug/L	2.0	0.3	1	03/28/25 16:41	03/27/25	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0207
Sample Matrix: Water
Sample Name: CCMLF-2-2
Lab Code: K2503015-002

Service Request: K2503015
Date Collected: 03/21/25 17:35
Date Received: 03/24/25 12:30

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
	Method	Result							
Aluminum	6020B	3.3 J	ug/L	4.0	1.4	1	03/28/25 16:55	03/27/25	
Antimony	6020B	ND U	ug/L	0.050	0.022	1	03/28/25 16:55	03/27/25	
Arsenic	6020B	ND U	ug/L	0.50	0.06	1	03/28/25 16:55	03/27/25	
Barium	6020B	30.6	ug/L	0.050	0.024	1	03/28/25 16:55	03/27/25	
Beryllium	6020B	0.048	ug/L	0.020	0.008	1	03/28/25 16:55	03/27/25	
Boron	6020B	13.7	ug/L	4.0	0.4	1	03/28/25 16:55	03/27/25	
Cadmium	6020B	0.011 J	ug/L	0.020	0.006	1	03/28/25 16:55	03/27/25	
Calcium	6020B	9210	ug/L	20	6	1	03/28/25 16:55	03/27/25	
Chromium	6020B	0.47	ug/L	0.20	0.06	1	03/28/25 16:55	03/27/25	
Iron	6020B	10.7	ug/L	2.0	0.4	1	03/28/25 16:55	03/27/25	
Lead	6020B	0.022	ug/L	0.020	0.007	1	03/28/25 16:55	03/27/25	
Lithium	6020B	1.78	ug/L	0.10	0.10	1	03/28/25 16:55	03/27/25	
Magnesium	6020B	250	ug/L	10	2	1	03/28/25 16:55	03/27/25	
Manganese	6020B	7.84	ug/L	0.20	0.09	1	03/28/25 16:55	03/27/25	
Molybdenum	6020B	ND U	ug/L	0.10	0.03	1	03/28/25 16:55	03/27/25	
Nickel	6020B	0.23	ug/L	0.20	0.04	1	03/28/25 16:55	03/27/25	
Potassium	6020B	790	ug/L	50	8	1	03/28/25 16:55	03/27/25	
Selenium	6020B	ND U	ug/L	1.0	0.2	1	03/28/25 16:55	03/27/25	
Silicon	6020B	6370	ug/L	200	40	1	03/28/25 16:55	03/27/25	
Silver	6020B	ND U	ug/L	0.020	0.006	1	03/28/25 16:55	03/27/25	
Sodium	6020B	3900	ug/L	100	40	1	03/28/25 16:55	03/27/25	
Thallium	6020B	0.021 J	ug/L	0.040	0.009	1	03/28/25 16:55	03/27/25	
Zinc	6020B	2.2	ug/L	2.0	0.3	1	03/28/25 16:55	03/27/25	



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
 Task 02.0207
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2505037-01

Service Request: K2503015
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

Analyte Name	Analysis		Units	MRL	MDL	Dil.	Date Analyzed	Date		Q
	Method	Result						Extracted		
Aluminum	6020B	ND U	ug/L	4.0	1.4	1	03/28/25 16:29	03/27/25		
Antimony	6020B	ND U	ug/L	0.050	0.022	1	03/28/25 16:29	03/27/25		
Arsenic	6020B	ND U	ug/L	0.50	0.06	1	03/28/25 16:29	03/27/25		
Barium	6020B	ND U	ug/L	0.050	0.024	1	03/28/25 16:29	03/27/25		
Beryllium	6020B	ND U	ug/L	0.020	0.008	1	03/28/25 16:29	03/27/25		
Boron	6020B	ND U	ug/L	4.0	0.4	1	03/28/25 16:29	03/27/25		
Cadmium	6020B	ND U	ug/L	0.020	0.006	1	03/28/25 16:29	03/27/25		
Calcium	6020B	ND U	ug/L	20	6	1	03/28/25 16:29	03/27/25		
Chromium	6020B	ND U	ug/L	0.20	0.06	1	03/28/25 16:29	03/27/25		
Iron	6020B	ND U	ug/L	2.0	0.4	1	03/28/25 16:29	03/27/25		
Lead	6020B	ND U	ug/L	0.020	0.007	1	03/28/25 16:29	03/27/25		
Lithium	6020B	ND U	ug/L	0.10	0.10	1	03/28/25 16:29	03/27/25		
Magnesium	6020B	ND U	ug/L	10	2	1	03/28/25 16:29	03/27/25		
Manganese	6020B	ND U	ug/L	0.20	0.09	1	03/28/25 16:29	03/27/25		
Molybdenum	6020B	ND U	ug/L	0.10	0.03	1	03/28/25 16:29	03/27/25		
Nickel	6020B	ND U	ug/L	0.20	0.04	1	03/28/25 16:29	03/27/25		
Potassium	6020B	ND U	ug/L	50	8	1	03/28/25 16:29	03/27/25		
Selenium	6020B	ND U	ug/L	1.0	0.2	1	03/28/25 16:29	03/27/25		
Silicon	6020B	ND U	ug/L	200	40	1	03/28/25 16:29	03/27/25		
Silver	6020B	ND U	ug/L	0.020	0.006	1	03/28/25 16:29	03/27/25		
Sodium	6020B	ND U	ug/L	100	40	1	03/28/25 16:29	03/27/25		
Thallium	6020B	0.020 J	ug/L	0.040	0.009	1	03/28/25 16:29	03/27/25		
Zinc	6020B	ND U	ug/L	2.0	0.3	1	03/28/25 16:29	03/27/25		

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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207
Sample Matrix: Water

Service Request: K2503015
Date Collected: 03/21/25
Date Received: 03/24/25
Date Analyzed: 03/28/25
Date Extracted: 03/27/25

Matrix Spike Summary
Dissolved Metals

Sample Name: POZ-4-2
Lab Code: K2503015-001
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2505037-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	2.2 J	109	100	107	75-125
Antimony	ND U	10.4	10.0	104	75-125
Arsenic	0.49 J	52.8	50.0	105	75-125
Barium	77.0	185	100	107	75-125
Beryllium	0.314	2.88	2.50	102	75-125
Boron	28.9	54.6	25.0	103	75-125
Cadmium	0.266	24.8	25.0	98	75-125
Calcium	333000	350000	10300	158 #	75-125
Chromium	0.18 J	10.7	10.0	105	75-125
Iron	222	283	50.0	122 #	75-125
Lead	ND U	48.7	50.0	97	75-125
Lithium	10.1	60.5	50.0	101	75-125
Magnesium	6180	16100	10300	97	75-125
Manganese	2580	2730	25.0	598 #	75-125
Molybdenum	0.04 J	27.8	25.0	111	75-125
Nickel	12.5	38.4	25.0	103	75-125
Potassium	5650	16000	10300	101	75-125
Selenium	ND U	51.0	50.0	102	75-125
Silver	ND U	12.4	12.5	99	75-125
Sodium	73600	84900	10300	110 #	75-125
Thallium	0.095	48.5	50.0	97	75-125
Zinc	10.0	35.0	25.0	100	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207
Sample Matrix: Water

Service Request: K2503015
Date Collected: 03/21/25
Date Received: 03/24/25
Date Analyzed: 03/28/25
Date Extracted: 03/27/25

Matrix Spike Summary
Dissolved Metals

Sample Name: POZ-4-2
Lab Code: K2503015-001
Analysis Method: 6020B
Prep Method: EPA CLP ILM04.0

Units: ug/L
Basis: NA

Matrix Spike
KQ2505037-06

<u>Analyte Name</u>	<u>Sample Result</u>	<u>Result</u>	<u>Spike Amount</u>	<u>% Rec</u>	<u>% Rec Limits</u>
Silicon	10100	15000	5000	98	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task 02.0207
Sample Matrix: Water

Service Request: K2503015
Date Collected: 03/21/25
Date Received: 03/24/25
Date Analyzed: 03/28/25

Replicate Sample Summary
Dissolved Metals

Sample Name: POZ-4-2 **Units:** ug/L
Lab Code: K2503015-001 **Basis:** NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2505037-04			
Aluminum	6020B	4.0	1.4	2.2 J	2.2 J	2.2	<1	20
Antimony	6020B	0.050	0.022	ND U	ND U	ND	-	20
Arsenic	6020B	0.50	0.06	0.49 J	0.51	0.50	4	20
Barium	6020B	0.050	0.024	77.0	78.6	77.8	2	20
Beryllium	6020B	0.020	0.008	0.314	0.322	0.318	3	20
Boron	6020B	4.0	0.4	28.9	29.7	29.3	3	20
Cadmium	6020B	0.020	0.006	0.266	0.266	0.266	<1	20
Calcium	6020B	200	60	333000	340000	337000	2	20
Chromium	6020B	0.20	0.06	0.18 J	0.17 J	0.18	6	20
Iron	6020B	2.0	0.4	222	231	227	4	20
Lead	6020B	0.020	0.007	ND U	ND U	ND	-	20
Lithium	6020B	0.10	0.10	10.1	10.3	10.2	2	20
Magnesium	6020B	10	2	6180	6290	6240	2	20
Manganese	6020B	0.20	0.09	2580	2690	2640	4	20
Molybdenum	6020B	0.10	0.03	0.04 J	ND U	NC	NC	20
Nickel	6020B	0.20	0.04	12.5	13.3	12.9	6	20
Potassium	6020B	50	8	5650	5720	5690	1	20
Selenium	6020B	1.0	0.2	ND U	ND U	ND	-	20
Silicon	6020B	2000	400	10100	9900	10000	2	20
Silver	6020B	0.020	0.006	ND U	ND U	ND	-	20
Sodium	6020B	100	40	73600	73100	73400	<1	20
Thallium	6020B	0.040	0.009	0.095	0.097	0.096	2	20
Zinc	6020B	2.0	0.3	10.0	10.3	10.2	3	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task
02.0207
Sample Matrix: Water

Service Request: K2503015
Date Analyzed: 03/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2505037-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6020B	108	100	108	80-120
Antimony	6020B	9.48	10.0	95	80-120
Arsenic	6020B	52.1	50.0	104	80-120
Barium	6020B	105	100	105	80-120
Beryllium	6020B	2.62	2.50	105	80-120
Boron	6020B	23.1	25.0	92	80-120
Cadmium	6020B	25.6	25.0	102	80-120
Calcium	6020B	10500	10300	103	80-120
Chromium	6020B	10.5	10.0	105	80-120
Iron	6020B	54.5	50.0	109	80-120
Lead	6020B	51.4	50.0	103	80-120
Lithium	6020B	51.8	50.0	104	80-120
Magnesium	6020B	10100	10300	98	80-120
Manganese	6020B	26.9	25.0	108	80-120
Molybdenum	6020B	27.2	25.0	109	80-120
Nickel	6020B	26.2	25.0	105	80-120
Potassium	6020B	10300	10300	101	80-120
Selenium	6020B	52.1	50.0	104	80-120
Silver	6020B	12.8	12.5	102	80-120
Sodium	6020B	10100	10300	99	80-120
Thallium	6020B	51.0	50.0	102	80-120
Zinc	6020B	26.4	25.0	106	80-120

ALS Group USA, Corp.
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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task
02.0207
Sample Matrix: Water

Service Request: K2503015
Date Analyzed: 03/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2505037-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Silicon	6020B	5210	5000	104	80-120



March 31, 2025

Service Request No:K2503016

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory March 24, 2025
For your reference, these analyses have been assigned our service request number **K2503016**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

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ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

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Phone (360) 577-7222 Fax (360) 425-9096
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Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2503016
Date Received: 03/24/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

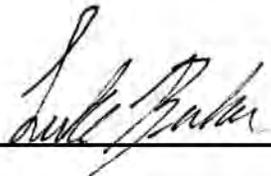
Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 03/24/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

03/31/2025

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: POZ-4-1	Lab ID: K2503016-001
---------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	83.4		0.013	0.040	ug/L	6020B

CLIENT ID: CCMLF-2-1	Lab ID: K2503016-002
-----------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Cobalt, Dissolved	0.079		0.013	0.040	ug/L	6020B



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207

Service Request:K2503016

SAMPLE CROSS-REFERENCE

K2503016-001	POZ-4-1	3/21/2025	1630
K2503016-002	CCMLF-2-1	3/21/2025	1730

172503016

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: (503)-972-5019

Date: 3/24/2025

Project Name: Santee Cooper - Winyah and Cross CCR Support

Project Number: 232922-01.01 Task 02.0207

Project Manager: Jason Stuckey

Phone Number: (503)-924-6184

Shipment Method: Courier Pick-up

Parameters										
No. of Containers	Dissolved Cobalt (EPA 60208) 5 day rush TAT	Chloride (EPA 300.0)	Nitrate, Nitrite, and Sulfate Anion (EPA 300.0)	Nitrogen, Ammonia (EPA 350.1)	Ortho Phosphorus (EPA 365.3)	Dissolved Metals Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Fe, Pb, Li, Mg, Mn, Mo, Ni, K, Se, Si, Ag, Na, Ti, Zn (EPA 60208)	Alkalinity (SM 2320 B)	Total Organic Carbon (SM 5310 B)		



Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters										Comments/Preservation		
		Date	Time			Dissolved Cobalt (EPA 60208) 5 day rush TAT	Chloride (EPA 300.0)	Nitrate, Nitrite, and Sulfate Anion (EPA 300.0)	Nitrogen, Ammonia (EPA 350.1)	Ortho Phosphorus (EPA 365.3)	Dissolved Metals Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Fe, Pb, Li, Mg, Mn, Mo, Ni, K, Se, Si, Ag, Na, Ti, Zn (EPA 60208)	Alkalinity (SM 2320 B)	Total Organic Carbon (SM 5310 B)					
1	POZ-4-1	3/21/2025	16:30	Liquid	1	X												
2	POZ-4-2	3/21/2025	16:35	Liquid	1		X	X	X	X	X	X	X	X				
3	CCMLF-2-1	3/21/2025	17:30	Liquid	1	X												
4	CCMLF-2-2	3/21/2025	17:35	Liquid	1		X	X	X	X	X	X	X	X				
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		

0.45-micron PES filtered. HNO3 Preserved

Notes: Dissolved Cobalt for POZ-4-1 and CCMLF-2-1 on a 5-day rushed TAT. All other analyses on standard 10-day TAT. All samples are HNO3-preserved and 0.45-um filtered. Please contact Jason Stuckey (jstuckey@anchorqea.com) if running > 10X dilution.

Relinquished by: _____ Company: Anchor QEA

Signature/Print Name: _____ Date/Time: _____

Relinquished by: _____ Company: _____

Signature/Print Name: _____ Date/Time: _____

Received by: _____

Signature/Print Name: _____

Received by: *Matthew M. Holo* *ALS*

Signature/Print Name: *Matthew M. Holo 3/24/25 12:30*

Cooler Receipt and Preservation Form

PM lh

Client Anchor Service Request K25 03016
 Received: 3/24/25 Opened: 3/24/25 By: AR Unloaded: 3/24/25 By: AR

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 2. Samples were received in: (circle) Cooler Box Envelope Other NA
 3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number <u>NA</u>	Filed
<u>10.9</u>	<u>6.8</u>	<u>IR-06</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column below:
 If no, take the temperature of a representative sample bottle contained within the cooler; note in the column "Sample Temp":
 5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
 7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
 8. Were samples received in good condition (unbroken) NA Y N
 9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
 10. Did all sample labels and tags agree with custody papers? NA Y N
 11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
 12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
 13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
 14. Was C12/Res negative? NA Y N
 15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
 16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Didn't receive unpreserved bottles or bottles for TOC and ammonia. Received HNO3 bottles

SHORT HOLD



Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207

Service Request: K2503016

Sample Name: POZ-4-1
Lab Code: K2503016-001
Sample Matrix: Water

Date Collected: 03/21/25
Date Received: 03/24/25

Analysis Method
6020B

Extracted/Digested By
ABOYER

Analyzed By
ABOYER

Sample Name: CCMLF-2-1
Lab Code: K2503016-002
Sample Matrix: Water

Date Collected: 03/21/25
Date Received: 03/24/25

Analysis Method
6020B

Extracted/Digested By
ABOYER

Analyzed By
ABOYER



Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com



Metals

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207
Sample Matrix: Water
Sample Name: POZ-4-1
Lab Code: K2503016-001

Service Request: K2503016
Date Collected: 03/21/25 16:30
Date Received: 03/24/25 12:30

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	83.4	ug/L	0.040	0.013	1	03/28/25 16:57	03/27/25	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207
Sample Matrix: Water
Sample Name: CCMLF-2-1
Lab Code: K2503016-002

Service Request: K2503016
Date Collected: 03/21/25 17:30
Date Received: 03/24/25 12:30

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	0.079	ug/L	0.040	0.013	1	03/28/25 17:00	03/27/25	



QC Summary Forms

ALS Environmental—Kelso Laboratory
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www.alsglobal.com



Metals

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www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01
Task 02.0207
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2505037-01

Service Request: K2503016
Date Collected: NA
Date Received: NA

Basis: NA

Dissolved Metals

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>Q</u>
Cobalt	6020B	ND U	ug/L	0.040	0.013	1	03/28/25 16:29	03/27/25	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/232922-01.01 Task
02.0207
Sample Matrix: Water

Service Request: K2503016
Date Analyzed: 03/28/25

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2505037-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cobalt	6020B	26.2	25.0	105	80-120



April 01, 2025

Service Request No:K2503145

Jason Stuckey
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 300
Portland, OR 97219

Laboratory Results for: Santee Cooper - Winyah and Cross CCR Support

Dear Jason,

Enclosed are the results of the sample(s) submitted to our laboratory March 27, 2025
For your reference, these analyses have been assigned our service request number **K2503145**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2503145
Date Received: 03/27/2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 03/27/2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

General Chemistry:

No significant anomalies were noted with this analysis.

Approved by



Date

04/01/2025



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: POZ-4-3	Lab ID: K2503145-001
---------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity as CaCO ₃ , Total	247		0.6	2.0	mg/L	SM 2320 B
Ammonia as Nitrogen	0.131		0.020	0.050	mg/L	350.1
Carbon, Total Organic (TOC)	2.20		0.10	0.50	mg/L	SM 5310 B
Chloride	453		1.5	5.0	mg/L	300.0
Sulfate	156		2.0	5.0	mg/L	300.0

CLIENT ID: CCMLF-2-3	Lab ID: K2503145-002
-----------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity as CaCO ₃ , Total	26.2		0.6	2.0	mg/L	SM 2320 B
Carbon, Total Organic (TOC)	0.15	J	0.10	0.50	mg/L	SM 5310 B
Chloride	5.23		0.06	0.20	mg/L	300.0
Sulfate	0.45		0.08	0.20	mg/L	300.0



Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

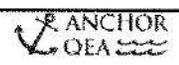
Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support

Service Request: K2503145

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2503145-001	POZ-4-3	3/26/2025	1300
K2503145-002	CCMLF-2-3	3/26/2025	1305

12503145

Chain of Custody Record & Laboratory Analysis Request												
Laboratory Number: (503)-972-5019					No. of Containers	Parameters						
Date:	3/27/2025					Chloride / Sulfate Anion (EPA 300.0)	Alkalinity (SM 2320 B)	Total Organic Carbon (SM 5310 B)	Nitrogen, Ammonia (EPA 350.1)			
Project Name:	Santee Cooper - Winyah and Cross CCR Support											
Project Number:	232922-01.01 Task 02.0207											
Project Manager:	Jason Stuckey											
Phone Number:	(503)-924-6184											
Shipment Method:	Courier Pick-up											
Line	Field Sample ID	Collection		Matrix							Comments/Preservation	
		Date	Time									
1	POZ-4-3	3/26/2025	13:00	Liquid	3	X	X	X	X		0.45-micron PES filtered. Unpreserved, H2SO4 and HCl preserved bottles	
2	CCMLF-2-3	3/26/2025	13:05	Liquid	3	X	X	X	X			
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Notes: All analyses on standard 10-day TAT. Chloride, sulfate, and alkalinity in unpreserved bottles. Ammonia in H2SO4 preserved bottles. TOC in HCl preserved bottles. All samples are 0.45-um filtered. Please contact Jason Stuckey (jstuckey@anchorqea.com) if running > 10X dilution.

Relinquished by: *Reese, Gregory* Company: Anchor QEA Received by: *Diane PML* 3/27/25 1038

Signature/Print Name: *Gregory Reese* Date/Time: 3/27/25 10:38 Signature/Print Name: *Diane PML*

Relinquished by: *DPML* Company: *ALS* Received by: *Diane PML ALS*

Signature/Print Name: *Diane PML* Date/Time: 3/27/25 1220 Signature/Print Name: *DPML* 3/27/25 1230

Cooler Receipt and Preservation Form

PM LA

Client: Anchor Service Request **K25** 0345
 Received: 3/27/25 Opened: 3/27/25 By: pdp Unloaded: 3/27/25 By: pdp

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
	<u>5.8</u>	<u>IR-04</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column below:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N
- If applicable, tissue samples were received: Frozen Partially Thawed Thawed
6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
13. Were VOA vials received without headspace? Indicate in the table below. NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within method specified time limit? If not, notate the error below and notify the PM. NA Y N
16. Were 100mL sterile microbiology bottles filled exactly to the 100mL mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Miscellaneous Forms

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Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

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Analyst Summary report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support/

Service Request: K2503145

Sample Name: POZ-4-3
Lab Code: K2503145-001
Sample Matrix: Water

Date Collected: 03/26/25
Date Received: 03/27/25

Analysis Method

300.0
350.1
SM 2320 B
SM 5310 B

Extracted/Digested By

ESCHLOSS

Analyzed By

ZHAMPTON
ESCHLOSS
JSANCHEZ
MSPECHT

Sample Name: CCMLF-2-3
Lab Code: K2503145-002
Sample Matrix: Water

Date Collected: 03/26/25
Date Received: 03/27/25

Analysis Method

300.0
350.1
SM 2320 B
SM 5310 B

Extracted/Digested By

ESCHLOSS

Analyzed By

ZHAMPTON
ESCHLOSS
JSANCHEZ
MSPECHT



Sample Results

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General Chemistry

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: POZ-4-3
Lab Code: K2503145-001

Service Request: K2503145
Date Collected: 03/26/25 13:00
Date Received: 03/27/25 12:30
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity as CaCO3, Total	SM 2320 B	247	mg/L	2.0	0.6	1	03/29/25 17:16	NA	
Ammonia as Nitrogen	350.1	0.131	mg/L	0.050	0.020	1	03/29/25 11:39	03/29/25	
Carbon, Total Organic (TOC)	SM 5310 B	2.20	mg/L	0.50	0.10	1	03/28/25 17:58	NA	
Chloride	300.0	453	mg/L	5.0	1.5	50	03/31/25 23:31	NA	
Sulfate	300.0	156	mg/L	5.0	2.0	50	03/31/25 23:31	NA	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: CCMLF-2-3
Lab Code: K2503145-002

Service Request: K2503145
Date Collected: 03/26/25 13:05
Date Received: 03/27/25 12:30

Basis: NA

General Chemistry Parameters

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity as CaCO3, Total	SM 2320 B	26.2	mg/L	2.0	0.6	1	03/29/25 17:16	NA	
Ammonia as Nitrogen	350.1	ND U	mg/L	0.050	0.020	1	03/29/25 11:39	03/29/25	
Carbon, Total Organic (TOC)	SM 5310 B	0.15 J	mg/L	0.50	0.10	1	03/28/25 17:58	NA	
Chloride	300.0	5.23	mg/L	0.20	0.06	2	03/31/25 23:39	NA	
Sulfate	300.0	0.45	mg/L	0.20	0.08	2	03/31/25 23:39	NA	



QC Summary Forms

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: K2503145-MB1

Service Request: K2503145
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

Analyte Name	Analysis		Result	Units	MRL	MDL	Dil.	Date Analyzed	Date	
	Method								Extracted	Q
Alkalinity as CaCO3, Total	SM 2320 B		0.9 J	mg/L	2.0	0.6	1	03/29/25 17:16	NA	
Ammonia as Nitrogen	350.1		ND U	mg/L	0.050	0.020	1	03/29/25 11:39	03/29/25	
Carbon, Total Organic (TOC)	SM 5310 B		ND U	mg/L	0.50	0.10	1	03/28/25 17:58	NA	
Chloride	300.0		ND U	mg/L	0.10	0.03	1	03/31/25 17:34	NA	
Sulfate	300.0		ND U	mg/L	0.10	0.04	1	03/31/25 17:34	NA	

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Analytical Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: K2503145-MB2

Service Request: K2503145
Date Collected: NA
Date Received: NA
Basis: NA

General Chemistry Parameters

<u>Analyte Name</u>	<u>Analysis Method</u>	<u>Result</u>	<u>Units</u>	<u>MRL</u>	<u>MDL</u>	<u>Dil.</u>	<u>Date Analyzed</u>	<u>Q</u>
Chloride	300.0	ND U	mg/L	0.10	0.03	1	03/31/25 21:20	
Sulfate	300.0	ND U	mg/L	0.10	0.04	1	03/31/25 21:20	

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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2503145
Date Analyzed: 03/28/25 - 03/31/25

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2503145-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity as CaCO3, Total	SM 2320 B	56.5	53.5	106	85-115
Ammonia as Nitrogen	350.1	3.44	3.56	97	90-110
Carbon, Total Organic (TOC)	SM 5310 B	24.3	25.0	97	85-115
Chloride	300.0	4.79	5.00	96	90-110
Sulfate	300.0	4.96	5.00	99	90-110

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QA/QC Report

Client: Anchor QEA, LLC
Project: Santee Cooper - Winyah and Cross CCR Support
Sample Matrix: Water

Service Request: K2503145
Date Analyzed: 03/29/25 - 03/31/25

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
K2503145-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity as CaCO ₃ , Total	SM 2320 B	55.8	53.5	104	85-115
Chloride	300.0	4.80	5.00	96	90-110
Sulfate	300.0	4.98	5.00	100	90-110