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

by Santee Cooper Moncks Corner, South Carolina

January 31, 2022 (Amended March 2, 2022)

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Table No. Title

1 Summary of Analytical Results

Figure No. Title

1 Location of Slurry Pond 3 & 4 Groundwater Monitoring Wells for CCR

Compliance

Appendix A – Statistical Analysis

Appendix B – Laboratory Analytical Reports

1. Annual Groundwater Monitoring Report Summary

The South Carolina Public Service Authority (Santee Cooper) has prepared this 2021 Annual Groundwater Monitoring Corrective Action Report for Slurry Pond 3 & 4 at the Winyah Generating Station (WGS). This 2021 Annual Report was prepared to comply with the United States Environmental Protection Agency (EPA) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities, Title 40 Code of Federal Regulations (CFR) Part 257, Subpart D dated April 17, 2015, (CCR Rule), specifically subsection § 257.90(e)(1) through (6).

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

At the start of the current annual reporting period (January 1, 2021), Slurry Pond 3 & 4 continued to operate under an assessment monitoring program in accordance with § 257.95, which was initiated on July 16, 2018. As required by § 257.93(h)(2), the statistical analysis to determine if statistically significant levels (SSLs) of one or more Appendix IV constituent are present downgradient of Slurry Pond 3 & 4 identified SSLs above the groundwater protection standards (GWPS) for arsenic and lithium. The SSLs for arsenic and lithium were addressed through completion of a successful alternate source demonstration (ASD) which was certified on October 9, 2019. The successful ASD, provided in the 2019 Annual Groundwater Report, allowed this CCR unit to remain in assessment monitoring. SSLs of Appendix IV constituents were not identified in downgradient monitoring wells for this unit during the semiannual monitoring events completed in 2021. Therefore, at the end of the current annual reporting period (December 31, 2021), Slurry Pond 3 & 4 remains in the assessment monitoring program. As such, an assessment of corrective measures, evaluating the nature and extent of contamination, holding a public meeting, selecting a remedy, and initiating remedial activities are not required.

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

2. 40 CFR § 257.90 Applicability

2.1 40 CFR § 257.90(a)

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

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

2.2 40 CFR § 257.90(e) - SUMMARY

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

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

This Annual Report documents the activities completed in 2021 for Slurry Pond 3 & 4 at WGS as required by the Groundwater Monitoring and Corrective Action regulations. Groundwater sampling and analysis was conducted per the requirements of § 257.93, and the status of the groundwater monitoring program, set forth in § 257.95, is provided in this report.

2.2.1 Status of the Groundwater Monitoring and Corrective Action Program

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

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

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

2.2.2 Key Actions Completed

The following key actions were completed in 2021:

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

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

2.2.3 Problems Encountered

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

2.2.4 Actions to Resolve Problems

No problems needed resolution.

2.2.5 Project Key Activities for Upcoming Year

Key activities to be completed in 2022 include the following:

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

2.3 40 CFR § 257.90(e) - INFORMATION

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

2.3.1 40 CFR § 257.90(e)(1)

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

As required by § 257.90(e)(1), a map showing the locations of the CCR unit and associated upgradient and downgradient monitoring wells for Slurry Pond 3 & 4 is presented as Figure 1.

2.3.2 40 CFR § 257.90(e)(2)

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

Groundwater monitoring wells were not installed or decommissioned in 2021.

2.3.3 40 CFR § 257.90(e)(3)

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

In accordance with § 257.95(b) and § 257.95(d)(1), two independent samples from each background and downgradient monitoring well were collected and analyzed. A summary table including the sample names, dates of sample collection, reason for sample collection, and monitoring data obtained for the groundwater monitoring program for Slurry Pond 3 & 4 is presented in Table 1 of this report. In addition, and in accordance with § 257.95(d)(3), Table 1 includes the groundwater protection standards established under § 257.95(d)(2). Laboratory analytical data reports, along with field sampling forms, are provided in Appendix B to this report.

2.3.4 40 CFR § 257.90(e)(4)

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

As required by § 257.93(h) a statistical analysis of the Appendix III constituents was completed by January 15, 2018. Baseline analytical data collected from background monitoring wells WBW-1 and WAP-1 were combined to develop Upper Tolerance Limits (UTLs). The UTLs for each Appendix III constituent were compared to the analytical results for the downgradient monitoring wells WAP-4, WAP-14, WAP-15, and WAP-16. Constituents with analytical results exceeding the UTLs were identified as SSIs over background for the respective Appendix III constituent. This statistical analysis determined that statistically significant increases of boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids were present downgradient of Slurry Pond 3 & 4. An evaluation of alternate sources for SSIs was initiated and completed on April 13, 2018 as provided in § 257.94(e)(2). A source causing the SSI over background levels other than the CCR unit was not identified at that time and an Assessment Monitoring program was initiated on July 16, 2018.

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

2.3.5 40 CFR § 257.90(e)(5)

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

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

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

TABLES

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

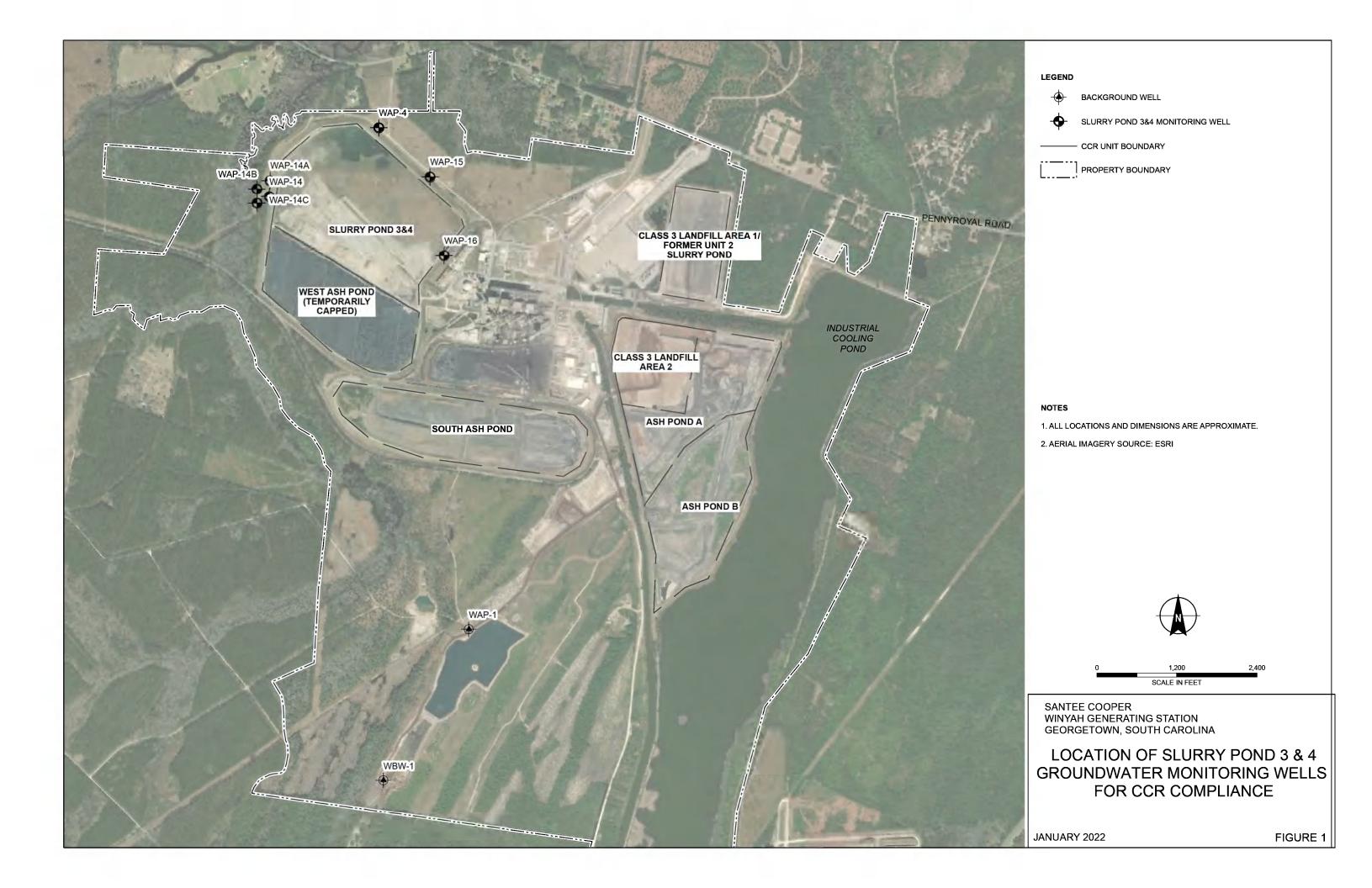
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ell ID	Purpose	Date of Sample Event	Laboratory Sample ID Number		Boron	Calcium	Chloride	Fluoride	Sulfat	te Tota Dissol Solid	ved	Antimony	Arsenic	Barium	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Radium 226	Radium 228	Radium 226/Radium 228 Combined Calculation	Selenium	Thallium	Depth to Groundwater	Groundwater pH Elevation	Specific Conductivity		dation Turb luction tential	rbidity Diss Ox
				Unit	ug/L	mg/L	mg/L	mg/L	mg/L	L mg/	L SU	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	pCi/L EPA 903.1 Mod	pCi/L	pCi/L	ug/L	ug/L	Feet (btoc)	Feet (msl) SU	uS			NTU p
					EPA 6010D	EPA 6020E	EPA 300.0	EPA 300.	.0 EPA 30	00.0 SM 25	40C	EPA 6020B	EPA 6020B	EPA 6010D	EPA 6020B	EPA 6020E	EPA 6020B	EPA 6020B	EPA 6020B	EPA 300.0	EPA 6020B	EPA 6010D	EPA 7470	EPA 6010D	EPA 903.1 Mod	EPA 904.0	EPA 903.1 Mod	EPA 6020B	EPA 6020E				SA	A2580	
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	Background		AF09050		26	2.2	2 B.76	6 <0.1	10 2	27.8 7	8.75 4.2	4 <5.0	<5.0		54.7	<0.50	<0.50	<5.0	1.6	<0.10	<1.0	<10	<0.2	<10	1.05	3.96	5.01	<10.0	<1.0	6.14	23.3 4.24	88	28.33	133	0.9
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	Background				<15						32.5 4. 8.75 4.7	2 <5.0 7 <5.0	<5.0 <5.0		23.7				2.00	<0.10	<1.0	<10	- D.L	0		0.024	0.626		<1.0	18.27				121	- 0
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	total sample	S		_	1	- 1	2 2	2	2	2	2	2 1	2		2		2			2	2	2	1	1	2	2	2	2	1	2	2 2	2	2	2	2
14	Assessment	2/25/2021	AE96394		6000	697	7 890	1 0.5	i9	645 3	3056 7.1	6 <5.0	12.5	50.7		<0.50	0.50	<5.0	<0.50	0.59	<1.0	<10	<0.2	<10	0.982	14	2.38	<10.0	<1.0	3.8	10.89 7.10	3590	22.67	-336	0
14	Duplicate		AE96395		6200	724	1 906	3 06	12	653 3	3156	<5.D	12.6	52.5		<0.50			<0.50	0.62	<1.0	<10	<0.2	<10	1.25	2 32	3 58	<10.0							-
14	Assessment	7/10/2021	AF09065		8600	1060	1560	0.2	28	977 5	172 7.3	3	14.1		50.3			<5.0	<0.50	0.28	<1.0	<10			1.21	0.453	1.67	10.0		4.46	10.23 7.3	5950	25.91	-385	0
14	Duplicate	7/10/2021	AF09066		8700	1068	3 1590	0.2	28 1	030 5	419		13.3		49.6			<5.0	<0.50	0.28	<1.0	<10			1.15	2.67	3.81								
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	CMA/NE						+	+	+	_	6.9		<u>55.0</u>									30								3.04				-372	48.5
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		Ī							1																								1	$\overline{}$	$\overline{}$
	CMA/NE										6.6		<5.0									12								4.48			26.4	-358	0
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15	Assessment	1	AE96399		3400		421	1 0.1	4		1185 6.4	7 <5.0	<5.0	234		<0.50	<0.50	<5.0	<0.50	0.14	<1.0	23	<0.2	<10		2.01			<1.0					-107	0
5	Assessment	7/19/2021	AF09070		1000	102	2 177	7 0.1	2 7	75.1 6	56.2 5.9	7	<5.0		120			<5.0	<0.50	0.12	<1.0	<10			0.983	-0.396	0.983			7.02	13.39 5.93	704	23.66	-42	0
5	total sample	s			2	2	2 2	2	2	2	2	2 1	2	1	1		1	2	2	2	2	2	1	1	2	2	2	1	1	2	2 2	2	2	2	2
16	Assessment	1	AE96400		1600		153	3 0.2	24	188 1	1008 6.7	2 <5.0	<5.0	97.9		<0.50	0.50	<5.0	<0.50	0.24	<1.0	<10	<0.2	<10	1.49	0.524		<10.0	<1.0	6.5	18.58 6.73			-77	9.9
16	Assessment	7/20/2021	AF09071		1500	234	1 238	9 0.1	15	248 1	205 6.5	9	<5.0		94.5	·		<5.0	<0.50	0.15	<1.0	<10			1.52	1.78	3.31			6.91	18.17 6.59	1700	27.3	-89	0
-16	total sample				2	1 2	2 2	2	2	2	2	2 1	2	1	1		1	2	2	2	2	2	1	- 1	2	2	2	1	1	2	2 4	2	2	2	2

All groundwater samples collected from the monitoring wells for Assessment Monitoring in 2621 for the constituents listed in Appendix IV of the EPA CCR Rule (40 CFR) were analyzed by South Carolina Certification # 08552), GEL Laboratories, LLC (Certification # 10120), and Rogers & Callcol, Inc. (Certification # 23105001).

^{1.} Some groundwater monitoring wells are sampled for both Federal CCR and State Permit program compliance. Applicable analytical results from the State Permit program have been included in this summary table. All background and downgradient compliance wells have been sampled to meet § 257.95.

2. The Corrective Measures Assessment/Nature & Extent (CMA/NE) wells were not sampled to comply with § 257.95(g)(iv) as the CCR Unit had already moved out of the CMA/NE monitoring program. These wells continue to provide additional insight to the nature & extent of the plume during corrective action. Moving forward, all CMA/NE wells will be sampled to comply with § 257.95(g)(iv) or § 257.98(a)(1).

FIGURES



Appendix A – Statistical Analysis



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TECHNICAL MEMORANDUM

July 28, 2021 File No. 132892-016

SUBJECT: 2021 Semi-annual Groundwater Assessment Monitoring Data

Statistical Evaluation

Winyah Generating Station

Slurry Pond 3 & 4

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

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

Statistical Evaluation of Appendix IV Constituents

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

STATISTICAL EVALUATION

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

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

The parametric TL methods were used to complete statistical evaluations of the referenced dataset. The TL procedure is one in which a concentration limit for each constituent is established from the distribution of the background data, with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is called the UTL. Depending on the data distribution, parametric or non-parametric TL procedures are used to evaluate groundwater monitoring data using this method. Parametric TLs utilize normally distributed data or normalized data via a transformation of the sample background data used to construct the limit. If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the TL. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

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

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

BACKGROUND DISTRIBUTIONS

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



South Carolina Public Service Authority (Santee Cooper) 28 July 2021 Page 3

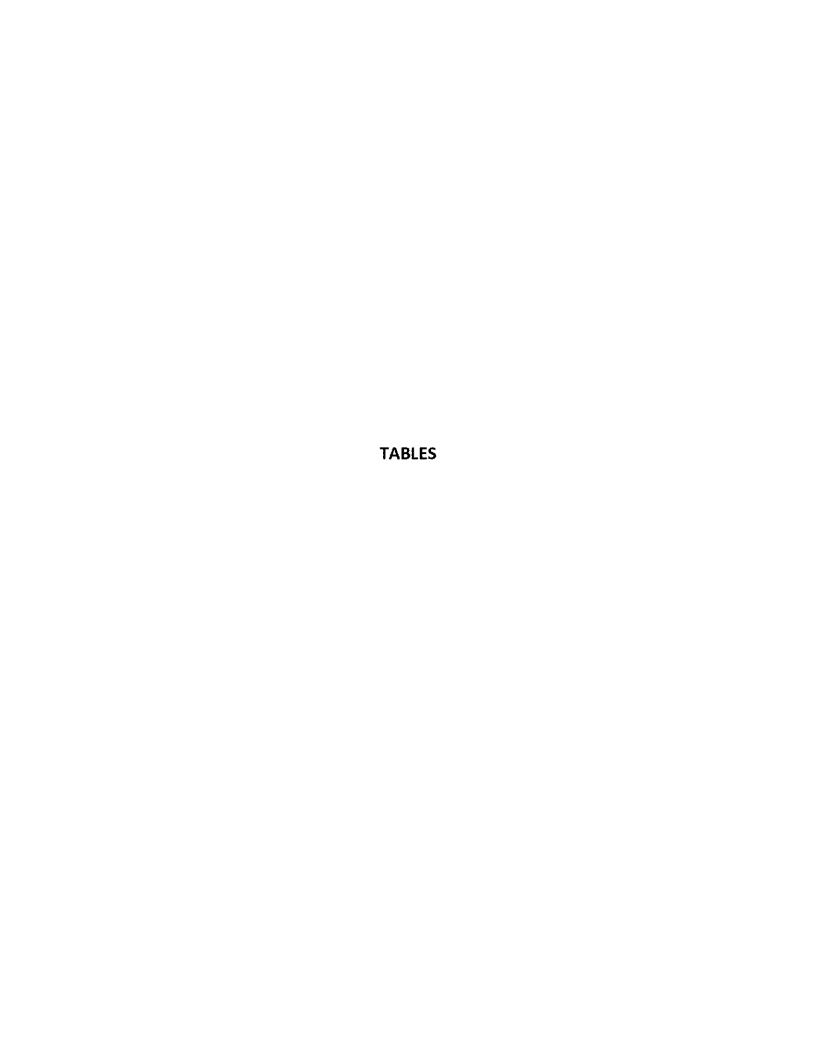
RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

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

Tables:

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





Part																					Inter-	well Analysis		intra-we	ell Analysis		GWPS	
Mart	Location Id	Frequency of Detection			Mean				riance			Result	Exceedances	Detection	Non-Detection	Outlier Presence	Outlier Removed	Trend	Distribution Well*		Detect?	Upper Tolerand Limit (mg/L)	Background at	Upper Prediction	Background at	MCL/RSL or Background	Exceedance above	SSL
Column								CCR Appendix	IV: Antimony, Tot	tal (mg/L)																		
Mart			100%										N	0	1	NA	NA	NA	Non-parametric			0.025				0.025		
Column		-,	100%										N N	0	1	1111	NA NA		NA.	0.005	N		N				N	FALSE
Mathematical Content of the conten		1/13										mg/L	N	0	1			NA			N		N				N	FALSE
The column													N N	0	1	1925	1975	1925			N		- "				N	FALSE
Mathematical Content	WAL-10	0/13	10076	0.002-0.023	0.00031	0.003	0.013				0.000	g.r		L.Y		165	100	100		0.003							N	FALL
Mathematical Content of the conten														0	0	1711			Non-parametric			0.008						
Mart													N N	0	0	101	785	1801	Non-parametric	0.005	N		N	5	N	0.010	N	FALSE
The column	WAP-14				0.0194	0.01685		0.0475 0.0					Y	13	0	Yes	No	Stable					Y	78.6458	N	0.079	N	FALSE
The content of the															_						-			8.56691			N N	FALSE
March Marc	WAY-10	1/16	3476	0.003-0.003	0.00448	0.003	0.005			The second second	0.01	mg/L		100	, and the second			NA.A.		0.005	N.		, n		, , , , , , , , , , , , , , , , , , ,	0.010		PALSE
Mart													N	0	0	No	No		Non-parametric			0.094				2.000		
Math													N N	0	0	Yes	No No		Normal	0.0478	٧		N				N	FALSE
Mart				_									N	0	0	No	No						N				N	FALSE
The content of the													N	-	0		110				-						N	FALSE
Maria Mari	WAP-16	16/16	U%		0.121	0.1135	0.18		_		2	mg/L	N	U	U	No	Oin	Decreasing	Normal	0.0979	Y		Y				N	FALSE
Mart														0	0	NA	NA		NA.			0.0005				0.004		
Mart				+									N N		0	NA NA			NA.	0.0005	N		N				N	FALSE
Martin													N N		0								N				N	FALSE
The content of the													N 	0	0	No	No	Stable	Non-parametric				N				N	FALSE
Math	WAP-16	0/13	100%	0.0005-0.001	0.000538	0.0005	0.0007				0.004	mg/L	N	U	O	NA.	NA.	N/A	NA NA	0.0005	N		N				N	FALSE
Marie Mari	WBW-1	0/14		0.0005-0.0005	0.0005	0.0005						mg/L	N	0	0	NA.	NΑ	NA	Non-parametric			0.0005				0.005		
Professor Prof													N		0	1975	1101	190%		0.0005							N	FALSE
Property													N		0												N	FALSE
Column C													-	-	-		-				-						N	FALSE
Math	WAP-16	0/13	100%	0.0005-0.001	0.000538	0.0005	0.0007				0.005	mg/L	N	0	0	NA.	NA	NA	NA.	0.0005	N		N				N	FALSE
March Marc	WBW-1	0/14	100%	0.005-0.005	0.005	0.005	0.005				0.1	mg/L	N	0	0	NA	nA.	NΑ	Non-narametric			0.0050				0.100		
Mart													N	0	0	NA	101			0.000		0.0000				0.150	N	FANCE
Math													- 11	-	0	170	110	190%					N				N N	FALSE
Marcia 1987 1987 1988 1989					0.00475							mg/L	N	0	0	No	No	NA	Non-parametric		N		N				N	FALSE
Marie 1976	WAP-16	1/14	93%	0.005-0.005	0.00478	0.005	0.005				0.1	mg/L	N	0	0	No	No	NA	Non-parametric	0.005	N		N				N	FALSE
March 1975	WBW-1	0/15	100%	0.0005-0.0005	0.0005	0.0005	0.0005				0.006	mg/L	N	0	0	NA	NΑ	NA.	Non-natametric			0.0015				0.006		
Part 1975															0	1011	1701	1.01				0.0013				0.000		****
Mary													-	-	0	Ves Ves		NA NA		-			N N		-		N N	FALSE
March Marc													Υ	1	1	Yes	No	Stable	Non-parametric		N		N				N	FALSE
Marie 1/10	WAP-16	4/15	73%	0.0005-0.0005	0.000485	0.0005	0.000525		2 W W V T T	008297 0.1712	0.006	mg/L	N	0	0	Yes	110	Stable	Non-parametric	0.0005	N		N				N	FALSE
Marie Mari	WBW-1	1/16	94%	0.1-0.1	0.1	0.1	0.1			6E-09 1.36E-08	4	mg/L	N	0	0	No	No	N.A.	Alon oppositely			0.140				400		
MAP-No. 1967 1976 0.1-0. 0.202 0.20 0.904 0.202 0.0078 0.0008		-,											N	0	0	No	No	101		100.0	-	0.140				4.00		
Mary			_								_		N N		0		No No										N N	FALSE
Martin Opt O								-		6226 0.3575	4		N	0	0	No	No	Stable	Normal		Y		N				N	FALSE
Marie Mari	WAP-16	14/16	12%	0.1-0.1	0.163	0.16	0.2425				4	mg/L	N	0	0	No	No	Stable	Normal	0.240	Y		Y				N	FALSE
MAP-5 Affa 79% 0.000.000 0.0	WBW-1	0/14	100%	0.001-0.01	0.00186	0.001	0.005125			LOT CALL	0.015	mg/L	N	0	0	NA	NA	NA.	Non-			0.0700				0.015		
MA-9-14 1/15 97% 0.001-0.0075 0.001/23 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00075 0.001/24 0.001 0.00077 0.001/24 0.00075 0.001/24 0.00075 0.001/24 0.00075 0.001/24 0.00075 0.00077 0.00077 0.00077 0.00077 0.00077 0.00077 0.000777 0.00077																					-	0.0100				0.015		
WA-15 1/				+									- "			11075	101										N N	FALSE
WW-1			100%		_	0.001	0.0025	3.5	67E-07 0.000	05627 0.4443	0.015					-				0.0010							N	FALSE
Name of colors Name	WAP-16	1/15	93%	0.001-0.0025	0.00128	0.001	0.0025				0.015	mg/L	N	0	0	NA	NA	NA	NA	0.0010	N		N				N	FALSE
WAPOL 1/15 9% 0.01-01 0.01-01 0.01-01 0.01-01 0.01-01 0.01-01 0.00-02 0.01-01 0.00-02 0.00	WBW-1	0/15	100%	0.01-0.01	0.01	0.01	0.01		The second second		0.04	mg/L	N	0	0	NA	NA.	NA	ales and			***						
MAP-14 2/16 28% 0.01-0.05 0.0289 0.01 0.105 0.027 0.00423 0.05605 2.25 0.04 mg/L Y 1 1 Mep M5 MA Mon-plasamentific 0.023 Y Y 220 N 0.0270		1/15	93%	0.01-0.01	0.0101	0.01	0.01048	0.0116 1.7	07E-07 0.000		0.04	mg/L	-	-	-							0.012			600	(*************************************		
MAP-15 14/16 12/8 0.014-0.01 0.0476 0.0412 0.0475 0.02 0.05285 0.0478 1.003 0.044 mg/L N 0 1 NA NA NA Na parametric 0.023 Y Y 220 N 0.220 0.250 N 0.220 0.0500 N N N 0.0500 N N N N N N N N N														1	1											C.C.L.	N N	FALSE
VBW-1 0/13 100% 0.0002-0.0002 0.0002													<u> </u>	9	0								- 11			0.220	N N	FALSE
WBW-1 0/13 100% 0.0002-0.0002 0.0002	WAP-16	0/16	100%	0.01-0.25	0.025	0.01	0.058				0.04	mg/L	N	0	1	NA	NA	N.A.	Non-parametric	0.010	N		N	250	N	0.250	N	FALSE
WAP-01 O/13 100% 0.0002-0.0002 0.0002	WBW-1	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002				0.002	mg/L	N	0	0	NA	NA.	N.A.										
WAP-14 0/13 100% 0.0002-0.0002 0.0002	WAP-01	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0 0	0.002	mg/L	N	0	0			NΑ				0.0002				0.0020		
WAP-15 O/13 100% 0.0002-0.0002 0.0002																											N	FALSE
WAP-14 O/15 100% 0.01-0.05 0.01-0.07 0.01 0.01 0.01 0.01 0.006 0.00108 0.006923 0.006923 0.006923 0.01 mg/L N 0 0 NA NA NA NA NA																											N	FALSE
WBW-1 0/15 100% 0.01-0.05 0.0127 0.01 0.022 0.000167 0.0193 0.8154 0.1 mg/L N 0 0 0 Yes NO NA NON-parametric 0.050 WAP-01 0/15 100% 0.01-0.01 0.01 0.01 0.01 0.01 0.01 1.76E-08 0.1 mg/L N 0 0 NA	WAP-16	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002				0.002	mg/L	N	0	0	NA	NA	NA	NA	0.0002	N		N				N	FALSE
WAP-01 0/15 100% 0.01-0.01 0.01 0.01 0.01 0.01 3.098E-20 1.76E-10 1.76E-08 0.1 mg/L N 0 0 0 NA	WBW-1	0/15	100%	0.01-0.05	0.0127	0.01	0.022	The same of the sa		ALC: NO.	0.1	ma/L	N	0	0	Yes	No	NA								=		
WAP-14 0/13 100% 0.01-0.4 0.04 0.01 0.166 0.0117 0.1062 2.704 0.1 mg/L N 0 1 NA NA NA NA NA NA 0.010 N N WAP-15 0/14 100% 0.01-0.4 0.0407 0.01 0.1725 0.01081 0.104 2.553 0.1 mg/L N 0 1 NA NA NA NA NA NA NA 0.010 N													-						Non-parametric			0.050				0.10		
WAP-15 0/14 100% 0.01-0.4 0.0407 0.01 0.1725 0.01061 0.104 2.553 0.1 mg/L N 0 1 NA NA NA 0.010 N N																											N	FALSE
															-						-			-	-		N N	FALSE
												mg/L	N	0	1	NA	NA	N.A.					N				N	FALSE

Winyah Slurry Pond 38.4

Assessment Monitoring Statistical Analysis Summary

Prepared: July 14, 2021

							CCR App	endix-IV: Radius	n-226 & 228 (pCl	/L)																	
WBW-1	8/15	47%	0-4	3.07	4	4.302	4.33	2.396	1.548	0.5042	5	pCI/L	N	D	0	No	No	Decrease	Non-non-neck			6.0			6.0		
WAP-01	10/15	33%	4-4	3.43	4	5.809	5.97	2.591	1.61	0.4694	5	pCI/L	Y	2	0	Yes	No	Decrease	- Non-parametric			0.0			6.0		
WAP-04	13/16	19%	4-4	3.48	4	5.735	5.99	2.739	1.655	0.4751	5	pCI/L	Y	3	0	Yes	No	Stable	Normal	1.970	Y		N			N	FALSE
WAP-14	14/16	12%	4-4	3.93	4.165	6.26	7.4	3.051	1.747	0.445	5	pCI/L	Y	4	0	No	No	Stable	Normal	2.380	Y		N			N	FALSE
WAP-15	16/16	0%	-	4.75	4.74	6.665	6.92	1.899	1.378	0.2902	5	pCI/L	Υ	6	0	Yes	No	Stable	Normal	4.350	Y		N			N	FALSE
WAP-16	15/16	6%	4-4	4.21	4.215	7.305	8.4	4.362	2.089	0.496	5	pCI/L	Y	6	0	No	No	Stable	Normal	2.010	Y		N			N	FALSE
							CCR Ap	pendix-IV: Seler	nium, Total (mg/i	1																	
WBW-1	0/14	100%	0.01-0.02	0.0114	0.01	0.02		0.00001319	0.003631	0.3177	0.05	mg/L	N	0	0	NA.	₽A	NA	414			0.020			0.050		
WAP-01	0/16	100%	0.01-0.02	0.0112	0.01	0.02		0.00001167	0.003416	0.3036	0.05	mg/L	N	0	0	NA	NΑ	NA	NA			0.020			0.050		
WAP-04	0/17	100%	0.005-0.02	0.0106	0.01	0.02		0.00001526	0.003906	0.3689	0.05	mg/L	N	o	0	NA	NA	NA	NA.	0.010	N		N			N	FALSE
WAP-14	1/13	92%	0.01-0.02	0.0109	0.01	0.02	0.0021	0.00002093	0.004575	0.4185	0.05	mg/L	N	0	0	No	No	NA.	Non-parametric	0.010	N		N		+	N	FALSE
WAP-15	1/13	92%	0.01-0.02	0.0108	0.01	0.02	0.00095	0.00002272	0.004767	0.4397	0.05	mg/L	N	0	0	No	No	NA	Non-parametric	0.010	N		N			N	FALSE
WAP-16	0/13	100%	0.005-0.02	0.0112	0.01	0.02		0.00001731	0.00416	0.373	0.05	mg/L	N	0	0	NA.	NA.	NA	NA	0.010	N		N			N	FALSE
							CCR A	pendia-IV: That	lkum, Total (mg/L	1)																	
WBW-1	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	n/A	NA	NA.			0.001			0.002		
WAP-01	0/13	100%	0.0001-0.001	0.000931	0.001	0.001		6.231E-08	0.0002496	0.2682	0.002	mg/L	N	0	0	NA.	NA	NA.	NA NA			0.001			0.002		
WAP-04	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA.	NA.	0.001	N		N			N	FALSE
WAP-14	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA.	NA.	NA	NA.	0.001	N		N			N	FALSE
WAP-15	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA.	NA	N.A.	NA	0.001	N		N		1	N	FALSE
WAP-16	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA.	NA	NA.	NA	0.001	N		N			N	FALSE



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

TECHNICAL MEMORANDUM

November 8, 2021 File No. 132892-016

SUBJECT: 2021 Semi-annual Groundwater Assessment Monitoring Data

Statistical Evaluation

Winyah Generating Station

Slurry Pond 3 & 4

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

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

Statistical Evaluation of Appendix IV Constituents

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

STATISTICAL EVALUATION

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

South Carolina Public Service Authority (Santee Cooper) 8 November 2021 Page 2

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

The parametric TL methods were used to complete statistical evaluations of the referenced dataset. The TL procedure is one in which a concentration limit for each constituent is established from the distribution of the background data, with a minimum 95 percent confidence level. The upper endpoint of a tolerance interval is called the UTL. Depending on the data distribution, parametric or non-parametric TL procedures are used to evaluate groundwater monitoring data using this method. Parametric TLs utilize normally distributed data or normalized data via a transformation of the sample background data used to construct the limit. If the data are non-normal and a transformation is not indicated, non-parametric procedures (order statistics or bootstrap methods) are used to calculate the TL. If all the background data are non-detect, a maximum reporting limit may serve as an appropriate UTL.

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

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

BACKGROUND DISTRIBUTIONS

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



South Carolina Public Service Authority (Santee Cooper) 8 November 2021 Page 3

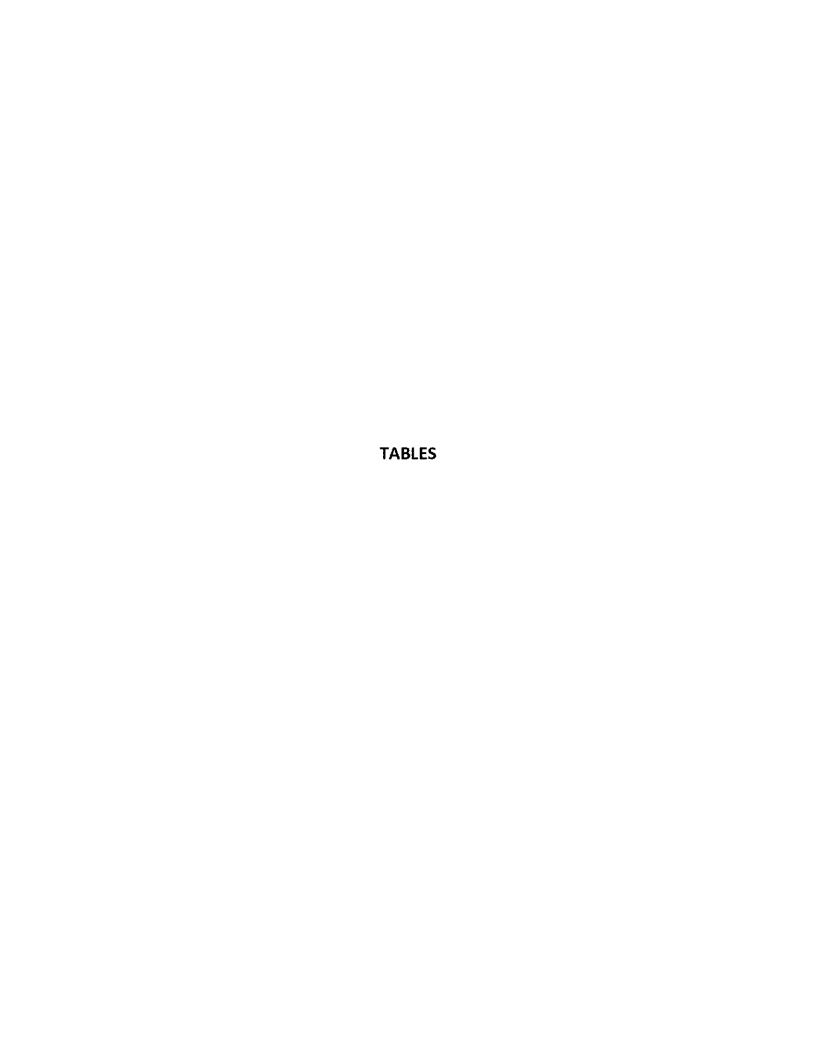
RESULTS OF APPENDIX IV DOWNGRADIENT STATISTICAL COMPARISONS

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Tables:

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





	1 7						,					,	1	1		1	4 4		1 1		inter-v	rell Analysis	,	Intra-we	all Analysis		GWPS	
cation id	Frequency of Detection	Percent Non-Detects	Range of Non- Detect	Mean	50th Percentile (Median)	95th Percentile	Maximum Detect	Variance	Standerd Deviation	Coefficient of Variance	MCI/RSI	Report Result Unit	Detection Exceedances (Y/N)	Number of Detection Exceedances		Outlier Presence	Outlier Removed	Trend	Distribution Well*	July 2021 Concentration (mg/L)	Detect?	Upper Tolerance Limit (mg/L)	Exceedance above Background at Individual Well (SSI)	Upper Prediction Limits (mg/L)	Exceedance above Background at Individual Well	GWPS (Higher of MCL/RSL or Background Umit) (mg/L)	Exceedance above GWPS (SSL)	
VBW-1	0/13	100%	0.005-0.025	0.00654	0.005	0.013	CCR Appendix-	-iV: Antimony, 0.00003077		0.8484	0.006	mg/L	N	0	1	NA NA	NA NA	NA										
VAP-01	0/13	100%	0.005-0.025	0.00654	0.005	0.013		0.00003077		0.8484	0.006	mg/L	N	0	1	NA.	NA NA	NA	Non-parametric			0.025				0.025		
AP-04	0/13	100%	0.002-0.025	0.00631	0.005	0.013		0.00003223	0.005677	0.9	0.006	mg/L	N	0	1	NA	NA NA	NA	NA .	NS			N				N	F/
AP-14	1/13	92%	0.005-0.025	0.00631	0.005	0.013	0.002	0.00003223		0.9	0.006	mg/L	N	0	1	NA	NA	NA	NA	NS			N				N	FA
AP-15	0/13	100%	0.002-0.025	0.00631	0.005	0.013		0.00003223	-	0.9	0.006	mg/L	N	0	1	NA	NA	NA	NA	NS			N				N	F.
AP-16	0/13	100%	0.002-0.025	0.00631	0.005	0.013	CCR Appendi	0.00003223 k-IV: Arsenic, T	The second second	0.9	0.006	mg/L	N	0	1	NA	NA	NA	NA	NS			N				N	F
BW-1 AP-01	0/15	100% 94%	0.003-0.005	0.00473	0.005	0.005	0.0083	4.952E-07 0.000001179		0.1487	0.01	rng/L rng/L	N N	0	0	NA NA	NA NA	NA NA	- Non-parametric			0.008						
AP-04	1/18	94%	0.003-0.005	0.00452	0.005	0.005	0.00044	0.000001454		0.2665	0.01	mg/L	N	0	0	Yes	Na	NA	Non-parametric	0.005	0.000		N	0.005	N	0.010	N	F
AP-14	14/16	12%	0.003-0.005	0.0194	0.01685	0.04713	0.0475	0.0001592	0.01262	0.6489	0.01	mg/L	Y	13	0	Yes	No	Stable	Normal	0.014	1.000		Y	0.064	N	0.064	N	F
.P-15 .P-16	7/16 1/16	56% 94%	0.005-0.005	0.00542	0.005	0.00075	0.0084	0.00000116		0.1986	0.01	mg/L mg/L	N	0	0	Yes	No No	Stable NA	Non-parametric	0.005	0.000		N	0.008	N	0.010	N N	- 1
			GGGS-GGGS				CCR Appendi	k-IV: Barkem, T	otal (mg/L)							140				0.003	0.000	7		0.003		0.010		
BW-1 AP-01	15/15 17/17	0%	-	0.0126	0.013	0.01565 0.0628	0.016	0.00000880		0.2348	2	mg/L mg/L	N N	0	0	No Yes	No No	Stable	Non-parametric			0.094				2.000		
AP-04	18/18	0%	-	0.0479	0.04515	0.06582	0.0818	0.0001063	0.01031	0.215	2	mg/L	N	0	0	Yes	No	Stable	Normal	0.0420	1.000		N			1	N	F
AP-14	16/16	0%	-	0.0585	0.05325	0.08325	0.093	0.0001652	0.01285	0.2196	2	mg/L	N	0	0	No	No	Stable	Normal	0.0503	1.000		N				И	F
AP~1 5	16/16	0%		0.237	0.2495	0.3313	0.335	0.006492	0.08058	0.3395	2	mg/L	N	0	0	No	No	Stable	Normal	0.120	1.000		Y				N	F
P-16	16/16	0%		0.121	0.1135	0.18	0.18 CCR Appendix	0.001426 -IV: Beryllium,	0.03777 Total (mg/L)	0.3113	2	mg/L	N	0	0	No	No	Decreasing	Normal	0.0945	1.000		Y				N	
W-1	0/13	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA	NA NA			0.0005				0.004		
NP-01	0/13	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.004	mg/L	N	0	0	NA	NA	NA	1-71	44.7						4		
P-04	0/13	100%	0.0005-0.001	0.000538	0.0005	0.0007		1.923E-08		0.2575	0.004	mg/L	N	0	0	NA NA	NA NA	NA	NA	NS			N		-		N	-
.P-14 .P-15	0/13	100%	0.0005-0.001	0.000538	0.0005	0.0007	0.00351	1.923E-08 9.759E-07	0.0001387	0.2575	0.004	mg/L mg/L	N	0	0	NA No	NA No	NA Stable	NA Non-parametric	NS NS			N				N	
P-16	0/13	100%	0.0005-0.0001	0.000538	0.0005	0.002952	0.00351	1.923E-08		0.2575	0.004	mg/L mg/L	N	0	0	NA NA	NA NA	NA	NA NA	NS NS			1/1				N	
41.4	0/14	100%	0.0005-0.0005	0.0005	0.0005	0.0005	CCR Appendia-	-IV: Cadmium, 0	Total (mg/L) 0	0	0.005			0		NA.	NA NA	NA										
IW-1 IP-01	0/14	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.005	mg/L mg/L	N N	0	0	NA NA	NA NA	NA NA	- Mon-parametric			0.0005				0.005		
AP-04	0/17	100%	0.0005-0.002	0.000618	0.0005	0.0012		1.415E-07	0.0003762	0.6091	0.005	mg/L	N	0	0	NA	NA NA	NA	NA	0.0005	0.0000		N				N	
\P-14	0/13	100%	0.0005-0.001	0.000538	0.0005	0.0007		1.923E-08		0.2575	0.005	mg/L	N	0	0	NA NA	NA NA	NA	NA NA	NS			N				N	
P-15 P-16	0/13	100%	0.0005-0.001	0.000538	0.0005	0.0007		1.923E-08		0.2575	0.005	mg/L mg/L	N N	0	0	NA NA	NA NA	NA NA	NA NA	NS NS			N				N	
							CCR Appendix-	IV: Chromium,	Total (mg/L)																			
BW-1 AP-01	0/14	100%	0.005-0.005	0.005	0.005	0.005		1.251E-20 7.228E-21		2.237E-08 0.000000017	0.1	mg/L mg/L	N	0	0	NA NA	NA NA	NA NA	- Non-parametric			0.0050				0.100		
AP-04	2/17	88%	0.005-0.01	0.00536	0.005	0.01	0.01	0.00000388	6 0.001971	0.3675	0.1	mg/L	N	0	0	No	No	NA	Non-parametric	0.005	0.000		N				N	1
AP-14	1/14	93%	0.005-0.005	0.00486	0.005	0.005	0.0031	2.579E-07	0.0005078	0.1044	0.1	mg/L	N	0	0	No	No	NA	Non-parametric	0.005	0.000		N				N	
AP-15 AP-16	1/14	93%	0.005-0.005	0.00475	0.005	0.005	0.0015	0.000000075 6.864E-07		0.1969	0.1	mg/L mg/L	N .	0	0	No.	No	NA.	Non-parametric	0.005	0.000		1/1		-		N	
4F*10	1/14	33.00	0.003*0.003	0.00478	0.003	0.003		ix-IV: Cobalt, To		0.1734	0.1	ngr	N			NO	NO	niA.	ноп-раганиетис	0.003	0.000		, v					
BW-1	0/15	100%	0.0005-0.0005	0.0005	0.0005	0.0005		0	0	0	0.006	mg/L	N	0	0	NA	NA	NA	Non-parametric			0.0023				0.006		
AP-01	2/15	87%	0.0005-0.0005	0.000573	0.0005	0.000863	0.0015	6.635E-08		0.4498	0.006	mg/L	N	0	0	NA	NA NA	NA								4		
AP-04 AP-14	1/15	93%	0.0005-0.0005	0.000509	0.0005	0.000542	0.00064	1.307E-09	0.00003615	0.07097	0.006	mg/L	N .	0	0	NA Yes	NA No	NA NA	NA NA	0.0005	0.0000		N N		-		N .	
\P-15	2/15 6/16	62%	0.0005-0.01	0.000342	0.0005	0.00745	0.00093	0.0000081	0.002846	0.2197	0.006	mg/L mg/L	N Y	1	1	Yes	No.	Stable	Non-parametric	0.0005	0.0000		N N				N	_
\P-16	4/15	73%	0.0005-0.0005	0.000485	0.0005	0.000525		6.884E-09		0.1712	0.006	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.0005	0.0000		N				N	
W-1	1/16	94%	0.1-0.1	0.1	0.1	0.1	CCR Appen	ndb:-IV: Fluorid	e (mg/L) 1.36E-09	1,366-08	4	mg/L	N	0	0	No	No	NA.	_									
AP-01	2/16	88%	0.1-0.1	0.104	0.1	0.1325	0.14	0.0001462		0.1159	4	mg/L	N	0	0	No	No No	NA	- Non-parametric			0.140				4.00		
AP-04	8/17	53%	0.1-0.1	0.103	0.1	0.122	0.13	0.0004202	0.0205	0.1988	4	mg/L	N	0	0	Yes	No	Stable	Non-parametric	0.100	0.000		N				N	
\P-14	16/17	6%	0.1-0.1	0.552	0.59	0.904	1	0.06359	0.2522	0.457	4	mg/L	N	0	0	No	No	Stable	Normal	0.280	1.000		Y				N	
P-15	14/17	18%	0.1-0.1	0.174	0.19	0.2B2	0.29	0.003876	0.06226	0.3575	4	mg/L	N	0	0	No	No	Stable	Normal	0.120	1.000		N				N	
P-16	14/16	12%	0.1-0.1	0.163	0.16	0.2425	0.25 CCR Append	0.002236 dia-IV: Lead. To	0.04729 tal (mg/L)	0.2899	4	mg/L	N	0	0	No	No	Stable	Normal	0.150_	1.000_		Y		-		N	
W-1	0/14	100%	0.001-0.01	0.00186	0.001	0.005125		0.000005786	6 0.002405	1.295	0.015	mg/L	N	0	0	NA NA	NA NA	NA	Non-parametric			0.0100				0.015		
P-01	4/16	75%	0.001-0.01	0.00205	0.001	0.00592	0.00456	0.000005400		1.132	0.015	mg/L	N	0	0	Yes	Na	Stable								4		
P-04	1/17	94%	0.001-0.0025	0.00136	0.001	0.00262	0.0031	4.826E-07	0.0006947	0.5112	0.015	mg/L	N	0	0	NA	NA NA	NA	NA NA	0.0010	0.0000		N		-		M	
\P-14 \P-15	0/15	93%	0.001-0.0025	0.00123	0.001	0.0025	0.00039	3.647E-07 3.167E-07		0.4926	0.015	mg/L mg/L	N	0	0	No NA	No NA	NA NA	Non-parametric NA	0.0010	0.0000		N		-		N	-
P-16	1/15	93%	0.001-0.0025	0.00129	0.001	0.0025	0.0012	3.117E-07	0.0005583	0.4443	0.015	mg/L mg/L	N	0	0	NA NA	NA NA	NA NA	NA NA	0.0010	0.0000		N N				N	
W-1	0/15	100%	0.01-0.01	0.01	0.01	0.01	CCR Appendix	a-IV: Lithlum, 1 3.098E-20		1.76E-08	0.04	mg/L	N	0	0	NA NA	NA NA	NA.										
P-01	1/15	93%	0.01-0.01	0.0101	0.01	0.01048	0.0116	1.707E-07		0.04088	0.04	mg/L	N	0	0	Yes	No	NA NA	Non-parametric			0.012				4		
.P-04	10/16	38%	0.01-0.01	0.0133	0.0115	0.02012	0.031	0.00002778		0.3948	0.04	mg/L	N	0	0	Yes	No	Decreasing	Non-parametric	0.010	0.000		N	0.031	N	0.040	N	
P-14	2/16	88%	0.01-0.05	0.0289	0.01	0.105	0.27	0.004233	0.06506	2.252	0.04	mg/L	Y	1	1	Yes	No	NA	Non-parametric	0.010	0.000		N	0.270	N	0.270	И	
P-15	14/16	12%	0.01-0.01	0.0476	0.0422	0.09475	0.22	0.002285	0.0478	1.003	0.04	mg/L	Y	9	0	Yes	No	Increasing	Non-parametric	0.010	0.000		1/1	0.220	N	0.220	N	
P-16	0/16	100%	0.01-0.25	0.025	0.01	0.058	CCR Appendia	0.003388 n-tV: Mercury, T	0.05821 Fotal (mg/L)	2.414	0.04	mg/L	N	0	1	NA	NA	NA	Non-parametric	0.010	0.000		N	0.250	N	0.250	И	
W-1	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	Non-parametric			0.0002				0.0020		
P-01	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N N	0	0	NA NA	NA NA	NA NA		-14						4		
	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L mg/L	N	0	0	NA NA	NA NA	NA NA	NA NA	NS NS			N		-		N	
	0/13	100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L mg/L	N	0	0	NA NA	NA NA	NA NA	NA NA	NS NS			1/1			1	N	
P-14		100%	0.0002-0.0002	0.0002	0.0002	0.0002		0	0	0	0.002	mg/L	N	0	0	NA NA	NA NA	NA.	NA NA	NS			1/				N	
AP-14 AP-15	0/13					cc	CR Appendix-IV	/: Molybdenum			0.1	mg/L	N	0	0	Yes	No	NA										
AP-14 AP-15 AP-16	0/13		0.01-0.05	0.0127	0.01	0.022		0.0001007								185	MU	1909								41		
AP-14 AP-15 AP-16 BW-1		100%	0.01-0.05	0.0127 0.01	0.01	0.022		0.0001067 3.098E-20		0.8154 1.76E-08	0.1		N	0	0	NA	NA NA	NA	Non-parametric			0.050				0.10		
AP-04 AP-14 AP-15 AP-16 BW-1 AP-01 AP-04	0/13	100%							1.76E-10			mg/L mg/L				NA NA	NA NA	NA NA	Non-parametric NA	NS		0.050	tV.			0.10	N	
AP-14 AP-15 AP-16 BW-1 AP-01	0/13 0/15 0/15	100% 100%	0.01-0.01	0.01	0.01	0.01		3.098E-20	1.76E-10	1.76E-09	0.1	mg/L	N	0	0					NS NS		0.050	N N			0.10	N N	

Winyah Slurry Pond 38.4

Assessment Monitoring Statistical Analysis Summary

Prepared: October 25, 2021

						(cc	R Appendix-l'	/: Radium-226 8	228 (pCl/L)																	
WBW-1	8/15	47%	0-4	3.07	4	4.302	4.33	2.396	1.548	0.5042	5	pCi/L	N	0	0	No	No	Decrease	Man constants			6.0		6.0		
WAP-01	10/15	33%	4-4	3.43	4	5.809	5.97	2.591	1.61	0.4694	5	pCI/L	Y	2	0	Yes	No	Decrease	- Non-parametric			0.0		0.0		
WAP-04	13/16	19%	4-4	3.48	4	5.735	5.99	2.739	1.655	0.4751	5	pCi/L	Y	3	0	Yes	No	Stable	Normal	1.400	1.000		N		N	FALSE
WAP-14	14/16	12%	4-4	3.93	4.165	6.26	7.4	3.051	1.747	0.445	5	pCi/L	Y	4	0	No	No	Stable	Normal	1.670	1.000		N		N	FALSE
WAP-15	16/16	0%	-	4.75	4.74	6.665	6.92	1.899	1.378	0.2902	5	pCi/L	Y	6	0	Yes	No	Stable	Normal	0.983	1.000		N		N	FALSE
WAP-16	15/16	6%	4-4	4.21	4.215	7.305	8.4	4.362	2.089	0.496	5	pCi/L	Y	6	0	No	Na	Stable	Normal	3.310	1.000		N		N	FALSE
							CCR Appendix	IV: Selenium, To	otal (mg/L)																	
WBW-1	0/14	100%	0.01-0.02	0.0114	0.01	0.02		0.00001319	0.003631	0.3177	0.05	mg/L	N	0	0	NA	NA	NA	NA NA			0.020		0.050		
WAP-01	0/16	100%	0.01-0.02	0.0112	0.01	0.02		0.00001167	0.003416	0.3036	0.05	mg/L	N	0	0	NA	NA	NA	NA NA			0.020		0.030		
WAP-04	0/17	100%	0.005-0.02	0.0106	0.01	0.02		0.00001526	0.003906	0.3689	0.05	mg/L	N	0	0	NA	NA	NA	NA	0.010	0.000		N		N	FALSE
WAP-14	1/13	92%	0.01-0.02	0.0109	0.01	0.02	0.0021	0.00002093	0.004575	0.4185	0.05	mg/L	N	0	0	No	No	AM	Non-parametric	NS			1/1		N	FALSE
WAP-15	1/13	92%	0.01-0.02	0.010B	0.01	0.02	0.00095	0.00002272	0.004767	0.4397	0.05	- mg/L	N	0	0	No	No	NA	Non-parametric	NS			10		N	FALSE
WAP-16	0/13	100%	0.005-0.02	0.0112	0.01	0.02		0.00001731	0.00416	0.373	0.05	mg/L	N	0	0	NA	NA	NA	NA	NS			N		N	FALSE
							CCR Appendia	IV: Thallkon, To	otal (mg/L)																	
WBW-1	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA.			0.001		0.002		
WAP-01	0/13	100%	0.0001-0.001	0.000931	0.001	0.001		6.231E-08	0.0002496	0.2682	0.002	mg/L	N	0	0	NA	NA.	NA	NA.			2.001		0.022		
WAP-04	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	NS			N		N	FALSE
WAP-14	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA NA	NA	NA NA	NA	NS			N		N	FALSE
WAP-15	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	NS			N		N	FALSE
WAP-16	0/13	100%	0.001-0.001	0.001	0.001	0.001		0	0	0	0.002	mg/L	N	0	0	NA	NA	NA	NA	NS			N		N	FALSE

NS=Not Sampled

Appendix B – Laboratory Analytical Reports



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

SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96379 Location: GW Well WAP-1 Date: 02/15/2021 Sample Collector: MDG/DEW

Loc. Code WAP-1 Time: 13:37

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09050 Location: GW Well WAP-1 Date: 07/20/2021 Sample Collector: MDG/BRT

Loc. Code WAP-1 Time: 12:28

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

Comments:

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





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SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96412 Location: GW Well WBW-1 Date: 02/15/2021 Sample Collector: MDG/DEW

Loc. Code WBW-1 Time: 12:21

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09083 Location: GW Well WBW-1 Date: 07/20/2021 Sample Collector: MDG/BRT

Loc. Code WBW-1 Time: 11:07

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

Comments:

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





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SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96382 Location: GW Well WAP-4 Date: 02/23/2021 Sample Collector: MDG/DEW

Loc. Code WAP-4 Time: 14:28

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09053 Location: GW Well WAP-4 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-4 Time: 11:24

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

Comments:

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





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SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96394 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:10

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96395 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:15

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

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

Loc. Code WAP-14 Time: 14:22

Result	Units	Test Date	Analyst	Method
14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
8600	ug/L	08/10/2021	R&C	EPA 6010D
1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
<10	ug/L	08/10/2021	R&C	EPA 6010D
<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
0.453	pCi/L	08/24/2021	GEL	EPA 904.0
1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
977	mg/L	07/21/2021	KCWELLS	EPA 300.0
5172	mg/L	07/26/2021	KCWELLS	SM 2540C
7.33	SU	07/19/2021	BRT/CS	
5950	uS	07/19/2021	BRT/CS	
3.84	ppm	07/19/2021	BRT/CS	
-385	mv	07/19/2021	BRT/CS	SM2580
25.91	С	07/19/2021	BRT/CS	
0	NTU	07/19/2021	BRT/CS	
4.46	Feet	07/19/2021	BRT/CS	
10.23	Feet	08/18/2021	MDGOINGS	
	14.1 50.3 8600 1060 <0.50 <5.0 <10 <1.0 1.21 0.453 1.67 1560 0.28 977 5172 7.33 5950 3.84 -385 25.91 0 4.46	14.1 ug/L 50.3 ug/L 8600 ug/L 1060 mg/L <0.50	14.1 ug/L 08/27/2021 50.3 ug/L 08/27/2021 8600 ug/L 08/10/2021 1060 mg/L 08/27/2021 <0.50	14.1 ug/L 08/27/2021 SJHATCHE 50.3 ug/L 08/27/2021 SJHATCHE 8600 ug/L 08/10/2021 R&C 1060 mg/L 08/27/2021 SJHATCHE <0.50 ug/L 08/27/2021 SJHATCHE <5.0 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/10/2021 R&C <1.0 ug/L 08/27/2021 SJHATCHE 1.21 pCi/L 08/22/2021 SJHATCHE 1.21 pCi/L 08/22/2021 GEL 0.453 pCi/L 08/22/2021 GEL 0.453 pCi/L 08/24/2021 GEL 1.67 pCi/L 08/24/2021 GEL 1.67 pCi/L 08/24/2021 GEL 560 mg/L 07/21/2021 KCWELLS 0.28 mg/L 07/21/2021 KCWELLS 977 mg/L 07/21/2021 KCWELLS 977 mg/L 07/21/2021 KCWELLS 5172 mg/L 07/21/2021 KCWELLS 5172 mg/L 07/26/2021 KCWELLS 5172 mg/L 07/26/2021 BRT/CS 5950 uS 07/19/2021 BRT/CS 3.84 ppm 07/19/2021 BRT/CS 3.84 ppm 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS

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



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

SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09066 Location: GW Well WAP-14 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-14 Time: 14:27

DU	JP					
Analysis	Result	Units	Test Date	Analyst	Method	
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D	
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B	
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D	
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod	
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0	
Radium 226/228 Combined Calculation	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod	
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Total Dissolved Solids	5419	mg/L	07/27/2021	KCWELLS	SM 2540C	

Comments:

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





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

SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96394 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:10

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

Comments:

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





Sample # AE96395 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:15

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

Comments:

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





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

Loc. Code WAP-14 Time: 14:22

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

Comments:

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



SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09066 Location: GW Well WAP-14 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-14 Time: 14:27

DL	<u> </u>				
Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0
Radium 226/228 Combined Calculation	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0
Total Dissolved Solids	5419	mg/L	07/27/2021	KCWELLS	SM 2540C

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96396 Location: GW Well WAP-14A Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14A Time: 14:48

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	36.0	ug/L	03/04/2021	R&C	EPA 6010D
pН	6.98	SU	02/25/2021	DEW/MDG	
Spec. Cond.	4410	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	9.77	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-372	mv	02/25/2021	DEW/MDG	SM2580
Temp	23.96	С	02/25/2021	DEW/MDG	
Turbidity	48.5	NTU	02/25/2021	DEW/MDG	
Depth	2.04	Feet	02/25/2021	DEW/MDG	
Elevation	11 91	Feet	03/08/2021	DEWEST	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

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

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

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96397 Location: GW Well WAP-14B Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14B Time: 13:56

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	12.0	ug/L	03/04/2021	R&C	EPA 6010D
pН	6.63	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3570	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	7.70	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-358	mv	02/25/2021	DEW/MDG	SM2580
Temp	26.40	С	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	4.48	Feet	02/25/2021	DEW/MDG	
Elevation	4 75	Feet	03/08/2021	DEWEST	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

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

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

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96398 Location: GW Well WAP-14C Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14C Time: 12:20

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
pН	6.75	SU	02/25/2021	DEW/MDG	
Spec. Cond.	898	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	4.03	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-121	mv	02/25/2021	DEW/MDG	SM2580
Temp	21.39	С	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	8.38	Feet	02/25/2021	DEW/MDG	
Elevation	5 50	Feet	03/08/2021	DEWEST	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

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

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

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96399 Location: GW Well WAP-15 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-15 Time: 15:40

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09070 Location: GW Well WAP-15 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-15 Time: 10:30

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96400 Location: GW Well WAP-16 Date: 03/04/2021 Sample Collector: DEW/ML

Loc. Code WAP-16 Time: 14:27

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

Comments:

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





Sample # AF09071 Location: GW Well WAP-16 Date: 07/29/2021 Sample Collector: MDG/BRT

Loc. Code WAP-16 **Time**: 15:38

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96382 Location: GW Well WAP-4 Date: 02/23/2021 Sample Collector: MDG/DEW

Loc. Code WAP-4 Time: 14:28

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

Comments:

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





Sample # AF09053 Location: GW Well WAP-4 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-4 Time: 11:24

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96394 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:10

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

Comments:

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





Sample # AE96395 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:15

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

Comments:

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





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

Loc. Code WAP-14 Time: 14:22

Result	Units	Test Date	Analyst	Method
14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
8600	ug/L	08/10/2021	R&C	EPA 6010D
1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
<10	ug/L	08/10/2021	R&C	EPA 6010D
<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
0.453	pCi/L	08/24/2021	GEL	EPA 904.0
1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
977	mg/L	07/21/2021	KCWELLS	EPA 300.0
5172	mg/L	07/26/2021	KCWELLS	SM 2540C
7.33	SU	07/19/2021	BRT/CS	
5950	uS	07/19/2021	BRT/CS	
3.84	ppm	07/19/2021	BRT/CS	
-385	mv	07/19/2021	BRT/CS	SM2580
25.91	С	07/19/2021	BRT/CS	
0	NTU	07/19/2021	BRT/CS	
4.46	Feet	07/19/2021	BRT/CS	
10.23	Feet	08/18/2021	MDGOINGS	
	14.1 50.3 8600 1060 <0.50 <5.0 <10 <1.0 1.21 0.453 1.67 1560 0.28 977 5172 7.33 5950 3.84 -385 25.91 0 4.46	14.1 ug/L 50.3 ug/L 8600 ug/L 1060 mg/L <0.50	14.1 ug/L 08/27/2021 50.3 ug/L 08/27/2021 8600 ug/L 08/10/2021 1060 mg/L 08/27/2021 <0.50	14.1 ug/L 08/27/2021 SJHATCHE 50.3 ug/L 08/27/2021 SJHATCHE 8600 ug/L 08/10/2021 R&C 1060 mg/L 08/27/2021 SJHATCHE <0.50 ug/L 08/27/2021 SJHATCHE <5.0 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/10/2021 R&C <1.0 ug/L 08/27/2021 SJHATCHE 1.21 pCi/L 08/22/2021 SJHATCHE 1.21 pCi/L 08/22/2021 GEL 0.453 pCi/L 08/22/2021 GEL 0.453 pCi/L 08/24/2021 GEL 1.67 pCi/L 08/24/2021 GEL 1.67 pCi/L 08/24/2021 GEL 560 mg/L 07/21/2021 KCWELLS 0.28 mg/L 07/21/2021 KCWELLS 977 mg/L 07/21/2021 KCWELLS 977 mg/L 07/21/2021 KCWELLS 5172 mg/L 07/21/2021 KCWELLS 5172 mg/L 07/26/2021 KCWELLS 5172 mg/L 07/26/2021 BRT/CS 5950 uS 07/19/2021 BRT/CS 3.84 ppm 07/19/2021 BRT/CS 3.84 ppm 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS

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



SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09066 Location: GW Well WAP-14 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-14 Time: 14:27

DOP						
Analysis	Result	Units	Test Date	Analyst	Method	
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D	
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B	
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D	
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod	
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0	
Radium 226/228 Combined Calculation	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod	
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Total Dissolved Solids	5419	mg/L	07/27/2021	KCWELLS	SM 2540C	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96394 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:10

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

Comments:

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





Sample # AE96395 Location: GW Well WAP-14 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14 Time: 11:15

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

Comments:

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





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

Loc. Code WAP-14 Time: 14:22

Result	Units	Test Date	Analyst	Method
14.1	ug/L	08/27/2021	SJHATCHE	EPA 6020B
50.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B
8600	ug/L	08/10/2021	R&C	EPA 6010D
1060	mg/L	08/27/2021	SJHATCHE	EPA 6020B
<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B
<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
<10	ug/L	08/10/2021	R&C	EPA 6010D
<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B
1.21	pCi/L	08/22/2021	GEL	EPA 903.1 Mod
0.453	pCi/L	08/24/2021	GEL	EPA 904.0
1.67	pCi/L	08/24/2021	GEL	EPA 903.1 Mod
1560	mg/L	07/21/2021	KCWELLS	EPA 300.0
0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0
977	mg/L	07/21/2021	KCWELLS	EPA 300.0
5172	mg/L	07/26/2021	KCWELLS	SM 2540C
7.33	SU	07/19/2021	BRT/CS	
5950	uS	07/19/2021	BRT/CS	
3.84	ppm	07/19/2021	BRT/CS	
-385	mv	07/19/2021	BRT/CS	SM2580
25.91	С	07/19/2021	BRT/CS	
0	NTU	07/19/2021	BRT/CS	
4.46	Feet	07/19/2021	BRT/CS	
10.23	Feet	08/18/2021	MDGOINGS	
	14.1 50.3 8600 1060 <0.50 <5.0 <10 <1.0 1.21 0.453 1.67 1560 0.28 977 5172 7.33 5950 3.84 -385 25.91 0 4.46	14.1 ug/L 50.3 ug/L 8600 ug/L 1060 mg/L <0.50	14.1 ug/L 08/27/2021 50.3 ug/L 08/27/2021 8600 ug/L 08/10/2021 1060 mg/L 08/27/2021 <0.50	14.1 ug/L 08/27/2021 SJHATCHE 50.3 ug/L 08/27/2021 SJHATCHE 8600 ug/L 08/10/2021 R&C 1060 mg/L 08/27/2021 SJHATCHE <0.50 ug/L 08/27/2021 SJHATCHE <5.0 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/27/2021 SJHATCHE <10 ug/L 08/10/2021 R&C <1.0 ug/L 08/27/2021 SJHATCHE 1.21 pCi/L 08/22/2021 SJHATCHE 1.21 pCi/L 08/22/2021 GEL 0.453 pCi/L 08/22/2021 GEL 0.453 pCi/L 08/24/2021 GEL 1.67 pCi/L 08/24/2021 GEL 1.67 pCi/L 08/24/2021 GEL 560 mg/L 07/21/2021 KCWELLS 0.28 mg/L 07/21/2021 KCWELLS 977 mg/L 07/21/2021 KCWELLS 977 mg/L 07/21/2021 KCWELLS 5172 mg/L 07/21/2021 KCWELLS 5172 mg/L 07/26/2021 KCWELLS 5172 mg/L 07/26/2021 BRT/CS 5950 uS 07/19/2021 BRT/CS 3.84 ppm 07/19/2021 BRT/CS 3.84 ppm 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS 0 NTU 07/19/2021 BRT/CS

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



SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09066 Location: GW Well WAP-14 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-14 Time: 14:27

DOP						
Analysis	Result	Units	Test Date	Analyst	Method	
Arsenic	13.3	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Barium	49.6	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Boron	8700	ug/L	08/10/2021	R&C	EPA 6010D	
Calcium	1068	mg/L	08/27/2021	SJHATCHE	EPA 6020B	
Cobalt	<0.50	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Chromium	<5.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Lithium	<10	ug/L	08/10/2021	R&C	EPA 6010D	
Lead	<1.0	ug/L	08/27/2021	SJHATCHE	EPA 6020B	
Radium 226	1.15	pCi/L	08/22/2021	GEL	EPA 903.1 Mod	
Radium 228	2.67	pCi/L	08/17/2021	GEL	EPA 904.0	
Radium 226/228 Combined Calculation	3.81	pCi/L	08/24/2021	GEL	EPA 903.1 Mod	
Chloride	1590	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Fluoride	0.28	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Sulfate	1030	mg/L	07/21/2021	KCWELLS	EPA 300.0	
Total Dissolved Solids	5419	mg/L	07/27/2021	KCWELLS	SM 2540C	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96396 Location: GW Well WAP-14A Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14A Time: 14:48

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	36.0	ug/L	03/04/2021	R&C	EPA 6010D
pН	6.98	SU	02/25/2021	DEW/MDG	
Spec. Cond.	4410	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	9.77	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-372	mv	02/25/2021	DEW/MDG	SM2580
Temp	23.96	С	02/25/2021	DEW/MDG	
Turbidity	48.5	NTU	02/25/2021	DEW/MDG	
Depth	2.04	Feet	02/25/2021	DEW/MDG	
Elevation	11 91	Feet	03/08/2021	DEWEST	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

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

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

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96397 Location: GW Well WAP-14B Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14B Time: 13:56

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	12.0	ug/L	03/04/2021	R&C	EPA 6010D
pН	6.63	SU	02/25/2021	DEW/MDG	
Spec. Cond.	3570	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	7.70	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-358	mv	02/25/2021	DEW/MDG	SM2580
Temp	26.40	С	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	4.48	Feet	02/25/2021	DEW/MDG	
Elevation	4 75	Feet	03/08/2021	DEWEST	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

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

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

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96398 Location: GW Well WAP-14C Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-14C Time: 12:20

Analysis	Result	Units	Test Date	Analyst	Method
Arsenic	<5.0	ug/L	03/22/2021	SJHATCHE	EPA 6020B
Lithium	<10	ug/L	03/04/2021	R&C	EPA 6010D
pН	6.75	SU	02/25/2021	DEW/MDG	
Spec. Cond.	898	uS	02/25/2021	DEW/MDG	
Dissolved Oxygen	4.03	ppm	02/25/2021	DEW/MDG	
Oxidation Reduction Potential	-121	mv	02/25/2021	DEW/MDG	SM2580
Temp	21.39	С	02/25/2021	DEW/MDG	
Turbidity	0	NTU	02/25/2021	DEW/MDG	
Depth	8.38	Feet	02/25/2021	DEW/MDG	
Elevation	5 50	Feet	03/08/2021	DEWEST	

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

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

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

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96399 Location: GW Well WAP-15 Date: 02/25/2021 Sample Collector: MDG/DEW

Loc. Code WAP-15 Time: 15:40

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AF09070 Location: GW Well WAP-15 Date: 07/19/2021 Sample Collector: BRT/CWS

Loc. Code WAP-15 Time: 10:30

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AE96379 Location: GW Well WAP-1 Date: 02/15/2021 Sample Collector: MDG/DEW

Loc. Code WAP-1 Time: 13:37

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

Comments:

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





Sample # AF09050 Location: GW Well WAP-1 Date: 07/20/2021 Sample Collector: MDG/BRT

Loc. Code WAP-1 Time: 12:28

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96412 Location: GW Well WBW-1 Date: 02/15/2021 Sample Collector: MDG/DEW

Loc. Code WBW-1 Time: 12:21

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

Comments:

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





Sample # AF09083 Location: GW Well WBW-1 Date: 07/20/2021 Sample Collector: MDG/BRT

Loc. Code WBW-1 Time: 11:07

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS

LAB CERTIFICATION #08552

Sample # AE96400 Location: GW Well WAP-16 Date: 03/04/2021 Sample Collector: DEW/ML

Loc. Code WAP-16 Time: 14:27

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

Comments:

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





SANTEE COOPER ANALYTICAL SERVICES CERTIFICATE OF ANALYSIS LAB CERTIFICATION #08552

Sample # AF09071 Location: GW Well WAP-16 Date: 07/29/2021 Sample Collector: MDG/BRT

Loc. Code WAP-16 **Time**: 15:38

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

Comments:

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

Analysis Validated:







Laboratory Services

Laboratory Report

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

Project: Work Order: Ground Water

1021082

Received:

02/19/2021 10:20

Dear Client:

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

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

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

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Haven Heures-Upshin

Report Approved By:

Karen Upshur Project Manager

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Page 1 of 12





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

Project: Ground Water
Work Order: 1021082

Received: 02/19/2021 10:20

Certificate of Analysis

Client Santee Cooper

Linda Williams
1 Riverwood Dr.

Moncks Corner, SC 29461

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



Sample Data

Sample Number

1021082-01

Sample Description

AE96379 WAP-1 collected on 02/15/21 13:37

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

Sample Number

1021082-02

Sample Description

AE96380 WAP-2 collected on 02/15/21 14:40

		Reporting							
Parameter	Result	Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 11:23	EPA 7470A	S 7	MLR	B1B1040
Lithium	13	10	ug/L	1.00	02/23/21 20:20	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 20:20	EPA 6010D		MLR	B1B1006

Sample Number

1021082-03

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

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

Sample Number

1021082-04

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

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

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Project: Ground Water Work Order: 1021082

Reported: 02/26/21 13:41

Sample Number

1021082-05

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

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

Sample Number

1021082-06

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

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

Sample Number

1021082-07

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

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

Sample Number

1021082-08

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

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	02/23/21 12:02	EPA 7470A	S 7	MLR	B1B1040
Lithium	26	10	ug/L	1.00	02/23/21 20:24	EPA 6010D		MLR	B1B1006
Molybdenum	ND	10	ug/L	1.00	02/23/21 20:24	EPA 6010D		MLR	B1B1006



Project: Ground Water
Work Order: 1021082

Reported: 02/26/21 13:41

Sample Number

1021082-09

Sample Description

AE96389 WAP-10 DUP collected on 02/17/21 14:02

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

Sample Number

1021082-10

Sample Description

AE96406 WAP-21 collected on 02/17/21 12:35

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

Sample Number

1021082-11

Sample Description

AE96408 WAP-23 collected on 02/17/21 11:26

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



Total Metals Quality Control Summary

		Reporting		Spike	Source		%REC		RPD	
Parameter	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Flags
Batch B1B1006 - EPA 3005A										
Blank (B1B1006-BLK1)										
Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							
LCS (B1B1006-BS1)										
Boron	250	15	ug/L	250		98	80-120			
Lithium	255	10	ug/L	250		102	80-120			
Molybdenum	240	10	ug/L	250		97	80-120			
LCS Dup (B1B1006-BSD1)										
Boron	250	15	ug/L	250		99	80-120	0.8	20	
Lithium	257	10	ug/L	250		103	80-120	0.7	20	
Molybdenum	250	10	ug/L	250		99	80-120	2	20	
Matrix Spike (B1B1006-MS1)	Source: 1021082-01	ı								
Boron	250	15	ug/L	250	24	92	75-125			
Lithium	253	10	ug/L	250	ND	101	75-125			
Molybdenum	230	10	ug/L	250	ND	93	75-125			
Matrix Spike (B1B1006-MS2)	Source: 1021082-03	3								
Boron	260	15	ug/L	250	ND	97	75-125			
Lithium	262	10	ug/L	250	ND	105	75-125			
Molybdenum	240	10	ug/L	250	ND	97	75-125			
Matrix Spike Dup (B1B1006-MSD1)	Source: 1021082-01	1								
Boron	270	15	ug/L	250	24	99	75-125	6	20	
Lithium	268	10	ug/L	250	ND	107	75-125	6	20	
Molybdenum	250	10	ug/L	250	ND	99	75-125	6	20	
Matrix Spike Dup (B1B1006-MSD2)	Source: 1021082-03	3								
Boron	260	15	ug/L	250	ND	98	75-125	0.4	20	
Lithium	264	10	ug/L	250	ND	105	75-125	0.5	20	
Molybdenum	240	10	ug/L	250	ND	98	75-125	1	20	

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Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1B1040 - EPA 7470A					Account	74450	Ziditi		Ziilli	
Blank (B1B1040-BLK1)										
Mercury	ND	0.20	ug/L							
LCS (B1B1040-BS1)										
Mercury	5.0	0.20	ug/L	5.00		101	80-120			
LCS Dup (B1B1040-BSD1)										
Mercury	4.9	0.20	ug/L	5.00		98	80-120	2	20	
Matrix Spike (B1B1040-MS2)	Source: 1021082-02	2								
Mercury	4.1	0.20	ug/L	5.00	ND	82	75-125			S 7
Matrix Spike Dup (B1B1040-MSD2)	Source: 1021082-02	2								
Mercury	4.1	0.20	ug/L	5.00	ND	82	75-125	0.6	20	S 7



Sample Preparation Data

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



Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported

RPD Relative Percent Difference

S7 Result calculated by Method of Standard Addition due to sample matrix interference and initial spike failures.

Chain of Custody



Custom	er Email	/Report Recipi	ient:	Date F	Results No	eeded b	y :		Pı	roject,	Task/	Unit #:		Rerun re	quest	for a	ny fila	gged	I QC
LEWI	LLIA	@santee	cooper.com		<i></i>			1215	56 学	1 38	M02.0	09.601	365	00	Yes	No			
												162	108	2		A	nalysi	s Grou	16
Labwor (Interna only)		Sample Locati Description	on/	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (G	Matrix(see below)	Preservative (see			ments it info		Œ.	1 7	Mo	-
AE76	37-7	WAP -1		2/15/24	1337	NDG /	1	P	G	GW	2	-01				×	X	×	X
AE 963	3 8o	WAP -2		2/15/21	1440	di i		!	1			-02	·				X	Х	X
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Reling	uished by:	Employee#	Date	Time	Receiv	ed by:	Er	aployee		Date		Time	Sample	Receiving (Int	ternal U				
Satare	THE PT	35594	2/18/21	1400	FED	EN								(°C): 4. (<u></u>	nitial:		_	-
Relinqu	ulshed by:	Employee#	Date	Time	Receive		En	rployee		Date		Time	Correc	tpH: Yes	No				
FER	OEX				M					2/19	1/21/1	020	Preserv	ative Lot#:					
Relinqu	lished by:	Employees	Data	Time	Receive	ed by:	En	nployee	_	Date		Time							
	D ME	TALS (all)						-					Date/Ti	me/Init for pr	reservat	tive:			
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□ Al ː	☐ Fe	□ Se	TOC		☐ BTEX ☐ Napthale	ne	-0	Wallbo	ard um(<i>al</i>	,	D	Ultimate ☐ % Moist		Ammonia			ii. Oll Mood		
□ As	. □K	□ Sn		IPO4	D THM/HA			below	(1			☐ Ash	ure	LOI % Carbon		-50	ter.		
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□ Ba	. □ Mg	□ Ti	i ci		E. Coli		100	Total	d metal:			☐ BTUs ☐ Volatile	Matte	Analysi	IS .	- 90			
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□ Co	□Ni	□ Hg			☐ Rad 228 ☐ PCB		1	Chk		- 1	DF	ineness Particulate Ma		Oil & Grease		B)			
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Chain of Custody



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

Custom	er Email	/Report Recipi	ent:	Date R	esults Ne	eded by	y :		Pr	oject/	Task/l	Unit #:		Rerun reque:	t for a	ny fla	gged	I QC
LCWI	LLIA	@santeed	cooper.com	·/				12.0	567	J_JM	02-0	9. GØI	1 36:	≤co Yes	No			
)	02	1082		Analysi	s Grou	пр
Labwork (Interna- only)		Sample Location Description	on/	Collection Date	Collection Time	Sample Collector	Total 8 of containary	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (988 below)	Met Rep Mis Any		iments nit info	æ	Ĺ,	Mo	Hey
AE96	388	WAP-10		2/17/21	1357	DEW	1	P	6	GW	2	-68				×	×	Х
AE963	389	WAP-10 DY	P	1	1402	1	1					-09				Х	x	X
AE.964	-06	WAP - 2.)		2/17/21	1235		1					-10			x	x	x	х
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Relinqu	ished by:	Employees	Date	Tone	Receiv	ed by:	E	mployee	er .	Date		Time		ct pH: Yes No)			
Relinqu	ished by:	Employee#	Date	Time	Receiv	ed by:	E	mployee	8	Date		Time						
	пмг	CTALS (all)											Date/	Time/Init for preser	vative:	_		
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□ A!	□ Fe		Di	X	☐ BTEX ☐ Napthale		1.0	Walibo	sum(a)	11		Ultimate Moist	ıre	LOI		es. (H) Official		
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□В	□ Li		CE	DON.	□ Oil & Gr	ease		LIO				□ Sulfur		Mineral		iridi) elemen		- 1
□ Ba	□ Mg	g 🛮 Ti	FCI		☐ E. Coli ☐ Total Co	liform		□ Tot	al metal		40	☐ BTUs ☐ Volatile	Matter	Analysis Sieve		T lamba		
□ Be	□ Mı	n C 11	LNO	02	□pH			☐ Pur	uble Mo	504)		□ CHN		□ % Moisture	Co	4 08		
□ Ca	□ Mo	O OV	E NO		☐ Dissolve			□ % ! □ Sul	Moisture fires			her Tests: (RF Scan		MODES				
□ Cd	□ Na	□ Zn	2 SC	14	□ Rad 226		ME	□pH			OF	HGI	= 24	NPDES		46,000		7
□Со	□Ni	□ Hg			□ Rad 228 □ PCB		1		orides ticle Siz		1000000	ineness Particulate Ma	tter	□ Oil & Grease □ As				
□ Cr	□ Рь	□ CrVI					E	Sulfur	100 312	-	3.			n TSS		FER		



Revised February 2018

Sample Receipt Verification

Client: Santee Cooper		Date ceived:	2/:	24/21		Work Order:	1021247	
Carrier Name: Client Track	FedEx UPS king Number: 8162406720	US 1	Mail		Cou	rier Field Servi	ces Other:	
Receipt Criteria			Y e s	N o	N A	Comments		
Shipping container / cooler in	tact?		x			Damaged Leakin	g Other:	
Custody seals intact?					х			
COC included with samples?			х					
COC signed when relinquished	d and received?		х					
Sample bottles intact?			х			Damaged Leakin	g Other:	
Sample ID on COC agree wit	n label on bottle(s)?		х					
Date / time on COC agree wit	h label on bottle(s)?		х					
Number of bottles on COC ag	rees with number of bottles rece	eived?	х					
Samples received within hold	ing time?		Х					
Sample volume sufficient for	analysis?		х					
VOA vials free of headspace	(<6mm bubble)?				х			
Namples cooled?	receipt recorded on COC casured with IR thermometer - SN: 970:	50067			х	Ice Cold Pa	acks Dry Ice	None
Samples requiring pH preserv Note: Samples for metals analysis		ab.	х				·	
Samples dechlorinated for parties time of sample collection?	ameters requiring chlorine remo	oval at			х			
	If in-house pres	servation	used	– re	cord	Lot#		
HCL		H ₃ P						
H ₂ SO ₄ HNO ₃		NaC Oth		-				
Comments:				1				
Were non-conformance iss	ues noted at sample receipt?	Vec	s or		Jo.	`		
Non-Conformance issue other		103	, 01		<u> </u>	,		
Daviced Cabruage 2019						umnleted by:	KRU	

Completed by:_ Page 12 of 12





Laboratory Services

Laboratory Report

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

Project:

Work Order: 1030283

Received: 03/03/2021 13:20

Ground Water

Dear Client:

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

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

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

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Lauren Hollister

Report Approved By:

Lauren Hollister Project Manager

Page 1 of 11

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

Client Santee Cooper

Certificate of Analysis

Linda Williams
1 Riverwood Dr.

Moncks Corner, SC 29461

Project: Ground Water
Work Order: 1030283

Received: 03/03/2021 13:20

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



Sample Data

Sample Number

1030283-01

Sample Description

AE96387 WAP-9 collected on 02/23/21 12:49

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

Sample Number

1030283-02

Sample Description

AE96382 WAP-4 collected on 02/23/21 14:28

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

Sample Number

1030283-03

Sample Description

AE96385 WAP-7 collected on 02/24/21 11:02

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

Sample Number

1030283-04

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

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



Santee Cooper Project: 1 Riverwood Dr. Work Order:

1030283 Moncks Corner, SC 29461 03/11/21 09:01 Reported:

Ground Water

1030283-05 Sample Number

Sample Description	AE96398 WAP-14C collected on	02/25/21 12:2	20						
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	ND	10	ug/L	1.00	03/04/21 17:20	EPA 6010D		MLR	B1C0267
Sample Number Sample Description	1030283-06 AE96397 WAP-14B collected on	02/25/21 13:5	66						
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	12	10	ug/L	1.00	03/04/21 17:59	EPA 6010D		MLR	B1C0267
Sample Number Sample Description	1030283-07 AE96396 WAP-14C collected on	02/25/21 14:4	16						
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lithium	36	10	ug/L	1.00	03/04/21 18:03	EPA 6010D		MLR	B1C0267
Sample Number Sample Description	1030283-08 AE96394 WAP-14 collected on 0	02/25/21 11:10							
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:29	EPA 7470A		MLR	B1C0396
Boron	6000	150	ug/L	10.0	03/04/21 18:22	EPA 6010D		MLR	B1C0267
Lithium	ND	10	ug/L	1.00	03/04/21 18:37	EPA 6010D		MLR	B1C0267
Molybdenum	ND	10	ug/L	1.00	03/04/21 18:37	EPA 6010D		MLR	B1C0267
Sample Number Sample Description	1030283-09 AE96395 WAP-14DUP collected	l on 02/25/21 1	1:15						
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/08/21 13:32	EPA 7470A		MLR	B1C0396

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MLR

MLR

MLR

EPA 6010D

EPA 6010D

EPA 6010D

ug/L

ug/L

ug/L

10.0

1.00

1.00

03/04/21 18:26

03/04/21 18:41

03/04/21 18:41

6200

ND

ND

150

10

10

Boron

Lithium

Molybdenum

B1C0267

B1C0267 B1C0267



Sample Number 1030283-10

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

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



Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1C0267 - EPA 200.7										
Blank (B1C0267-BLK1)										
Boron	ND	15	ug/L							
ithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							
.CS (B1C0267-BS1)										
Boron	240	15	ug/L	250		96	80-120			
Lithium	266	10	ug/L	250		106	80-120			
Molybdenum	220	10	ug/L	250		89	80-120			
LCS Dup (B1C0267-BSD1)										
Вогоп	250	15	ug/L	250		100	80-120	5	20	
ithium	264	10	ug/L	250		106	80-120	0.7	20	
Molybdenum	230	10	ug/L	250		94	80-120	5	20	
Matrix Spike (B1C0267-MS1)	Source: 1030283-05	5								
Boron	680	15	ug/L	250	400	109	75-125			
ithium	286	10	ug/L	250	ND	112	75-125			
Molybdenum	230	10	ug/L	250	ND	94	75-125			
Matrix Spike Dup (B1C0267-MSD1)	Source: 1030283-05	5								
Boron	680	15	ug/L	250	400	110	75-125	0.6	20	
ithium	283	10	ug/L	250	ND	110	75-125	1	20	
Molybdenum	240	10	ug/L	250	ND	98	75-125	4	20	
Post Spike (B1C0267-PS1)	Source: 1030283-05	5								
Boron	0.91		mg/L	0.500	ND	101	75-125			
ithium	0.531		mg/L	0.500	ND	105	75-125			
Molybdenum	0.47		mg/L	0.500	ND	94	75-125			
Batch B1C0396 - EPA 7470A										
Blank (B1C0396-BLK1)										
Mercury	ND	0.20								



Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1C0396 - EPA 7470A										
LCS (B1C0396-BS1)										
Mercury	5.0	0.20	ug/L	5.00		100	80-120			
LCS Dup (B1C0396-BSD1)										
Mercury	5.0	0.20	ug/L	5.00		101	80-120	1	20	
Matrix Spike (B1C0396-MS1)	Source: 1030283-03	3								
Mercury	4.8	0.20	ug/L	5.00	ND	97	75-125			
Matrix Spike Dup (B1C0396-MSD1)	Source: 1030283-03	3								
Mercury	5.0	0.20	ug/L	5.00	ND	100	75-125	3	20	
Post Spike (B1C0396-PS1)	Source: 1030283-03	3								
Mercury	4.0		ug/L	4.00	ND	99	80-120			



Sample Preparation Data

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



 Santee Cooper
 Project:
 Ground Water

 1 Riverwood Dr.
 Work Order:
 1030283

 Moncks Corner, SC 29461
 Reported:
 03/11/21 09:01

Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported

RPD Relative Percent Difference

Chain of Custody



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

	ici Lillan	y keport kecip	ment.	Date	Results N	eeded b	y:		P	roject,	/Task/	Unit #:		Rerun rec	quest fo	or any	flag	ged Q
LOW	ILLIA	@santee	ecooper.com		<i></i>	/		1215	567	JJA	402.	OT. GØ	365	500	Yes I	No		
· · · · · · · · · · · · · · · · · · ·												103	,028	3		Ana	alysis (Group
Labwari (Interna only)		Sample Locat Description	ion/	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastlc-P)	Grab (G) or Composite (C)	Matrix(see below)	Preservative (see	_		ments nit info		m	ָּוֹן.	Mo
AE 96	387	WAP-9		2/23/24	1249	MOG	1.	P	6	GW	2	-0	,				X >	X X
AET6	382	WAP-4		L	1428	1	1	1	1	1		-02						x ×
AE 96	382	WAP-7		2/24/21	1102	DEW	1		delication con-	-	1	-03	3			X	(×	< X
4E963	881	WAP-3		1	1318			1		-		-ري	l				-	× x
AE 963	398	WAP-14C		2/25/21	1220	DEW		111		, consens.	i	. 05			\top	×		1
AE963	397	WAP-148			1356	1		İ				-06)			×	+	
AE 963	396	WAP-14C			1446		1			1		-07				Х		-
4E 9635	74	WAP-14		2/25/21	1110	DEN						-08			X	×	X	X
F963	95	WAP-14 DO	UP		1115		1	and the second		Towns .		-09			×	×	X	×
E9639	79	WAP-15		1	1540		-	1			1	-10)		×	; ×	XX	+
Relinquis	shed by:	Employee#	Date	Time	Receive	d by:	Em	ployee #		Date		Time	Sample	Receiving (Inter	nal Use	Only)		
* Amount		35594	3/2/21	1500	PED	RX							TEMP	(°C): 10.C	1 Init	ial:	ne	<u></u>
Reiinquis	shed by:	Employee#	Date	Time	Receive		Em	ployee #	1	Date	\top	Time	Correct	pH: Yes	No			
FEDI				X	10	_			3/	3/21	,	320	Preserv	ative Lot#:				
Relinquis	shed by:	Employee#	Date	Time	Receive	d by:	Em	ployee #		Date		Time						
	O MET	ALS (all)								_			Date/Tir	me/Init for pres	ervative	is .		
□ Ag	□ Cu		Nutri	_	MIS	<u>c.</u>		Gyp	sum			Coal	620	Flyash		0	il	
□ Al	□ Fe	□ Se	100		BTEX Napthalene		HEAT.	Wallboar Gypsu			1000	ltimate		□ Ammonia	1	raus O	H Qu	
∃As	□K	□ Sn	TFT	PLM D	THM/HA			below				☐ % Moist ☐ Ash ☐ A	ure	% Carbon		MSMid Follow		
B	□ Li	□ Sr	NH.		VOC Oil & Grea	ise		AIM TOC				Sulfur		- Mineral		Aculty		
∃ Ba	□Mg	□ Ti	-01		E. Coli			Total	metals			BTUs		Analysis		olitare DT		all .
∃ Bc	□ Mn	□ T 1	SUE		Total Colif	orm		Solub	(CaSO			Volatile CHN	Matter	Sieve Moisture	_	District O		(XXI)
Ca	□Мо	υV	Bir Not2	7	Dissolved I			- % Mo	isture	31	Oth	er Tests:	3 -23/	- Judistuic		Flashy		
Cđ	□ Na	□ Zn	504		Rad 226			Solfin	5	-	DXE	RF Scan		NPDES		漂		
Co	□Ni	□ Hg			Rad 228	1		Chlori	des			eness		Oil & Grease		Uar-		
Co Cr			2	1 11	PCB			☐ Partiel	40.0	- 1	- mar	ticulate Ma		. As		68		



Revised February 2018

Sample Receipt Verification

Santee Cooper	Date ceived:	03	/03/2	:1	Work Order: 1030283
Carrier Name: Client FedEx UPS	US N	/Iail		Cou	rier Field Services Other:
Tracking Number: 81624	0672657				_
Receipt Criteria		Y e s	N o	N A	Comments
Shipping container / cooler intact?		Х			Damaged Leaking Other:
Custody seals intact?				Х	
COC included with samples?		Х			
COC signed when relinquished and received?		Х			
Sample bottles intact?		Х			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?		Х			
Date / time on COC agree with label on bottle(s)?		Х			
Number of bottles on COC agrees with number of bottles rece	eived?	Х			
Samples received within holding time?		Х			
Sample volume sufficient for analysis?		Х			
VOA vials free of headspace (<6mm bubble)?				Х	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN: 9705	0067			Х	Ice Cold Packs Dry Ice None
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the la Note: Samples for O&G and VOA analysis – preservation checked at bene	ıb.	х			
Samples dechlorinated for parameters requiring chlorine remo the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, a analysis.	oval at			х	
If in-house pres	servation u	ısed	– re	cord	Lot#
HCL	H ₃ P(
H ₂ SO ₄ HNO ₃	NaO Oth		+		
Comments:					
Were non-conformance issues noted at sample receipt?	Yes	OF	Q	(OV	
Non-Conformance issue other than noted above:	103	- 01			
Davigad Columna, 2010				Ca	omplated by: CTC

Completed by:_ Page 11 of 11





Laboratory Services

Laboratory Report

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

Project: Work Order: Ground Water

1030536

Received:

03/09/2021 12:55

Dear Client:

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

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

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Lauren Hollister

Report Approved By:

Lauren Hollister Project Manager

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Page 1 of 14





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

Client Santee Cooper

Certificate of Analysis

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

Project: Ground Water Work Order: 1030536

Received: 03/09/2021 12:55

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



Sample Data

Sample Number

1030536-01

Sample Description

AE96413 WBW-A1-1 collected on 03/01/21 10:05

Parameter	Resu	Reporting It Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	48	15	ug/L	1.00	03/15/21 14:30	EPA 6010D		MLR	B1C0515
Sample Number Sample Description	1030536-02 AE96417 WLF-A1-4 collected	on 03/01/21 11	:10						
Parameter	Resu	Reporting It Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	140	15	ug/L	1.00	03/15/21 15:16	EPA 6010D		MLR	B1C0515
Sample Number Sample Description	1030536-03 AE96418 WLF-A1-4 dup colle	ected on 03/01/2	1 11:15						
Parameter	Resu	Reporting It Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	150	15	ug/L	1.00	03/15/21 15:20	EPA 6010D		MLR	B1C0515
Sample Number Sample Description	1030536-04 AE96416 WLF-A1-3 collected	on 03/01/21 12	::31						
Parameter	Resu	Reporting It Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	59	15	ug/L	1.00	03/15/21 15:24	EPA 6010D		MLR	B1C0515
Sample Number Sample Description	1030536-05 AE96415 WLF-A1-2 collected	on 03/01/21 13	:48						
Parameter	Resu	Reporting It Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	120	15	ug/L	1.00	03/15/21 15:28	EPA 6010D		MLR	B1C0515



Project:

Ground Water

Work Order: Reported:

1030536 03/17/21 10:37

Sample Number

1030536-06

Sample Description

AE96401 WAP-17 collected on 03/02/21 10:48

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

Sample Number

1030536-07

Sample Description

AE96402 WAP-17 DUP collected on 03/02/21 10:53

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

Sample Number

1030536-08

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

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

Sample Number

1030536-09

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

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

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Project:

Ground Water

Work Order: Reported: 1030536 03/17/21 10:37

Sample Number

1030536-10

Sample Description

AE96409 WAP-24 collected on 03/02/21 11:28

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

Sample Number

1030536-11

Sample Description

AE96411 WAP-26 collected on 03/02/21 15:13

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

Sample Number

1030536-12

Sample Description

AE96410 WAP-25 collected on 03/04/21 10:36

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

Sample Number

1030536-13

Sample Description

AE96393 WAP-13 collected on 03/04/21 11:55

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:32	EPA 7470A	S 7	MLR	B1C0646
Boron	4400	15	ug/L	1.00	03/15/21 16:05	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 19:27	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:27	EPA 6010D		MLR	B1C0515



Project:

Ground Water

Work Order: Reported: 1030536 03/17/21 10:37

Sample Number

1030536-14

Sample Description

AE96391 WAP-12 collected on 03/04/21 13:09

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:35	EPA 7470A	S 7	MLR	B1C0646
Boron	4900	15	ug/L	1.00	03/15/21 16:09	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 19:30	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:30	EPA 6010D		MLR	B1C0515

Sample Number

1030536-15

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

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	03/12/21 10:38	EPA 7470A	S 7	MLR	B1C0646
Boron	4800	15	ug/L	1.00	03/15/21 16:16	EPA 6010D		MLR	B1C0515
Lithium	ND	10	ug/L	1.00	03/11/21 19:34	EPA 6010D		MLR	B1C0515
Molybdenum	ND	10	ug/L	1.00	03/11/21 19:34	EPA 6010D		MLR	B1C0515

Sample Number

1030536-16

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

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



Total Metals **Quality Control Summary**

		Reporting		Spike	Source		%REC		RPD	
Parameter	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Flags
Batch B1C0515 - EPA 200.7										
Blank (B1C0515-BLK1)										
Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							
LCS (B1C0515-BS1)										
Boron	280	15	ug/L	250		110	80-120			
Lithium	264	10	ug/L	250		106	80-120			
Molybdenum	240	10	ug/L	250		98	80-120			
LCS Dup (B1C0515-BSD1)										
Boron	250	15	ug/L	250		100	80-120	10	20	
Lithium	250	10	ug/L	250		100	80-120	6	20	
Molybdenum	250	10	ug/L	250		100	80-120	3	20	
Matrix Spike (B1C0515-MS1)	Source: 1030536-01									
Boron	290	15	ug/L	250	48	98	75-125			
Lithium	272	10	ug/L	250	ND	109	75-125			
Molybdenum	250	10	ug/L	250	ND	99	75-125			
Matrix Spike (B1C0515-MS2)	Source: 1030536-16	;								
Boron	1800	15	ug/L	250	1600	103	75-125			
Lithium	277	10	ug/L	250	ND	109	75-125			
Molybdenum	240	10	ug/L	250	ND	95	75-125			
Matrix Spike Dup (B1C0515-MSD1)	Source: 1030536-01									
Boron	290	15	ug/L	250	48	96	75-125	1	20	
Lithium	263	10	ug/L	250	ND	105	75-125	3	20	
Molybdenum	250	10	ug/L	250	ND	100	75-125	0.3	20	
Matrix Spike Dup (B1C0515-MSD2)	Source: 1030536-16	i								
Boron	1800	15	ug/L	250	1600	113	75-125	l	20	
Lithium	284	10	ug/L	250	ND	112	75-125	2	20	
Molybdenum	240	10	ug/L	250	ND	97	75-125	2	20	



Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1C0515 - EPA 200.7										
Post Spike (B1C0515-PS1)	Source: 1030536-01									
Boron	0.53		mg/L	0.500	ND	96	75-125			
Lithium	0.515		mg/L	0.500	ND	103	75-125			
Molybdenum	0.49		mg/L	0.500	ND	98	75-125			
Post Spike (B1C0515-PS2)	Source: 1030536-16									
Boron	2.1		mg/L	0.500	ND	103	75-125			
Lithium	0.542		mg/L	0.500	ND	108	75-125			
Molybdenum	0.48		mg/L	0.500	ND	96	75-125			
Batch B1C0646 - EPA 7470A										
Blank (B1C0646-BLK1)										
Mercury	ND	0.20	ug/L							
LCS (B1C0646-BS1)										
Mercury	4.9	0.20	ug/L	5.00		98	80-120			
LCS Dup (B1C0646-BSD1)										
Mercury	5.0	0.20	ug/L	5.00		101	80-120	3	20	
Matrix Spike (B1C0646-MS1)	Source: 1030536-15									
Mercury	4.1	0.20	ug/L	5.00	ND	81	75-125			S 7
Matrix Spike Dup (B1C0646-MSD1)	Source: 1030536-15									
Mercury	4.1	0.20	ug/L	5.00	ND	81	75-125	0	20	S 7
Post Spike (B1C0646-PS1)	Source: 1030536-15									
Mercury	3.3		ug/L	4.00	ND	82	80-120			S 7
Post Spike (B1C0646-PS3)	Source: 1030536-06									
Mercury	3.9		ug/L	4.00	ND	98	80-120			
Post Spike (B1C0646-PS4)	Source: 1030536-07									
Mercury	3.9		ug/L	4.00	ND	97	80-120			



Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1C0646 - EPA 7470A										
Post Spike (B1C0646-PS5)	Source: 1030536-13									
Mercury	3.3		ug/L	4.00	ND	82	80-120			S 7
Post Spike (B1C0646-PS6)	Source: 1030536-14									
Mercury	3.2		ug/L	4.00	ND	81	80-120			S7
Post Spike (B1C0646-PS7)	Source: 1030536-16									
Mercury	3.6		ug/L	4.00	ND	89	80-120			



 Santee Cooper
 Project:
 Ground Water

 1 Riverwood Dr.
 Work Order:
 1030536

 Moncks Corner, SC 29461
 Reported:
 03/17/21 10:37

Sample Preparation Data

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



Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported

RPD Relative Percent Difference

S7 Result calculated by Method of Standard Addition due to sample matrix interference and initial spike failures.

Chain of Custody



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

Customer Email/Report Recipient:				Date	Date Results Needed by:				Project/Task/Unit #: Rer							run request for any flagged QC				
LCWILLIA		@sante	ecooper.coi	m					121567 JM02.09.GØ! 36500							No				
									1030536							Analysis Group				
Labwori (Interna only)		Sample Locat Description	ion/	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	low}	Preservative (see	1		info		Ф	Li	Mo	Hay	
AE96	413	WBW-A-	-1	3/1/2	1 1005	DEW	1	P	G	GW	2	-01				X				
AE96	+17	WLF-AI-	4		1110							-08	2			X				
AE 96 4	-18	WLF-AI-	+ DUP		1115							-03				Χ				
AE964	t16	WLF-AI-	3		1231							-04	,			Х			,	
AE964	-15	WLF-AI-	- 2	1	1348							-05				X				
AE 964	101	WAP-17		3/2/2	1 1048	DEN TG/DJ	. panas	-				-06	,			X	X	×	х	
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			····																\exists	
Relinqui	shed by:	Employee#	Date	Time	Receiv	ed bv:	Er	nployee (#	Date		Time	Sample	Receiving (Int	ternal Us	se Onl	y)			
Sitta con .		35594 3/8/2		12.00	P / OPA							1	TEMP	(°C): 17-1	ce i	nitial:	a	a	-	
Relinquished by:		Employee# Date		Time			Er	Employee # Date		Time		Correc	t pH: Yes	No						
F60	GA				()510	9			31	19/2	1 ,	255	Preserv	vative Lot#:						
Relinquished by:		Employee# Date		Time	Received by:			mployee # Date		Time										
													Date/Ti	me/Init for pr	reservat	ive:				
-		TALS (all)	Nut	rients	MIS	C.		Gvi	sum		15	Coal		Chereb			Dill			
 □ Ag □ Cu □ Al □ Fe 		Sh		C	□ BTEX □ Napthalene		10	Wallboard Gypsum(all below) AllM TOC			п	□ Ultimate		<u>Flyash</u> Ammonia			Oil			
	Al Fe		DOX								☐ % Moisture ☐ Ash ☐ Sulfur			LOI						
				TEAH	□ VOC □ Oil & Grease									% Carbon	n Colc					
□ B	□ Li	75		1-10										Mineral						
□ Ba	3a UMg UTi			□ E. Coli ⊔ Total Coliform			Total metals Soluble Metals			☐ BTUs ☐ Volatile Matter			Analysi Sieve	Analysis						
∃ Be □ Min		□ T I			□ pH □ Dissolved As □ Dissolved Fe			Purity (CaSO4)			□ CHN			% Moisture						
□ Ca □ Mo		UV Br		*			□ % Moisture					her Tests:					Parapolit			
□ Cd	□ Na	□ Zn	50		Rad 226	10		□ Salfr	tes		O H	RF Scan	7700	NPDES		Alle		of the		
□ Co	□Ni	□ Hg			□ Rad 228			□ Chlo			DF	ineness		Oil & Grease		160				
□ Cr	□Pb	□ CrVI		- 7	D PCB		1	☐ Partic	ele Size		D Pa	articulate M	atter	As TSS		601				



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

Customer Email/Report Recipient:		Date	Date Results Needed by:				Project/Task/Unit #:						Rerun request for any flagged QO					
LCW	ILLIA	@santee	cooper.com		//			121	567	J_JM	02.	09.6	Ø1 J 36	Soo Ve	No			
												1	172A	536		Analy:	sis Gra	oup
Labwork (Interna only)		Sample Locati Description	on/	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	· · ·	Method # Reporting li Misc. samp Any other n	mments mit le info	m	L.	Mo	至
AE961	+09	WAP-24		3/2/21	1128	DEW 15 DJ	1	P	G	G W	2	5	0			X	×	
AE 964	+ 1 1	WAP - 26		L	1213	1	1	1	<u>}</u>	1	2:	-1)			X	X	
AE961	440	WAP- 25		3/4/21	1036	DEW	1	1	1	1	2	- 1	2			X	Х	
AE96=	393	WAP-13			1155	-			1			-13			X	Х	X	X
AE963	391	WAP-12			1309		The same of the sa					~/c	1		×	×	Х	X
AB96	392	WAP-12 (DUP		1314						the same of the sa	- l	5		×	×	×	X
AE964	t00	WAP-16			1427	- American de la composition della composition d	}	_	(married and and and and and and and and and an		1	- 1	6		×	×	X	×
Relingu	ished by:	Employee#	Date	Time	Receive	ed by:	En	ployee	#	Date		Time	Samp	le Receiving (Interna	l Use Or	ly)		
Sitines	(.1)	35594	3/8/21	1200	-	130	T	.p.0,00				Tillie	TEM	P(°C): 14.6	Initia	_	1	=
	ished by:	Employee#	Date	Time	Receive		En	ployee	#	Date		Time	Corr	ect pH: Yes N	o			
FEE	Ex				80		+	•	2	19/	,,	1255	Prese	rvative Lot#:				
	shed by:	Employee#	Date	Time	Receive	ed by:	Em	ployee f	# X	Date	1	Time						
		1				· · · ·			_				Date/	Time/Init for preser	vative:			
		TALS (all)	Market	Care I				0	Janes.				IU.			-	-	
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□ As	□K	□ Sn	TPIT	PO4	D THM/HA		1	below		-		□ % M □ Ash	oisture	LOI % Carbon			Mor	
□B	□ Li	□ Sr	NH3		□ VOC □ Oil & Gre	925		All				Sulfu	ır	Mineral		(CIV)		
□ Ba	□Mg	□ Ti	-10		E. Coli	430		Total	l metals		1	□ BTU	S	Analysis	19	00 m 3		
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□ Ca	□ Mo	0 V	1 03		☐ Dissolved			Sulfi			□ X	(RF Scan		NPDES	M	ender ti	lin r	
□ Cd	□ Na	□ Zn	SUA		☐ Rad 226 ☐ Rad 228			□ pH	nida e		DH			Oil & Grease		0.100	1000	the
□ Co	□ Ni	☐ Hg			□ PCB		- 1-	C Chlo	indes iele Size		**	ineness articulate	Matter	_As				
□ Cr	□ Pb	☐ CrVI												TSS				



Revised February 2018

Sample Receipt Verification

Client: Santee Cooper	Date Received:	3/	9/21		Work Order: 1030536
Carrier Name: Client FedE		Mail		Cou	rier Field Services Other:
Tracking Number	er:804137735722				_
Receipt Criteria		Y e s	N o	N A	Comments
Shipping container / cooler intact?		Х			Damaged Leaking Other:
Custody seals intact?		•		х	
COC included with samples?		Х			
COC signed when relinquished and receiv	ved?	Х			
Sample bottles intact?		Х			Damaged Leaking Other:
Sample ID on COC agree with label on bo	ottle(s)?	Х			
Date / time on COC agree with label on b	ottle(s)?	Х			
Number of bottles on COC agrees with nu	ımber of bottles received?	Х			
Samples received within holding time?		Х			
Sample volume sufficient for analysis?		Х			
VOA vials free of headspace (<6mm bubl	ole)?			х	
Samples cooled? Temp at receipt recorde Temp measured with IR	d on COC thermometer - SN: 97050067			x	Ice Cold Packs Dry Ice None
Samples requiring pH preservation at proposes: Note: Samples for metals analysis may be preservation. Note: Samples for O&G and VOA analysis – proposes.	ved upon receipt in the lab.	Х			
Samples dechlorinated for parameters req the time of sample collection? Note: Chlorine checked at bench for samples re analysis.	uiring chlorine removal at			х	
	If in-house preservation	used	– re	cord	Lot#
HCL	H ₃ P	O ₄			
H ₂ SO ₄	NaC				
HNO ₃	Oth	er			
Comments:					
Were non-conformance issues noted a	t sample receipt? Ves	OI	<u></u>	No)	<u> </u>
Non-Conformance issue other than noted		- 01		<u>```</u>	·
Daviged February 2010				Ca	ompleted by: KRU

Completed by:_ Page 14 of 14





Laboratory Services

Laboratory Report

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

Project: Work Order:

Received:

Ground Water

1080231

08/03/2021 09:15

Dear Client:

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

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

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

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Lauren Hollister

Report Approved By:

Lauren Hollister

Project Manager





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

Project: Ground Water
Work Order: 1080231

Received:

08/03/2021 09:15

Certificate of Analysis

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

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



Santee Cooper Ground Water Project: 1 Riverwood Dr. Work Order: 1080231

Moncks Corner, SC 29461 08/19/21 22:26 Reported:

Sample Data

Sample Number

1080231-01

Sample Description

AF09053 WAP-4 collected on 07/19/21 11:24

Sample Description	AI 07055 WAI -4 conceicd of	11 07/1	7/21 11.2 4							
Parameter	Res	sult	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals										
Boron	18	80	15	ug/L	1.00	08/10/21 16:10	EPA 6010D		MLR	B1H0147
Lithium	N	D	10	ug/L	1.00	08/10/21 16:10	EPA 6010D		MLR	B1H0147
Sample Number Sample Description	1080231-02 AF09070 WAP-15 collected of	on 07/	19/21 10:30							
Parameter	Res	sult	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals										
Boron	10	00	15	ug/L	1.00	08/10/21 16:13	EPA 6010D		MLR	B1H0147
Lithium	N	D	10	ug/L	1.00	08/10/21 16:13	EPA 6010D		MLR	B1H0147
Sample Number Sample Description	1080231-03 AF09065 WAP-14 collected of	on 07/	19/21 14:22							
Parameter -	Res	sult	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals										
Boron	86	00	75	ug/L	5.00	08/10/21 14:56	EPA 6010D		MLR	B1H0147
Lithium	N	D	10	ug/L	1.00	08/10/21 16:17	EPA 6010D		MLR	B1H0147
Sample Number Sample Description	1080231-04 AF09066 WAP-14 DUP colle	ected o	on 07/19/21 1	4:27						
Parameter	Res	sult	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals										
Boron	87	00	75	ug/L	5.00	08/10/21 14:59	EPA 6010D		MLR	B1H0147
Lithium	N	D	10	ug/L	1.00	08/10/21 16:32	EPA 6010D		MLR	B1H0147
Sample Number Sample Description	1080231-05 AF09067 WAP-14A collected	d on 0°	7/19/21 13:4	6						
Parameter -	Res	sult	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals										
Lithium	4	0	10	ug/L	1.00	08/10/21 18:40	EPA 6010D	S 1	MLR	B1H0482

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Santee Cooper Project: 1 Riverwood Dr. Work Order:

Moncks Corner, SC 29461 Reported: 08/19/21 22:26

Ground Water

1080231

1080231-06 Sample Number

AF09069 WAP-14C collected on 07/19/21 15:39													
Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch					
13	10	ug/L	1.00	08/10/21 15:24	EPA 6010D		MLR	B1H0147					
1080231-07 AF09068 WAP-14B collected on (07/19/21 16:3	4											
Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch					
15	10	ug/L	1.00	08/10/21 15:28	EPA 6010D		MLR	B1H0147					
1080231-08 AF09050 WAP-1 collected on 07/	/20/21 12:28												
Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch					
ND	0.20	ug/L	1.00	08/09/21 11:58	EPA 7470A		NAR	B1H0392					
26	15	ug/L	1.00	08/13/21 00:00	EPA 6010D		MLR	B1H0147					
ND	10	ug/L	1.00	08/10/21 15:31	EPA 6010D		MLR	B1H0147					
ND	10	ug/L	1.00	08/10/21 15:31	EPA 6010D		MLR	B1H0147					
1080231-09 AF09051 WAP-2 collected on 07/	/20/21 13:28												
Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch					
8300	75	ug/L	5.00	08/10/21 14:21	EPA 6010D		MLR	B1H0147					
1080231-10 AF09083 WBW-1 collected on 07	7/20/21 11:07												
Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch					
ND	0.20	ug/L	1 00	08/09/21 12:09	EPA 7470A		NAR	B1H0392					
								B1H0147					
.112		J											
ND	10	ug/L	1.00	08/10/21 15:49	EPA 6010D		MLR	B1H0147					
1 2	13 1080231-07 AF09068 WAP-14B collected on 18 Result 15 1080231-08 AF09050 WAP-1 collected on 07/ Result ND 26 ND ND 1080231-09 AF09051 WAP-2 collected on 07/ Result 8300 1080231-10 AF09083 WBW-1 collected on 07/	Result Limit	13	13 10 ug/L 1.00	13 10 ug/L 1.00 08/10/21 15:24	13	13 10 ug/L 1.00 08/10/21 15:24 EPA 6010D	Result Limit Units DF Analyzed Method Flag Analyzed					

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Santee CooperProject:Ground Water1 Riverwood Dr.Work Order:1080231Moncks Corner, SC 29461Reported:08/19/21 22:26

Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1H0147 - EPA 3005A										
Blank (B1H0147-BLK1)										
Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							
LCS (B1H0147-BS1)										
Boron	500	15	ug/L	500		99	80-120			
Lithium	519	10	ug/L	500		104	80-120			
Molybdenum	490	10	ug/L	500		99	80-120			
Matrix Spike (B1H0147-MS1)	Source: 1080231-0	5RE1								
Boron	7200	75	ug/L	500	6500	142	75-125			S5
Lithium	637	50	ug/L	500	ND	120	75-125			
Molybdenum	520	50	ug/L	500	ND	105	75-125			
Matrix Spike Dup (B1H0147-MSD1)	Source: 1080231-0	5RE1								
Boron	7300	75	ug/L	500	6500	145	75-125	0.2	20	S 5
Lithium	634	50	ug/L	500	ND	120	75-125	0.5	20	
Molybdenum	520	50	ug/L	500	ND	104	75-125	0.5	20	
Post Spike (B1H0147-PS1)	Source: 1080231-0	5RE1								
Boron	9100	75	ug/L	2500	6500	102	75-125			
Lithium	2890	50	ug/L	2500	ND	114	75-125			
Molybdenum	2600	50	ug/L	2500	ND	104	75-125			
Batch B1H0392 - EPA 7470A										
Blank (B1H0392-BLK1)										
Mercury	ND	0.20	ug/L							
LCS (B1H0392-BS1)										
Mercury	5.1	0.20	ug/L	5.00		102	80-120			
Matrix Spike (B1H0392-MS1)	Source: 1080231-0	8								
Mercury	4.9	0.20	ug/L	5.00	ND	97	75-125			
			-							

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Project:

Ground Water

Work Order: Reported:

1080231 08/19/21 22:26

Total Metals Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
	INCOME		- 4113		ACSUIT					
Batch B1H0392 - EPA 7470A										
Matrix Spike Dup (B1H0392-MSD1)	Source: 1080231-08									
Mercury	4.9	0.20	ug/L	5.00	ND	97	75-125	0.3	20	
Post Spike (B1H0392-PS1)	Source: 1080231-08									
Mercury	3.8		ug/L	4.00	ND	95	80-120			
Batch B1H0482 - EPA 3005A										
Blank (B1H0482-BLK1)										
Lithium	ND	10	ug/L							
LCS (B1H0482-BS1)										
Lithium	499	10	ug/L	500		100	80-120			
Matrix Spike (B1H0482-MS1)	Source: 1080231-05									
Lithium	715	10	ug/L	500	40	135	75-125			S1
Matrix Spike Dup (B1H0482-MSD1)	Source: 1080231-05									
Lithium	717	10	ug/L	500	40	135	75-125	0.4	20	S1
Post Spike (B1H0482-PS1)	Source: 1080231-05									
Lithium	0.703		mg/L	0.500	ND	133	75-125			S1



Santee Cooper Project: Ground Water 1 Riverwood Dr. Work Order: 1080231 Moncks Corner, SC 29461 Reported: 08/19/21 22:26

Sample Preparation Data

Batch	Sample ID	Prepared	Analyst	
B1H0147	1080231-01	08/04/2021 09:25	CAL	
B1H0147	1080231-02	08/04/2021 09:25	CAL	
B1H0147	1080231-03	08/04/2021 09:25	CAL	
B1H0147	1080231-04	08/04/2021 09:25	CAL	
B1H0482	1080231-05	08/10/2021 13:03	MTH	
B1H0147	1080231-06	08/04/2021 09:25	CAL	
B1H0147	1080231-07	08/04/2021 09:25	CAL	
B1H0147	1080231-08	08/04/2021 09:25	CAL	
B1H0147	1080231-09	08/04/2021 09:25	CAL	
B1H0147	1080231-10	08/04/2021 09:25	CAL	
B1H0392	1080231-08	08/09/2021 09:14	NAR	
B1H0392	1080231-10	08/09/2021 09:14	NAR	
	B1H0147 B1H0147 B1H0147 B1H0147 B1H0482 B1H0147 B1H0147 B1H0147 B1H0147	B1H0147 1080231-01 B1H0147 1080231-02 B1H0147 1080231-03 B1H0147 1080231-04 B1H0482 1080231-05 B1H0147 1080231-06 B1H0147 1080231-07 B1H0147 1080231-08 B1H0147 1080231-09 B1H0147 1080231-10	B1H0147 1080231-01 08/04/2021 09:25 B1H0147 1080231-02 08/04/2021 09:25 B1H0147 1080231-03 08/04/2021 09:25 B1H0147 1080231-04 08/04/2021 09:25 B1H0482 1080231-05 08/10/2021 13:03 B1H0147 1080231-06 08/04/2021 09:25 B1H0147 1080231-07 08/04/2021 09:25 B1H0147 1080231-08 08/04/2021 09:25 B1H0147 1080231-09 08/04/2021 09:25 B1H0147 1080231-09 08/04/2021 09:25 B1H0147 1080231-10 08/04/2021 09:25 B1H0147 1080231-10 08/04/2021 09:25 B1H0147 1080231-10 08/04/2021 09:25	B1H0147 1080231-01 08/04/2021 09:25 CAL B1H0147 1080231-02 08/04/2021 09:25 CAL B1H0147 1080231-03 08/04/2021 09:25 CAL B1H0147 1080231-04 08/04/2021 09:25 CAL B1H0482 1080231-05 08/10/2021 13:03 MTH B1H0147 1080231-06 08/04/2021 09:25 CAL B1H0147 1080231-06 08/04/2021 09:25 CAL B1H0147 1080231-07 08/04/2021 09:25 CAL B1H0147 1080231-08 08/04/2021 09:25 CAL B1H0147 1080231-09 08/04/2021 09:25 CAL B1H0147 1080231-09 08/04/2021 09:25 CAL B1H0147 1080231-10 08/04/2021 09:25 CAL B1H0147 1080231-10 08/04/2021 09:25 CAL



 Santee Cooper
 Project:
 Ground Water

 1 Riverwood Dr.
 Work Order:
 1080231

 Moncks Corner, SC 29461
 Reported:
 08/19/21 22:26

Data Qualifiers and Definitions

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



One Riverwood Drive

Moncks Corner, SC 29461

Phone: (843)761-8076

Fax: (843)761-4175

Customer Email/Report Recipient: Date Results Needed by: Project/Task/Unit #: Rerun request for any flagged QC LOWILLIA @santeecooper.com 121567 JM02.09.601 36500 Yes No **Analysis Group** Labworks ID # Sample Location/ Comments (Internal use Collection Date Collection Time Description · Method # Collector Preservative (s below) only) Reporting limit S Bottle type: (G/Plastic-P) Matrior(see Grab (G) or Composite (C Misc. sample info Total # of Any other notes ž E Ĺ, BRT 7/19/24 GW 2 AF 09053 WAP-4 1124 CNS Х Χ AF09070 1030 Χ Χ WAP - 15 1422 AF09065 WAP - 14 ŧ Х Х 1 WAP- 14 DUP 1427 Χ AF 09066 WAP- 14A AF09067 1346 Х X AF-09069 1539 WAP-140 AF09068 1634 L Χ WAP - 148 MDG. X X AF09050 7/20/21 1228 X X WAP-1 ١ WAP-2 7/20/21 1328 AF09051 L ŧ Χ WBW-1 1107 Х AF69083 7/20/21 Х х Sample Receiving (Internal Use Only) Relinquished by: Employee# Date Time Received by: Employee # Time TEMP (°C): 34 4 Initial: -POFX Agroun 95594 8/2/21 1530 Correct pH: Yes Relinquished by: Employee# Date Time Received by: Employee # Date Time Preservative Lot#: FECTEX 8.3.21 0915 \mathcal{D} 8.3.21 0915 Refinguished by: Employee# Date ._ Received by: Time Employee # Date Time Date/Time/Init for preservative: ☐ METALS (all) Nutrients Gypsum MISC. Coal Flyash Oil □ Sb □ Ag □ Cu TOC BTEX Wallboard □ Ultimate Trans, Oll Qual. Ammonia □ Al □ Fe □ Se DOC □ Napthalene Gypsum(all ☐ % Moisture LOL □ As □ THM/HAA FIK □ Sn below) TP TPO4 □ Ash E % Carbon DVOC E AIM Adulity
(Directory Strength
(R)) NHH-N $\square B$ □ Li □ Sr ☐ Sulfur □ Mineral □ Oil & Grease TOC TF □ BTUs Analysis □ Ba □ Mg □ Ti DE. Coli T Siève CL □ Volatile Matter Dissolved Gases Used Dill ☐ Total Coliform Soluble Metals □ Be □ Mn DTI NO2 □pH D CHN □ % Moisture Parity (CaSO4) Br ☐ Dissolved As Other Tests: □ Ca ΠV 29 Molsture □ Mo ☐ Dissolved Fe NO3 Sulfites □ XRF Scan NPDES □ Cd □ Na □ Zn SO4 □ Rad 226 PpH O HGI (1 Oil & Grease □ Rad 228 Chlorades El Fineness □ Co □Ni □ Hg □ PCB Particle Size Particulate Matter □ Cr □ Pb □ CrVI GUEER



Sample Receipt Verification

Client: Sar	ntee Cooper		Date Received:	08	/03/2	021	Work Order: ¹⁰⁸⁰²³¹
Carrier Name:	Client	FedEx UPS	US l	Mail		Cou	urier Field Services Other:
	Trackir	g Number:					<u> </u>
Receipt Crite	eria			Y e s	N o	N A	Comments
Shipping contain	iner / cooler inta	et?		х			Damaged Leaking Other:
Custody seals in	ntact?					,X	
COC included	with samples?			х			
COC signed wh	nen relinquished	and received?		х			
Sample bottles	intact?			х			Damaged Leaking Other:
Sample ID on C	COC agree with l	abel on bottle(s)?		х			
Date / time on (COC agree with	abel on bottle(s)?		х			
Number of bott	tles on COC agre	es with number of bottles	received?	х			
Samples receive	ed within holding	g time?		х			
Sample volume	sufficient for an	alysis?		Х			
VOA vials free	of headspace (<	6mm bubble)?				х	
Samples cooled	1 /	eipt recorded on COC ured with IR thermometer - SN:	: 97050067	х			Ice Cold Packs Dry Ice None
Note: Samples	ing pH preservat	on at proper pH? ay be preserved upon receipt in nalysis – preservation checked a	the lab.	х			
Samples dechlor the time of sam	orinated for parar	neters requiring chlorine r	removal at			х	
		If in-house	preservation	used	— re	cord	Lot#
HCL			H ₃ P				
H ₂ SO ₄ HNO ₃			Na(Oth				
Comments:							
Were non-con	nformance issue	s noted at sample recei	pt? Yes	s or	. (1	No)	
	nce issue other th		L 10.	. 01			
Revised February 2	2018					Co	ompleted by: CSG





Laboratory Services

Laboratory Report

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

Project:

Received:

Ground Water

1080871

Work Order:

08/13/2021 09:25

Dear Client:

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

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

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

CC: Jeanette Gilmetti, Sherri Brown, Courtney Ames Watkins

Lauren Hollister

Report Approved By:

Lauren Hollister Project Manager





Certificate of Analysis

Client Santee Cooper

Linda Williams 1 Riverwood Dr.

Moncks Corner, SC 29461

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

Project: Ground Water
Work Order: 1080871

Received: 08/13/2021 09:25

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

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Santee Cooper Project: Ground Water 1 Riverwood Dr. 1080871 Work Order: Moncks Corner, SC 29461 Reported: 08/27/21 23:29

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



Santee CooperProject:Ground Water1 Riverwood Dr.Work Order:1080871Moncks Corner, SC 29461Reported:08/27/21 23:29

Sample Data

Sample Number

1080871-01

Sample Description

AF09085 WLF-A1-1 collected on 08/05/21 12:46

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

Sample Number

1080871-02

Sample Description

AF09056 WAP-7 collected on 08/10/21 15:00

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

Sample Number

1080871-03

Sample Description

AF09076 WAP-20 collected on 08/10/21 15:36

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

Sample Number

1080871-04

Sample Description

AF09081 WAP-25 collected on 08/10/21 13:32

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

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Project:

Ground Water

Work Order:

1080871

Reported:

08/27/21 23:29

Sample Number

1080871-05

Sample Description

AF09082 WAP-26 collected on 08/10/21 11:46

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

Sample Number

1080871-06

Sample Description

AF09086 WLF-A1-2 collected on 08/11/21 13:35

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

Sample Number

1080871-07

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

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

Sample Number

1080871-08

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

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



Project:

Ground Water

Work Order: Reported: 1080871 08/27/21 23:29

Sample Number

1080871-09

Sample Description

AF09089 WLF-A1-4 DUP collected on 08/11/21 11:12

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Mercury	ND	0.20	ug/L	1.00	08/18/21 15:29	EPA 7470A		NAR	B1H0833
Boron	180	20	ug/L	1.00	08/17/21 20:04	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 20:04	EPA 6010D		MLR	B1H0709
Molybdenum	ND	10	ug/L	1.00	08/17/21 20:04	EPA 6010D		MLR	B1H0709
Sample Number Sample Description	1080871-10 AF09052 WAP-3 collected on 0	7/29/21 12:35							
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	1700	20	ug/L	1.00	08/17/21 18:36	EPA 6010D		MLR	B1H0709
Sample Number Sample Description	1080871-11 AF09071 WAP-16 collected on	07/29/21 15:38							
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	1500	20	ug/L	1.00	08/17/21 20:08	EPA 6010D		MLR	B1H0709
Lithium	ND	10	ug/L	1.00	08/17/21 20:08	EPA 6010D		MLR	B1H0709
Sample Number Sample Description	1080871-12 AF09064 WAP-13 collected on	07/29/21 11:29							
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	4200	20	ug/L	1.00	08/17/21 20:12	EPA 6010D		MLR	B1H0709
Sample Number Sample Description	1080871-13 AF09062 WAP-12 collected on	07/29/21 13:54							
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Boron	370	20	ug/L	1.00	08/17/21 20:16	EPA 6010D		MLR	B1H0709



Project:

Ground Water

Work Order:

1080871

Reported:

08/27/21 23:29

Sample Number

1080871-14

Sample Description

AF09063 WAP-12 DUP collected on 07/29/21 13:59

Parameter		Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals										
Boron		390	20	ug/L	1.00	08/17/21 20:20	EPA 6010D		MLR	B1H0709
Sample Number Sample Description	1080871-15 AF09080 WAP-24 collec	cted on 08	/02/21 12:50							

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

Sample Number

1080871-16

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

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

Sample Number

1080871-17

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

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



Ground Water Project:

Work Order: 1080871 08/27/21 23:29 Reported:

Sample Number

1080871-18

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

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

Sample Number

1080871-19

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

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

Sample Number

1080871-20

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

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

Sample Number

1080871-21

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

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



Project:

Ground Water

Work Order:

1080871

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Sample Number

1080871-22

Sample Description

AF09077 WAP-21 collected on 08/03/21 11:30

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

Sample Number

1080871-23

Sample Description

AF09075 WAP-19 collected on 08/03/21 16:27

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

Sample Number

1080871-24

Sample Description

AF09078 WAP-22 collected on 08/04/21 13:31

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

Sample Number Sample Description 1080871-25

AF09091 WLF-A2-6 collected on 08/04/21 15:02

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



Project:

Ground Water

Work Order: Reported:

1080871 08/27/21 23:29

Sample Number

1080871-26

Sample Description

AF09092 WLF-A2-6 DUP collected on 08/04/21 15:07

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

Sample Number

1080871-27

Sample Description

AF09074 WAP-18 collected on 08/04/21 12:16

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

Sample Number

1080871-28

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

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

Sample Number

1080871-29

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

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



 Santee Cooper
 Project:
 Ground Water

 1 Riverwood Dr.
 Work Order:
 1080871

 Moncks Corner, SC 29461
 Reported:
 08/27/21 23:29

Total Metals **Quality Control Summary**

	Reporting			Spike	Source		%REC		RPD	
Parameter	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Flags
Batch B1H0709 - EPA 3005Å										
Blank (B1H0709-BLK1)										
Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							
LCS (B1H0709-BS1)										
Boron	490	15	ug/L	500		98	80-120			
Lithium	516	10	ug/L	500		103	80-120			
Molybdenum	470	10	ug/L	500		93	80-120			
Matrix Spike (B1H0709-MS1)	Source: 1080871-02									
Boron	1400	15	ug/L	500	970	84	75-125			
Lithium	484	10	ug/L	500	ND	97	75-125			
Molybdenum	500	10	ug/L	500	ND	100	75-125			
Matrix Spike (B1H0709-MS2)	Source: 1080871-10									
Boron	2200	15	ug/L	500	1700	100	75-125			
Lithium	547	10	ug/L	500	11	107	75-125			
Molybdenum	460	10	ug/L	500	ND	92	75-125			
Matrix Spike Dup (B1H0709-MSD1)	Source: 1080871-02									
Boron	1500	15	ug/L	500	970	102	75-125	6	20	
Lithium	512	10	ug/L	500	ND	102	75-125	6	20	
Molybdenum	460	10	ug/L	500	ND	91	75-125	10	20	
Matrix Spike Dup (B1H0709-MSD2)	Source: 1080871-10									
Boron	2200	15	ug/L	500	1700	112	75-125	3	20	
Lithium	547	10	ug/L	500	11,	107	75-125	0.03	20	
Molybdenum	460	10	ug/L	500	ND	92	75-125	0.003	20	
Post Spike (B1H0709-PS1)	Source: 1080871-02									
Boron	1.5		mg/L	0.500	ND	99	75-125			
Lithium	0.515		mg/L	0.500	ND	103	75-125			
Molybdenum	0.48		mg/L	0.500	ND	95	75-125			

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 Santee Cooper
 Project:
 Ground Water

 1 Riverwood Dr.
 Work Order:
 1080871

 Moncks Corner, SC 29461
 Reported:
 08/27/21 23:29

Total Metals **Quality Control Summary**

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1H0709 - EPA 3005A										
Post Spike (B1H0709-PS2)	Source: 1080871-1	0								
Boron	2.1		mg/L	0.500	ND	97	75-125			
Lithium	0.552		mg/L	0.500	ND	108	75-125			
Molybdenum	0.47		mg/L	0.500	ND	94	75-125			
Batch B1H0734 - EPA 3005A										
Blank (B1H0734-BLK1)										
Boron	ND	15	ug/L							
Lithium	ND	10	ug/L							
Molybdenum	ND	10	ug/L							
LCS (B1H0734-BS1)										
Boron	510	15	ug/L	500		101	80-120			
Lithium	519	10	ug/L	500		104	80-120			
Molybdenum	490	10	ug/L	500		97	80-120			
Matrix Spike (B1H0734-MS1)	Source: 1080871-2	4								
Boron	4500	15	ug/L	500	4000	94	75-125			
Lithium	615	10	ug/L	500	67	110	75-125			
Molybdenum	460	10	ug/L	500	ND	91	75-125			
Matrix Spike Dup (B1H0734-MSD1)	Source: 1080871-2	4								
Boron	4700	15	ug/L	500	4000	139	75-125	5	20	S 5
Lithium	640	10	ug/L	500	67	114	75-125	4	20	
Molybdenum	470	10	ug/L	500	ND	94	75-125	3	20	
Post Spike (B1H0734-PS1)	Source: 1080871-2	4								
Boron	4.6		mg/L	0.500	ND	109	75-125			
Lithium	0.629		mg/L	0.500	ND	112	75-125			
Molybdenum	0.48		mg/L	0.500	ND	96	75-125			
Batch B1H0833 - EPA 7470A										
Blank (B1H0833-BLK1)										
Mercury	ND	0.20	ug/L							

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Project:

Ground Water

Work Order: Reported:

1080871 08/27/21 23:29

Total Metals Quality Control Summary

Parameter	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Batch B1H0833 - EPA 7470A										
LCS (B1H0833-BS1)										
Mercury	5.0	0.20	ug/L	5.00		99	80-120			
Matrix Spike (B1H0833-MS1)	Source: 1080871-01									
Mercury	4.2	0.20	ug/L	5.00	ND	83	75-125			
Matrix Spike (B1H0833-MS2)	Source: 1080871-02									
Mercury	5.0	0.20	ug/L	5.00	ND	101	75-125			
Matrix Spike Dup (B1H0833-MSD1)	Source: 1080871-01									
Mercury	4.2	0.20	ug/L	5.00	ND	83	75-125	0.2	20	
Matrix Spike Dup (B1H0833-MSD2)	Source: 1080871-02									
Mercury	5.0	0.20	ug/L	5.00	ND	100	75-125	0.9	20	
Post Spike (B1H0833-PS1)	Source: 1080871-01									
Mercury	3.2		ug/L	4.00	ND	81	80-120			
Post Spike (B1H0833-PS2)	Source: 1080871-02									
Mercury	3.8		ug/L	4.00	ND	95	80-120			



Santee Cooper Ground Water Project: 1 Riverwood Dr. Work Order: 1080871 Moncks Corner, SC 29461 Reported: 08/27/21 23:29

Sample Preparation Data

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



Santee Cooper 1 Riverwood Dr. Moncks Corner, SC 29461			Project: Work Order: Reported:	Ground Water 1080871 08/27/21 23:29	
EPA 7470A Mercury Digestion					
EPA 7470A	B1H0833	1080871-01	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-02	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-03	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-06	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-07	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-08	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-09	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-25	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-26	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-28	08/18/2021 1	1:33 NAR	
EPA 7470A	B1H0833	1080871-29	08/18/2021 1	1:33 NAR	



Santee Cooper Project: Ground Water
1 Riverwood Dr. Work Order: 1080871
Moncks Corner, SC 29461 Reported: 08/27/21 23:29

Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported

RPD Relative Percent Difference

S5 The raw sample concentration was greater than four times the spike concentration. The spike recovery was not evaluated against the

control limits.

1080871



10f3

Customer Email/Report Recipient: Date Results Needed by:				Pr	oject/	Task/l	Rerur	Rerun request for any flagged C									
LCWILLIA	@santeed	cooper.com		//			[2]	567	<u>/</u>	402.C	9.6¢]	365∞	Yes	No			
				•				•			•			A	nalysi	s Grou	ıp
Labworks ID #. (Internal use only)	Sample Location Description	osc811	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	• M • Ro • M • A	Comments ethod # eporting limit isc. sample info ny other notes		M	ت.	Mo	1
AF69085	WLF-AI-I	10-	8/5/21	1246	BRT/ BWM									Х	×	X	x
AF09056	WAP-7	102	8/10/21	1500	MDG/ BSB	ì								×	×	x	x
A=09076	WAP-20	-03	1	1236		-						 		×	x	x	×
AF09081	WAP -25	-04		1332											×	×	
AF09082	WAP -26	-05		1146											×	x	
AF09086	WLF-A1-2	ماهر	8/11/21	1335	MOG									Х	×	х	×
AF09087	WLF-A1-3	-01		1205										×	Х	×	×
AF09088	WLF-A1 - 4	208		1107										×	×	×	X
AF09089	WLF-41-4	DUP 100		1112										×	×	X	×
												,					
Dollari island bud	2	Date	- 		Mer			<u> </u>			e fet tus å	Sample Receiving	(Internal U	se On	ly)		
Relinguished by:	S5574	8/12/21	Time	A L	red by:	11-	mployee	*	Date		'Time	TEMP (°C): 22	1	nitial	_ <i>M</i>		_
Relinquished by:	Émployee#	Date	Time /	Receiv	ed by:	_	mployee	#	Date		Time	Correct pH: Y	es! No	٠.			
FeJE7	7			Mr. U.L.	Who	1		8	1/3/2	4	0925	Preservative Lot	#:				
Relinquished by:	Employee#	. Date	Time /	Receiv	ed by:	Et :	mployee	#	Date		Time						
			:			. .,						Date/Time/Init fo		ive:	٠		٠.
□ MAg □ Ag □ Al □ Al □ As □ Cl □ Al □ Ba □ Cl □ Ba □ Ma □ Ca □ Na □ Co □ Co □ Db		OT CI OO CI	S TROA L-N	MIS DETEX Napthale THM/H VOC OIL & Gr E. Coli Total Co pH Dissolve Rad 226 Rad 228	ne AAA ifform d'As d Fe			sun(d sy) M C c) med uble Me ib, (Cas violatur illus toridas idde Siz	M B S(04) S(04) S		Ultimate Who Ash Sultur Su	In In Investment of the Invest	Sh rifa Ion H Hysis Store	ON AMERICAN PROPERTY OF THE PR	Straight of the straight of th	STEEL STEEL	\$ \$
			Fed	EX	81:	53	6	79 l	. 5	39	7 4	MA15/2/				. 7	,



santee cooper

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

Date Results Needed by: Customer Email/Report Recipient: Project/Task/Unit #: Rerun request for any flagged QC LCWILLIA 121567 1 JM02.09.601 36200 @santeecooper.com (Yes) No Analysis Group Labworks ID # Sample Location/ Comments Matrix(see below) **Collection Time** (Internal use Description Total # of container Method # Collecto only) Reporting limit Q Grab (G) or Composite (C) Bottle type: Misc. sample info Any other notes J \mathfrak{D} ADG Х G 2 -10 7/29/21 GW 4F09052 WAP-3 1235 BRI AF09071 1238 Х Х WAP-16 \mathcal{N} 1129 Х AF 09064 81-4AW 1/3 X AF09062 WAP-12 1354 ~14 1359 X WAP-12 DUP AF09063 MDE X X 1250 AF09080 8/2/21 WAP - 24 BRI -16 X 1134 AF09059 WAP-10 × X X WAP-10 DUP AF09060 1139 13 Х Х х WAP -9 1337 AF09058 Х Х WAP-17 1512 AF 69072 Sample Receiving (Internal Use Only) Relinquished by: Employee# Date ... Time Received by: Employee # Date Time. TEMP (°C): 11.4 Initial: Syrgroun 35594 8/12/21 Correct pH: Yes Relinquished by: Employee# Date Date : Time Time Received by: Employee # Preservative Lot#: 0925 Relinquished by: Employee# Date Time Employee # Date Time Date/Time/Init-for preservative: Coal Coal □ METALS (all.) **Nutrients** MISC. **Gypsum** OII Flyash Ultimate □Äg □ Cu □ Sb LUIS TICILI SILI TOMO TOT □ BTEX Wallboard □ Fe □ Se □.Nanthalene Cypsum(dll) PDQC □ THM/HAA (ব্যাক্র □ As $\Box K$ □ Sn TIBARO4 * ©%Carbon □ VOC MW 5 © Minerall ΠB 🛛 Li □ Sr □ Oil & Grease DARTARN G-110 CF. Analysis □ E. Coli -D Ba □ Mg 🛮 Ti 🧸 fi ioniments ି ପୋ ii Sieve Particion. □ Total Coliform O Soldiale Merris WNO2 ΠÎ ©%Mosure ්යම්යෝධ මෙක්මය්ව .□ Be ☐ Mn □ pH ". Purity (CASO4) TIB: Dissolved As @%Moisture □ Ca ŪV 🛮 Mo Mostle well ☐ Dissolved Fe EON B **NPDES** (Caccordina) ☐ Rad 226 □Ćd □ Na □ Zn 0 804 DONA Gresse ☐ Rad 228 ☐ Finen O Co □ Ni □ Hg (D) (A)(S) □ PCB m Lil Paridello Stree COMER ҈ РЬ □ CrVI □ Cr

3.73 Zof 3

1080871

Santee cooper

Customer Email/Report Recipient: Date Results Needed by: Project/Task/Unit #: Rerun request for any flagged QC 121567 / JM02.09. GØI / 36500 LCWILLIA @santeecooper.com (Yes No Analysis Group Labworks ID# Sample Location/ Comments Date (Internal use Description **Collection Time** Collector Total # of containers Method # only) Reporting limit ş Bottle type: (G/Plastic-P) 6 o (G) or posite Preservati below) Misc. sample info Any other notes Σ Grab (Ţ m MDS P 2 Х -20 8/2/21 1517 G GW Χ AF09073 WAP-17 DUP BRI -2 Х Х 8/3/21 AF09079 WAP-23 1236 /ws -22 X Х WA-P-21 1130 X AF09077 -13 X X 1627 AF09075 WAP-19 Х Х 8/4/21 X 1331 WAP-22 AF69078 Х 1502 X X AF09091 WLF - A2-6 26 X X AF09092 WLF-A2-6 DUP 1507 х Х Х 1216 χ WA-7-18 AF09074 BRT Х Х X Х MRM-YI-I 8/5/21 480POTA 1030 BWN X Х WLF- A1-5 AF09090 Sample Receiving (Internal Use Only) Time Received by: Time Relinguished by: Date Date Employee# Employee # TEMP (°C): 71.4 Initial: MA od E 35594 Sogroun 8/12/21 1500 Correct pH: Yes No Relinquished by: Employee# Date Time Received by: Employee:# Date Time Preservative Lot#: o 97S Relinquished by: Employee# Date Time Received by: Employee # Date Time Date/Time/Init for preservative: ©oal ⊡ Últimáte ☐ METALS (all) Nutrilents MISC. **Gypsum** Oil - Flyash □ Ag Ü₀Cù □.Sb D BTEX: DraudlieW E O. Moisture 19 (O. Ash. TOTAL SOUND COME TITOC . Ē Amnonia . □ Se □ A1 □Fe Cypsun(dii babay) Company ☐ Napthalene E'DOC GILOI Color Addition THM/HAA Ů.As □ Sn LITP/TIPOA 2% Carbon' □ VOC ☐ Sulfür ☐ BTÜS ☐ Volatile Matter ☐ GHN LINE N. C AM (A Mineral $\Box \mathbf{B}$ □'Li' Sr [↑] □ Oil & Grease OLFER SECURE D TOC OF Analysis (Fel) Masedhoù Gasas □ E. Coli 🛛 Ba □.Mg □ Ti . - : 'U Total metals ne ☐ Total Coliform : Stabilite Metals □ T1 TINO2 டஇரை □ Be □ Mn Party (Cesoa) m% Moisture □pH Other Tests:
OXRESCAND
OHGI
Fineness ☐ Dissolved As (Interprine □ Ca ΠÝ ⊡́Мо LETT-FOR ☐ Dissolved Fe <u>aguiles</u> NPDES □ Zn □ Cd □ Na □ Rad 226 [_804 201&G220 10(40) T Rad 228 **Chilorides** □ Ćo □ Hg ΠNi DPCB . Bartole Size D Particulate Matter **ETSS** COPUR □ Cr □ CrVI



Revised February 2018

Sample Receipt Verification

Client: Santee Cooper	Date Received:	08	/13/2	021	Work Order: 1080871
Carrier Name: Client FedEx UPS	US	Mail		Cou	urier Field Services Other:
Tracking Number:					<u> </u>
Receipt Criteria		Y e s	N o	N A	Comments
Shipping container / cooler intact?		Х			Damaged Leaking Other:
Custody seals intact?				χ	
COC included with samples?		Х			
COC signed when relinquished and received?		Х			
Sample bottles intact?		Х			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?		Х			
Date / time on COC agree with label on bottle(s)?		Х			
Number of bottles on COC agrees with number of bottles	received?	Х			
Samples received within holding time?		Х			
Sample volume sufficient for analysis?		Х			
VOA vials free of headspace (<6mm bubble)?				х	
Samples cooled? Temp at receipt recorded on COC Temp measured with IR thermometer - SN	: 97050067	Х			Ice Cold Packs Dry Ice None
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in Note: Samples for O&G and VOA analysis – preservation checked	the lab.	Х			
Samples dechlorinated for parameters requiring chlorine the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial. Vanalysis.	removal at			х	
If in-house	preservation	used	– re	cord	Lot#
HCL	H ₃ P				
H ₂ SO ₄	NaC Oth				
HNO ₃	Oin	ет			
Comments:					
Were non-conformance issues noted at sample recei	nt? Ves	or	. (1	No)	
Non-Conformance issue other than noted above:	.p 103	. 01		<u>ر</u>	
Paried February 2010				Co	ompleted by: MAW

Completed by:___











PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843,556,8171 F 843,766,1178

gel.com

March 19, 2021

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

Re: ABS Lab Analytical Work Order: 535320

Dear Ms. Gilmetti:

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

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

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

Sincerely,

Julie Robinson Project Manager

Purchase Order: 367074

Enclosures



GEL LABORATORIES LLC

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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 535320 GEL Work Order: 535320

The Qualifiers in this report are defined as follows:

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

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

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

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

	Julie	Robinson	
Reviewed by			

Page 2 of 18 SDG: 535320

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96403 Project: SOOP00119 Sample ID: 535320001 Client ID: SOOP001

Matrix: Ground Water
Collect Date: 16-FEB-21 11:33
Receive Date: 19-FEB-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Ra228, Liquid "A	As Received"												
Radium-228	\mathbf{U}	1.24	+/-1.16	1.91	3.00	pCi/L			LXB3	03/03/21	0619	2094595	1
Radium-226+Radium-228 Calculation "See Parent Products"													
Radium-226+228 Sum		1.54	+/-1.21			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liquid "As Received"													
Radiun-226	U	0.298	+/-0.323	0.523	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation
3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 81.9 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 3 of 18 SDG: 535320

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: March 19, 2021

DF Analyst Date Time Batch Method

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

OCO3

Moncks Corner, South Carolina 29461

Result Uncertainty

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96404 Project: SOOP00119 Sample ID: 535320002 Client ID: SOOP001

MDC

Matrix: Ground Water
Collect Date: 16-FEB-21 14:25
Receive Date: 19-FEB-21
Collector: Client

Qualifier

1 Graniever	Zuminer.	100an C	neerming	1111	142	Cilits	 	mary or Duce	THIC DIRECT	Lyloulou
Rad Gas Flow Proports	ional Counting									
GFPC, Ra228, Liquid	"As Received"									
Radiun-228	U	1.83	+/-1.32	2.10	3.00	pCi/L	I	LXB3 03/03/21	0619 2094595	1
Radium-226+Radium-	228 Calculation	n "See Pare	nt Products"							
Radium-226+228 Sum		2.18	+/-1.37			pCi/L	1 2	AEA 03/16/21	0416 2094594	2
Rad Radium-226										
Lucas Cell, Ra226, Lic	juid "As Receiv	ved"								
Radium-226	U	0.355	+/-0.371	0.604	1.00	pCi/L	1	MXH8 03/12/21	0841 2094556	3

RI.

Units

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 85 (15%-125%)

Notes:

Parameter

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 4 of 18 SDG: 535320

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96405 SOOP00119 Sample ID: 535320003 Client ID: SOOP001

Matrix: Ground Water Collect Date: 16-FEB-21 15:30 Receive Date: 19-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Rad Gas Flow Propor	tional Counting												
GFPC, Ra228, Liquid	l "As Received"												
Radium-228	U	0.550	+/-0.938	1.64	3.00	pCi/L			LXB3	03/03/21	0619	2094595	1
Radium-226+Radium	-228 Calculatio	n "See Pa	arent Products"										
Radium-226+228 Sum		0.877	+/-1.00			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, La	iquid "As Recei	ved"											
Radium-226	U	0.327	+/-0.358	0.588	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

83.4 (15%-125%) Barinm-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 5 of 18 SDG: 535320

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96379 SOOP00119 Sample ID: 535320004 Client ID: SOOP001

Matrix: Ground Water Collect Date: 15-FEB-21 13:37 Receive Date: 19-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228	\mathbf{U}	1.34	+/-1.01	1.58	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-22	28 Calculation	n "See Pa	rent Products"										
Radium-226+228 Sum		1.76	+/-1.06			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Recei	ved"											
Radium-226	\mathbf{U}	0.422	+/-0.332	0.450	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Test Result Surrogate/Tracer Recovery Nominal Recovery% Acceptable Limits

85.1 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 6 of 18 SDG: 535320

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96380
 Project:
 SOOP00119

 Sample ID:
 535320005
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 15-FEB-21 14:40
Receive Date: 19-FEB-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228		3.43	+/-1.39	1.92	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"										
Radium-226+228 Sum		8.50	+/-1.77			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"											
Radium-226		5.07	+/-1.09	0.817	1.00	pCi/L			MXH8	03/12/21	0841	2094556	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation 3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 85.9 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96412
 Project:
 SOOP00119

 Sample ID:
 535320006
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 15-FEB-21 12:21
Receive Date: 19-FEB-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228	\mathbf{U}	1.24	+/-0.858	1.30	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-22	28 Calculation	n "See Pa	rent Products"										
Radium-226+228 Sum		1.69	+/-0.929			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"											
Radium-226	U	0.453	+/-0.356	0.482	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

Calculation
 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 84.5 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96388 SOOP00119 Sample ID: 535320007 Client ID: SOOP001

Matrix: Ground Water Collect Date: 17-FEB-21 13:57 Receive Date: 19-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Ar	alyst Date	Time Batch	Method
Rad Gas Flow Proport	ional Counting										
GFPC, Ra228, Liquid	"As Received"										
Radium-228		2.96	+/-1.42	2.12	3.00	pCi/L		LX	B3 03/03/21	0620 2094595	1
Radium-226+Radium-	228 Calculatio	n "See Pa	arent Products"								
Radium-226+228 Sum		5.83	+/-1.59			pCi/L		1 AE	A 03/16/21	0416 2094594	2
Rad Radium-226											
Lucas Cell, Ra226, Li	quid "As Recei	ved"									
Radium-226	_	2.88	+/-0.701	0.492	1.00	pCi/L		M	H8 03/12/21	0915 2094556	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

83.3 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96389 SOOP00119 Sample ID: 535320008 Client ID: SOOP001

Matrix: Ground Water Collect Date: 17-FEB-21 14:02 Receive Date: 19-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Rad Gas Flow Proport	ional Counting												
GFPC, Ra228, Liquid	"As Received"												
Radium-228	\mathbf{U}	1.53	+/-1.24	1.99	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-	228 Calculation	n "See Pa	arent Products"										
Radium-226+228 Sum		3.16	+/-1.37			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Lic	quid "As Recei	ved"											
Radium-226		1.63	+/-0.584	0.600	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

82.6 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: March 19, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96406 SOOP00119 Sample ID: 535320009 Client ID: SOOP001

Matrix: Ground Water Collect Date: 17-FEB-21 12:35 Receive Date: 19-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Rad Gas Flow Proport	ional Counting												
GFPC, Ra228, Liquid	"As Received"												
Radium-228	\mathbf{U}	1.48	+/-1.05	1.63	3.00	pCi/L			LXB3	03/03/21	0620	2094595	1
Radium-226+Radium-	228 Calculation	n "See Pa	arent Products"										
Radium-226+228 Sum		2.13	+/-1.11			pCi/L		1	AEA	03/16/21	0416	2094594	2
Rad Radium-226													
Lucas Cell, Ra226, Lie	quid "As Recei	ved"											
Radium-226		0.646	+/-0 377	0.381	1.00	pCi/L			MXH8	03/12/21	0915	2094556	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

85.3 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

QC Summary

Report Date: March 19, 2021

Page 1 of 2

Santee Cooper P.O. Box 2946101

OCO3

Moncks Corner, South Carolina

Contact: Ms. Jeanette Gilmetti

Workorder: 535320

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow Batch 2094595									
QC1204757495 535320004 DUP									
Radium-228	U Uncertainty	1.34 +/-1.01	U	0.520 +/-0.847	pCi/L	N/A		N/A LXB3	03/03/21 06:19
	Oncertainty	₹/-1.01		₹/-0.647					
QC1204757496 LC8	51.5				O' 7		110	(750(1050))	02/02/21 07 10
Radium-228	54.7 Uncertainty			61.6 +/-3.92	pCi/L		113	(75%-125%)	03/03/21 06:19
	Oncertainty			17-3.72					
QC1204757494 MB				1.50	C: A				02/02/21 07:10
Radium-228	Uncertainty			1.50 +/-0.829	pCi/L				03/03/21 06:19
	5 11-51 (01111)								
Rad Ra-226 Batch 2094556									
QC1204757382 535320001 DUP	**	0.200		0.575	G. A			(00/ 1000/) 1 577770	00/10/01 00 50
Radium-226	U Uncertainty	0.298 +/-0.323		0.575 +/-0.378	pCi/L	63.6		(0% - 100%) MXH8	03/12/21 09:53
	Oncertainty	V. 0.525		7, 0.575					
QC1204757384 LCS Radium-226	27.0			26.0	C: /T		00.1	(759/ 1050/)	02/12/21 00:52
Radium-220	Uncertainty			26.8 +/-2.12	pCi/L		99.1	(75%-125%)	03/12/21 09:53
QC1204757381 MB Radium-226				0.778	pCi/L				03/12/21 09:52
Radium-220	Uncertainty			+/-0.479	pest				03/12/21 09.32
	,								
QC1204757383 535320001 MS Radium-226	27.0 U	0.298		24.9	pCi/L		92.2	(75%-125%)	03/12/21 09:53
radian 220	Uncertainty	+/-0.323		+/-2.01	реви		12.2	(1070-12070)	GUITATET G7.03

Notes:

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

The Qualifiers in this report are defined as follows:

** Analyte is a Tracer compound

< Result is less than value reported</p>

> Result is greater than value reported

BD Results are either below the MDC or tracer recovery is low

FA Failed analysis.

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

QC Summary

Workorder: 535320 Parmname NOM Sample Qual QC Units RPD% REC% Range AnIst Date Time

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

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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Radiochemistry Technical Case Narrative Santee Cooper SDG #: 535320

Product: GFPC, Ra228, Liquid

<u>Analytical Method:</u> EPA 904.0/SW846 9320 Modified <u>Analytical Procedure:</u> GL-RAD-A-063 REV# 5

Analytical Batch: 2094595

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

GEL Sample ID#	Client Sample Identification
535320001	AE96403
535320002	AE96404
535320003	AE96405
535320004	AE96379
535320005	AE96380
535320006	AE96412
535320007	AE96388
535320008	AE96389
535320009	AE96406
1204757494	Method Blank (MB)
1204757495	535320004(AE96379) Sample Duplicate (DUP)
1204757496	Laboratory Control Sample (LCS)

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

Data Summary:

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

Quality Control (QC) Information

Method Blank Criteria

The blank result (See Below) is greater than the MDC but less than the required detection limit.

Sample	Analyte	Value	
1204757494 (MB)	Radium-228	Result: $1.50 \text{ pCi/L} > \text{MDA}$: $1.14 \text{ pCi/L} \le \text{RDL}$: 3.00 pCi/L	

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2094556

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

GEL Sample ID#	Client Sample Identification
535320001	AE96403
535320002	AE96404
535320003	AE96405
535320004	AE96379
535320005	AE96380
535320006	AE96412
535320007	AE96388
535320008	AE96389
535320009	AE96406
1204757381	Method Blank (MB)
1204757382	535320001(AE96403) Sample Duplicate (DUP)
1204757383	535320001(AE96403) Matrix Spike (MS)
1204757384	Laboratory Control Sample (LCS)

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

Data Summary:

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

Quality Control (QC) Information

Method Blank Criteria

The blank result (See Below) is greater than the MDC but less than the required detection limit.

Sample	Analyte	Value
1204757381 (MB)	Radium-226	Result: 0.778 pCi/L > MDA: 0.662 pCi/L <= RDL: 1.00 pCi/L

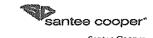
Certification Statement

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

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Chain of Custody

535320



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

121 St. 170 Zt. 170	Customer Em	port Recipie	Date F	Results Ne	y:	-	Pr	oject/	Task/	Unit #:	Rerun request for any flagged QC								
Labworks ID # Comments Comm	LOWILLIA	······	@santeec	ooper.com		<i> </i>			121	567	<u>/</u>	102.0	ମ.ବର୍ଷା	<u> 36500</u>	Yes	No			
Description																A	nalysi	s Grou	1D
AE 96 3 P	(Internal use			n/.	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	• Re • M • Aı	ethod# eporting limit isc. sample info			1	RAD	
AE 96 3 90 WAP - 20	AE 96403	h	1AP-18		2/16/21	1133	MDG	2	P	G	ew	2				X	Х	*	
AE 76 37-7	AE96404	W	1AP-19			1425)				j			
AE 9638	AE96405	W	VAP-20			1530													
AE 96412 WBW -	AE96379	N	1AP-1		2/15/21	1337	MDEN												
Relinquished by: Employees Date Time Received by: Employees Date Time TEMP (°C): Initial:	4E 96380 WAP -2				1	1440	1							·					
Relinquished by: Employee# Date Time Received by: Employee# Date Time Sample Receiving (Internal Use Only)	E 96412 WBW-1			2/15/21	1221	1	L		<u> </u>				****		<u></u>				
Relinquished by: Employees Date Time Received by: Employee Date Time Sample Receiving (Internal Use Only) TEMP (°C): Initial: Second by: Employee Date Time Sample Receiving (Internal Use Only) TEMP (°C): Initial: Second by: Employee Date Time Date/Time/Init for preservative: Date/Time/Init for preservative: Date/Time/Init for preservative: Date/Time/Init for preservative: Second by:				2/17/21	1357	BSB BSB	2									1			
Relinquished by: Employee# Date Time Received by: Employee# Date Time Conly TEMP (°C): Initial: Correct pH: Yes No Preservative Lot#: No Preservative Lot#: Lot			1P		1402														
Relinquished by: Employee# Date time Received by: Employee # Date time Preservative Lot#: Correct pH: Yes No Preservative Lot#: Date/Time/Init for preservative: Date/Time/Init for p	AE 96406	W	47-21		1	1235	1	1	1	1		1				<u> </u>]		
Relinquished by: Employee# Date time Received by: Employee # Date time Preservative Lot#: Correct pH: Yes No Preservative Lot#: Date/Time/Init for preservative: Date/Time/Init for p																			
Relinquished by: Employee# Date Time Received by: Employee# Date Time Preservative Lot#: METALS (all)	Relinquished b	y;	Employee#	Date	Time	Receiv	ed by:	E	mployee	# 1	Date		Time						
Relinquished by: Employee# Date Time Received by: Employee # Date Time Preservative Lot#: METALS (all	Symoan		35594	2/19/21	of Per	.011	0		GEL 2/19/21 0954							£1111141	•		-
Relinquished by: Employee# Date Time Received by: Employee# Date Time Date/Time/Init for preservative:	Relinquished L	y;	Employee#	Date	Mme	Receiv	ed by:	E							Correct pH: Yes No				
Refinquished by: Employee# Date Time Received by: Employee # Date Time Date/Time/Init for preservative: METALS (all)	Mal		611	200	1120	HUND	Bala	ha. P	iFl		lak	ο <i>l</i>	11:2	Preservat	ive Lot#:				
□ METALS (all)	Rélinquished b	y:	Employee#	Date	Time			F	mployee	#									
□ Ag □ Cu □ Sb □ TOC □ BTEX □ Wallboard □ Ultimate □ Ammonia □ Trans Gil Quel. □ As □ K □ Sn □ TP/TPO4 □ THM/HAA □ VOC □ AlM □ Sulftur □ Mineral □ Analysis □ TOC □ BTUs □ TOC □ THM/HAA □ TOC □ AlM □ Sulftur □ Mineral □ Analysis □ TOC □ TOLAL Coliform □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOC □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ NO2 □ pH □ Purity (CaSO4) □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ Wineral □ Wineral □ CHN □ Wineral □ W								38 50 50						Date/Time	/Init for preserva	itive:			
□ Ag □ Cu □ Sb □ TOC □ BTEX □ Wallboard □ Ultimate □ Ammonia □ Trans Gil Quel. □ As □ K □ Sn □ TP/TPO4 □ THM/HAA □ VOC □ AlM □ Sulftur □ Mineral □ Analysis □ TOC □ BTUs □ TOC □ THM/HAA □ TOC □ AlM □ Sulftur □ Mineral □ Analysis □ TOC □ TOLAL Coliform □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOC □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ NO2 □ pH □ Purity (CaSO4) □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ TOLAL Coliform □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ CHN □ Wineral □ Soluble Metals □ Volatile Matter □ Sieve □ Dissolved Gase □ Wineral □ Wineral □ CHN □ Wineral □ W	Ċ N	AET/	ALS (all)	Miste	ionse l	8.41			6 .	nci.e			· · · ·		et				
□ As □ K □ Sn □ TP/TPO4 □ THM/HAA below) □ Ash □ % Carbon □ % Moisture □ LOI □ Scr □ NH3-N □ VOC □ AIM □ Sulfur □ Mineral □ Analysis □ Cl □ Total Coliform □ F □ E. Coli □ Total Coliform □ Purity (CaSO4) □ CHN □ % Moisture □ Sieve □ Total Coliform □ Purity (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ Soluble Metals □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ % Moisture □ Sieve □ Theory (CaSO4) □ CHN □ Moisture □ Sieve □ Theory (CaSO4) □ CHN □ Moisture □ Sieve □ Theory (CaSO4) □ CHN □ Moisture □ Sieve □ Theory (CaSO4) □ CHN □ Moisture □ Sieve □ Theory (CaSO4) □ CHN □ Moisture □ CHN □ Mo	D Ag D	Cu	□ Sb	A		11 - 3 - 175	<u> </u>				<u>.</u>	1 .					Section 1	100	
□ As □ K □ Sn □ TP/TPO4 □ THM/HAA □ VOC □ AIM □ Sulfur □ Mineral Analysis □ TO □ Ba □ Mg □ Ti □ NO2 □ pH □ Dissolved As □ Ca □ Mo □ V □ Br □ Dissolved Fe □ Dissolved Fe □ Dissolved Fe □ Rad 226 □ Rad 228 □ Chlorides □ Fineness □ Sieve □ Oil & Grease □ XRP Scan □ MPDES □ Analysis □ Chlorides □ Fineness □ Sieve □ Chlorides □ Fineness □ Sieve □ Chlorides □ Chlorides □ Sieve □ Chlorides □ Sieve □ Chlorides □ C	44.4 (204,304,11) (8.73)		total separation and			☐ Napthale		1 7		150400000000000000000000000000000000000	11		32.6 kg 3.6			ų.	Mois		
□ B □ Li □ Sr □ NH3-N □ Oil & Grease □ FOC □ BTUs □ BTUs □ BTUs □ Silver □ Dissolved Gase □ FOC □ BTUs □ Volatile Matter □ Sieve □ Dissolved Gase □ Ca □ Mo □ V □ NO3 □ Dissolved For □ Suffices □ Suffices □ XFF Scan □ NFF Scan □ NF	□ As □	K					4A							.0	% Carbon				
□ Ba □ Mg □ Ti □ Cl □ Total Coliform □ Dissolved Gase □ Soluble Metals □ CHN □ Wind Moisture □ Sieve □ Dissolved Gase □ Cd □ Na □ Zn □ NO3 □ Dissolved Fe □ Sulfites □ XRF Scan NPDES □ CAS Cd CNAT □ CAS Cd CNAT □ CAS Cd CNAT □ Chlorides □ Fineness □ Cd Crease □ Cas Cd CNAT □ Chlorides □ Fineness □ Cd Crease □ Cd Crea	□ B □	B □Li □Sr □NI			5-N	□ Oil & G	rease							- 9		Di	elactor	Strong	th
□ Be □ Mn □ T1 □ NO2 □ pH □ Purity (CaSO4) □ CHN □ % Moisture Used Oil □ Ca □ Mo □ V □ NO3 □ Dissolved Fe □ Cd □ Na □ Zn □ SO4 □ Rad 226 □ pH □ HGl □ Rad 228 □ T Chlorides □ Fineness □ Oil & Grease □ Light	□Ba□□	Mg	□Ti	\$24300,6600,000,000,000,000,000,000,000,000			liform							e Matter			STATE OF THE PARTY.	ed Gas	ies
□ Cd □ Na □ Zn □ SO4 □ Rad 226 □ PH □ HGI □ Fineness □ SI & Grease □ Cd □ Na □ Zn □ SO4 □ Rad 228 □ The Chlorides □ Fineness □ Cd □ Cd	□ Be □	Mn	□ TI	□ NO	2	□pH			🗇 🖽 Pui	ity (Cal	SO4)	1 _		Д	30.	Usc	d Oi		
□ Cd □ Na □ Zn □ SO4 □ Rad 226 □ pH □ HGI □ SO4 □ Rad 228 □ Chlorides □ Fineness □ Oil & Grease □ the	□ Ca □	Мо	□V								C				MDDEC				
Committees Commi	□ Cd □	Na	□Zn	310000000000000000000000000000000000000	KARTACIA SHIPLE NATIONA	☐ Rad 226			ΩpH			∥ n	HGI	П	Manager and Company of the Company o			Cr.Ni.	Pb
□ Co □ Ni □ Hg □ PCB □ Particle Size □ Particulate Matter □ As □ TX	□ C o □	Ni	□Hg								te:			∕latter □	As .	- 1	X.		
□ Cr □ Pb □ CrVI □ TSS GOFER				was e. P.								ū	188	GO	FFR				

(A Rist Laboratorios U.C.			TO A STATE OF THE
图部 Laboratories LLC			SAMPLE RECEIPT & REVIEW FORM
Client:			SDC/AR/COCAVork Order 3373
Received By: Tye			Date Received: Circle Applicable: Courier Other
teat read and a			FedEx Express FedEx Graund UPS Field Services Courier Other
Carrier and Trucking Number			
	T _n		"If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Goup for further investigation.
Suspected Hazard Information	Zi Zi	٤	
		1	/ Chrand Class Shipped: UN#: / If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
A)Shipped as a DOT Hazardous?	_	V	
3) Did the client designate the samples are to be		V	COC notation or rullioaztive stickers on containers equal client designation.
ectived as radioactive?	┼	-	CPM/mR/Hr
2) Did the RSO classify the samples as		V	Maximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Clussified as: Rad 1 Rad 2 Rad 3
adioamive?	┨—	_	
Did the client designate samples are hazardous!		V	COC notation or hazard labels on containers equal client designation.
N was the ment of early state and little as a constitution	T		If D or E is yes, select Hazards below. PCR's Flanguable Foreign Soil RCRA Asbestos Beryllium Other.
E) Did the RSO identify possible hazards?	_	V	PCB's Flantinable Foreign Soil RCRA Asbestos Beryllium Other:
Sample Receipt Criteria	Z GS	X	Comments/Qualifiers (Required for Non-Conforming Items)
Shioning containers received intact and	1	1	Circle Appăcable: Svals broken Damaged container Leaking container Other (describe)
1 scaled?	\underline{V}	烫	
2 Chain of custody documents included	V		Circle Applicable: Client contacted and provided COC COC created upon receipt
with shipment?	-	E CA	Breservation Method: Wet fee fee Packs Dry ice None Other:
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*] .	"all temperatures are recorded in Colsius TEMP:
Duity check performed and passed on IR	1.		Temperature Device Serial #: 183-19
4 temperature gun?	V	×	Secondary Temperature Device Serial # ((f Applicable):
5 Sample containers intact and sealed?	1/		Circle Applicable: Scals broken Daniaged container Leaking container Other (describe)
	<u> </u>	É	Sample 10's and Containers Affected:
Samples requiring chemical preservation at proper off?	V		(f Preservation added, Lut#;
	-	237	If Yes, are Encores or Soil (its present for solids? Yes_No_NA_(If yes, take to VOA Freezer):
7 Do any samples require Volatile		15	Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No)
Analysis?			Are liquid VOA vials free of headspace? YesNoNA Sample ID's and containers affected:
	<u> </u>		
8 Samples received within holding time?	/		(D's end tests affected:
Sample ID's on COC match ID's on	2	1	1D's and containers affected:
boules?	/	Ť	
Date & time on COC match date & time			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
on bottles?	V	_	
Number of containers received metch number indicated on COC?	1	4	Circle Applicable: No container count on COC Other (describe)
Age temple startalous identifiable as	-		. /
GEL provided by use of GEL labels?		1	ν
COC form is properly signed in relinquished/received sections?	$ \nu $		Circle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):	1	Jirk's	
•			
•			
	_		
D14 B	(11.		initials NPC Date Z ZZ ZI Page I of I

List of current GEL Certifications as of 19 March 2021

State Alabama	Certification 42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kausas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019–165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	
Sanitation Districts of L	10120002 9255651
South Carolina Chemistry	10120001
	TN 02934
Tennessee	
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122020-34
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



a member of The GEL Group INC



PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843,556,8171 F 843,766,1178

gel.com

March 26, 2021

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

Re: ABS Lab Analytical Work Order: 536093

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 26, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

Julie Robinson Project Manager

Purchase Order: 367074

Enclosures



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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 536093 GEL Work Order: 536093

The Qualifiers in this report are defined as follows:

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

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

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

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

	Inlie	Robinson	
Reviewed by			

Page 2 of 13 SDG: 536093

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

Certificate of Analysis

Report Date: March 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96385
 Project:
 SOOP00119

 Sample ID:
 536093001
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 24-FEB-21 11:02
Receive Date: 26-FEB-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228	\mathbf{U}	1.01	+/-0.828	1.31	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	rent Products"										
Radium-226+228 Sum		1.66	+/-0.938			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"											
Radium-226		0.647	+/-0.440	0.621	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

Calculation
 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 88.5 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 3 of 13 SDG: 536093

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

Certificate of Analysis

Report Date: March 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96381 SOOP00119 Sample ID: 536093002 Client ID: SOOP001

Matrix: Ground Water Collect Date: 24-FEB-21 13:18 Receive Date: 26-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228	\mathbf{U}	-0.123	+/-0.815	1.57	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"										
Radium-226+228 Sum		1.47	+/-0.999			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Recei	ved"											
Radium-226		1.47	+/-0.578	0.661	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Test Result Surrogate/Tracer Recovery Nominal Recovery% Acceptable Limits

90.8 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 4 of 13 SDG: 536093

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

Certificate of Analysis

Report Date: March 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96387 SOOP00119 Sample ID: 536093003 Client ID: SOOP001

Matrix: Ground Water Collect Date: 23-FEB-21 12:49 Receive Date: 26-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	e Batch	Method
Rad Gas Flow Propo	rtional Counting												
GFPC, Ra228, Liqui	d "As Received"												
Radium-228		2.59	+/-1.57	2.45	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium	n-228 Calculatio	n "See Pa	arent Products"										
Radium-226+228 Sum		3.65	+/-1.63			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, I	iquid "As Recei	ved"											
Radium-226	_	1.07	+/-0.422	0.364	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

81.8 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 5 of 13 SDG: 536093

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

Certificate of Analysis

Report Date: March 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96382 SOOP00119 Sample ID: 536093004 Client ID: SOOP001

Matrix: Ground Water Collect Date: 23-FEB-21 14:28 Receive Date: 26-FEB-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228	\mathbf{U}	0.524	+/-0.903	1.58	3.00	pCi/L			LXB3	03/23/21	0645	2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa											
Radium-226+228 Sum		1.97	+/-1.03			pCi/L		1	AEA	03/24/21	1133	2097459	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Recei	ved"											
Radium-226		1.45	+/-0.495	0.421	1.00	pCi/L			MXH8	03/04/21	0838	2097342	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Test Result Surrogate/Tracer Recovery Nominal Recovery% Acceptable Limits

85.2 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 6 of 13 SDG: 536093

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

QC Summary

Report Date: March 26, 2021

Page 1 of 2

Santee Cooper P.O. Box 2946101

OCO3

Moncks Corner, South Carolina

Contact: Ms. Jeanette Gilmetti

Workorder: 536093

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow Batch 2097455									
QC1204762520 536093004 DUP Radium-228	U	0.524	U	0.739	pCi/L	N/A		N/A LXB3	03/23/21 06:46
	Uncertainty	+/-0.903		+/-0.982					
QC1204762521 LC8 Radium-228	54.3			46.4	pCi/L		85.4	(75%-125%)	03/23/21 06:46
	Uncertainty			+/-3.39	r			(12112221)	
QC1204762519 MB			**		~				
Radium-228	Uncertainty		U	1.67 +/-1.34	pCi/L				03/23/21 06:46
Rad Ra-226 Batch 2097342									
QC1204762172 536093001 DUP Radium-226		0.647		0.747	pCi/L	14.4		(0% - 100%) MXH8	03/04/21 09:12
Address 220	Uncertainty	+/-0.440		+/-0.426	Port	11		(0,4 100.0) 111110	03/ 0 121 03/12
QC1204762176 LCS								(=== ()	
Radium-226	27.0 Uncertainty			26.3 +/-2.38	pCi/L		97.2	(75%-125%)	03/04/21 09:12
QC1204762171 MB									
Radium-226	Uncertainty		U	0.222 +/-0.399	pCi/L				03/04/21 09:12
QC1204762173 536093001 MS									
Radium-226	135 Uncertainty	0.647 +/-0.440		138 +/-10.3	pCi/L		102	(75%-125%)	03/04/21 09:12

Notes:

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

The Qualifiers in this report are defined as follows:

** Analyte is a Tracer compound

< Result is less than value reported</p>

> Result is greater than value reported

BD Results are either below the MDC or tracer recovery is low

FA Failed analysis.

Page 7 of 13 SDG: 536093

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

QC Summary

Workorder: 536093

Page 2 of 2

Parmname

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

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

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.

Page 8 of 13 SDG: 536093

Radiochemistry Technical Case Narrative Santee Cooper SDG #: 536093

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified Analytical Procedure: GL-RAD-A-063 REV# 5

Analytical Batch: 2097455

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

GEL Sample ID#	Client Sample Identification
536093001	AE96385
536093002	AE96381
536093003	AE96387
536093004	AE96382
1204762519	Method Blank (MB)
1204762520	536093004(AE96382) Sample Duplicate (DUP)
1204762521	Laboratory Control Sample (LCS)

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

Data Summary:

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

Product: Lucas Cell, Ra226, Liquid **Analytical Method:** EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2097342

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

\mathbf{G}	EL Sample ID#	Client Sample Identification
53	36093001	AE96385
53	36093002	AE96381
53	36093003	AE96387
53	36093004	AE96382
12	204762171	Method Blank (MB)
12	204762172	536093001(AE96385) Sample Duplicate (DUP)
12	204762173	536093001(AE96385) Matrix Spike (MS)
12	204762176	Laboratory Control Sample (LCS)

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

Page 9 of 13 SDG: 536093

Data Summary:

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

Miscellaneous Information

Additional Comments

The matrix spike and matrix spike duplicate, 1204762173 (AE96385MS), aliquots were reduced to conserve sample volume.

Certification Statement

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

Page 10 of 13 SDG: 536093

536093

Chain of Custody



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

Custom	stomer Email/Report Recipient:				Date Results Needed by:					Pi	roject/	Task/I	Unit #:	Rerun request for any flagged QC					
LCW	LLIA	@:	santeed	cooper.com		<i></i>			1215	67	JJM	2.09	, GØI	<u> </u>	<u>></u> Yes	No			
																A	nalysis	Group	
Labwor (Interna only)	3	Sample Descrip	Location	in/	Collection Date	Collection Time	Sample Collector	Total # of containers	Bottle type: (Glass- G/Plastic-p)	Grab (G) or Composite (Cl	Matrix(see below)	Preservative (see below)	• Rej	Comn thod # sorting limi so: sample i y other note	t nfo	RAD 226	RAD 228	TOTAL KAD CALC	
⊁ E96	385	WAP	- 7		2/24/21	1102	DEW	2	P	b	GW	2				Х	Х	х	
AE96	881	WAP	- ខ		1	1318	1	2	1	L	1	1				×	×	х	
AE963	87	WAP	-9		2/23/21	1249	DEW	2								Х	×	х	
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Sprow			594	2/26/21	5147	SH	0		址		1/26/2		0747	Correc	t pH: Yes No				
Relinq	uished by:	Em	ployee#	Date	Time	Receiv	ed by:	E	mployee	#	Date		Time		ative Lot#:				
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□As	ΩК		□ Sn	DO		☐ Napthale ☐ THM/H			Gyp belo	sum(a w)	Ш		□ % Mois □ Ash	ture	D LOI		annoisi olar	ure	
□ B		Breeze M. Carlo	□ Sr	UNH		□ VOC			ΠAI	M			□ Sulfur		☐ % Carbon ☐ Mineral		eidny	Strength	
			30,500,000	— ⊕ CF		□ Oil & G □ E. Coli	rease		UTO	iC tal meti	.i.		□ BTUs		Analysis		riceine T	S) (Calgin	
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□ C 6	□ N		□ Hg			☐ Rad 228				lorides ticle Si			rmeness Particulate M	atter	□As	1	X.		
□ Cr	□ Pt	,	□ CrVI						□ Sulfur						O TSS	GO	FFR		
	COMPANY OF THE STATE OF THE STA																		

Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: SOUP	1 6 1	jewo	SDG/AR/COC/Work Order: 53(6093
Received By: 3 ACYBUL	IN	C,	Date Received: FEBUARY 26, 2021
Carrier and Tracking Number			FedEx Express FedEx Ground UPS Field Services Courier Other
Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?			Hazard Class Shipped: UN#: 1f UN2910, 1s the Radioactive Shipment Survey Compliant? YesNo
B) Did the client designate the samples are to be received as radioactive?		\	COC notation or radioactive stickers on containers equal elient designation.
C) Did the RSO classify the samples as radioactive?		1	Maximum Net Counts Observed* (Observed Counts - Area Background Counts):
D) Did the client designate samples are hazardous?			COC notation or hazard labels on containers equal client designation.
E) Dil the RSO identify possible hazards?			If D or E is yes, select Hazards below, PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other;
Sample Receipt Criteria	Yes	N'A	Comments Challifiers (Tegules S for Bon-Conforming Items)
Shipping containers received intact and spaled?	/		Circle Applicable: Seals broken Damaged container C.c.aking container Other (describe)
2 Chain of custody documents included with shipment?			Circle Applicable: Client contested and provided CCC COC scented upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	1		Preservation Method: Wet Ice Ice Packs Dry ice None Other: TEMP: C
Daily check performed and passed on IR temperature gun?	/		Temperature Device Serial #: [1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
5 Sample containers intact and scaled?			Circle Applicable: Seals broker: Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	1	Per	Sample ID's and Containers Affected:
7 Do any samples require Volatile Analysis?			Do liquid VOA vials contain acid preservation? YesNoNA(If unknown, select No) *Are liquid VOA vials free of headspace? Yes No NA(If unknown, select No) Sample ID's and containers affected:
8 Samples received within holding time?	/		ID's and tests affected:
Sample ID's on COC match ID's on bottles?	/		ID's and containers affected:
Date & time on COC match date & time on bottles?	/		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	/		Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels? 12 COC form is properly signed in	,		Circle Applicable: Not relinquished Other (describe)
relinquished/received sections? Comments (Use Continuation Form if needed):			
Commons (ose Commons of a common of the comm			
PM (or PM	LA) n	view	Initials NRIS Date 311 Z1 Page of

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 26 March 2021

State Alabama	Certification 42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kausas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC002 SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019–165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	
	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001 TN 02024
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122020-34
Vermont	VT87156
Virginia NELAP	460202
Washington	C780











PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843,556,8171 F 843,766,1178

gel.com

April 01, 2021

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

Re: ABS Lab Analytical Work Order: 536991

Dear Ms. Gilmetti:

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

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

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

Sincerely,

Julie Robinson Project Manager

Purchase Order: 367074

Enclosures



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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 536991 GEL Work Order: 536991

The Qualifiers in this report are defined as follows:

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

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

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

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

	Inlie	Robinson	
Reviewed by			

Page 2 of 27 SDG: 536991

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96394 SOOP00119 Sample ID: 536991001 Client ID: SOOP001

Matrix: Ground Water Collect Date: 25-FEB-21 11:10 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batel	n Method
Rad Gas Flow Proport	ional Counting										
GFPC, Ra228, Liquid	"As Received"										
Radium-228	\mathbf{U}	1.40	+/-1.44	2.40	3.00	pCi/L		LXB3	03/23/21	0645 209745	5 1
Radium-226+Radium-	228 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		2.38	+/-1.47			pCi/L		1 GXR1	04/01/21	1330 210299	4 2
Rad Radium-226											
Lucas Cell, Ra226, Lie	quid "As Recei	ved"									
Radium-226		0.982	+/-0.297	0.247	1.00	pCi/L		MXH8	04/01/21	0909 210010	10 3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

77.2 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 3 of 27 SDG: 536991

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96395
 Project:
 SOOP00119

 Sample ID:
 536991002
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 25-FEB-21 11:15
Receive Date: 05-MAR-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batch	Method
Rad Gas Flow Propor	rtional Counting										
GFPC, Ra228, Liquid	d "As Received"										
Radium-228		2.32	+/-1.30	1.98	3.00	pCi/L		LXB3	03/23/21	0645 209745	5 1
Radium-226+Radium	n-228 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		3.58	+/-1.34			pCi/L		1 GXR1	04/01/21	1330 210299	4 2
Rad Radium-226											
Lucas Cell, Ra226, L	iquid "As Recei	ved"									
Radium-226	_	1.25	+/-0.336	0.211	1.00	pCi/L		MXH8	04/01/21	0909 210010	0 3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

Calculation
 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 88 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 4 of 27 SDG: 536991

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96399 Project: SOOP00119 Sample ID: 536991003 Client ID: SOOP001

Matrix: Ground Water Collect Date: 25-FEB-21 15:40 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	yst Date	Time Batch	Method
Rad Gas Flow Propor	rtional Counting										
GFPC, Ra228, Liquio	l "As Received"										
Radium-228		2.01	+/-1.14	1.70	3.00	pCi/L		LXB3	03/23/21	0645 2097455	1
Radium-226+Radium	n-228 Calculation	n "See Pa	rent Products"								
Radium-226+228 Sum		4.35	+/-1.24			pCi/L		1 GXR3	04/01/21	1330 2102994	2
Rad Radium-226											
Lucas Cell, Ra226, L	iquid "As Recei	ved"									
Radium-226	_	2.34	+/-0.480	0.330	1.00	pCi/L		MXH	3 04/01/21	0909 2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

85.2 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 5 of 27 SDG: 536991

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96393
 Project:
 SOOP00119

 Sample ID:
 536991004
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 04-MAR-21 11:55
Receive Date: 05-MAR-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	st Date	Time B	atch	Method
Rad Gas Flow Proportio	nal Counting											
GFPC, Ra228, Liquid "A	As Received"											
Radium-228		1.96	+/-0.969	1.35	3.00	pCi/L		LXB3	03/23/21	0645 20	97455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"									
Radium-226+228 Sum		3.36	+/-1.03			pCi/L		1 GXR1	04/01/21	1330 21	02994	2
Rad Radium-226												
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"										
Radium-226		1.40	+/-0.352	0.170	1.00	pCi/L		MXH	04/01/21	0909 21	00100	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

Calculation
 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 88.3 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 6 of 27 SDG: 536991

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96391
 Project:
 SOOP00119

 Sample ID:
 536991005
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 04-MAR-21 13:09
Receive Date: 05-MAR-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batch	Method
Rad Gas Flow Proportion	onal Counting										
GFPC, Ra228, Liquid ".	As Received"										
Radiun-228	\mathbf{U}	1.53	+/-1.10	1.74	3.00	pCi/L		LXB3	03/23/21	0645 209745	5 1
Radium-226+Radium-2	28 Calculatio	n "See Pa	rent Products"								
Radium-226+228 Sum		3.18	+/-1.17			pCi/L		1 GXR1	04/01/21	1330 210299	1 2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	uid "As Recei	ved"									
Radium-226		1.65	+/-0.380	0.170	1.00	pCi/L		MXH	04/01/21	0909 210010) 3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation 3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 85.8 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 7 of 27 SDG: 536991

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96392 Project: SOOP00119 Sample ID: 536991006 Client ID: SOOP001

Matrix: Ground Water Collect Date: 04-MAR-21 13:14 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting												
GFPC, Ra228, Liquid "A	As Received"												
Radium-228		3.31	+/-1.12	1.34	3.00	pCi/L			LXB3	03/23/21	0646	2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"										
Radium-226+228 Sum		4.72	+/-1.18			pCi/L		1	GXR1	04/01/21	1330	2102994	2
Rad Radium-226													
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"											
Radium-226		1.42	+/-0.355	0.234	1.00	pCi/L			MXH8	04/01/21	0909	2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

84.1 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96400 Project: SOOP00119 Sample ID: 536991007 Client ID: SOOP001

Matrix: Ground Water
Collect Date: 04-MAR-21 14:27
Receive Date: 05-MAR-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Ana	lyst Date	Time	Batch	Method
Rad Gas Flow Proportio	nal Counting											
GFPC, Ra228, Liquid "A	As Received"											
Radium-228	\mathbf{U}	0.524	+/-0.852	1.49	3.00	pCi/L		LXE	3 03/23/21	0646	2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	rent Products"									
Radium-226+228 Sum		2.01	+/-0.937			pCi/L		1 GXI	1 04/01/21	1330	2102994	2
Rad Radium-226												
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"										
Radium-226		1.49	+/-0.390	0.197	1.00	pCi/L		MX	I8 04/01/21	0909	2100100	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation
3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 84.6 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96414
 Project:
 SOOP00119

 Sample ID:
 536991008
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 02-MAR-21 12:53
Receive Date: 05-MAR-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	yst Date	Time Ba	itch M	Iethod
Rad Gas Flow Proportio	nal Counting											
GFPC, Ra228, Liquid "A	As Received"											
Radium-228	\mathbf{U}	1.48	+/-1.33	2.18	3.00	pCi/L		LXB3	03/23/21	0646 209	7455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	rent Products"									
Radium-226+228 Sum		2.10	+/-1.35			pCi/L		1 GXR	04/01/21	1330 210	2994	2
Rad Radium-226												
Lucas Cell, Ra226, Liqu	id "As Receiv	ved"										
Radium-226		0.624	+/-0.254	0.191	1.00	pCi/L		MXH	8 04/01/21	0909 210	0100	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 86.2 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96419 SOOP00119 Sample ID: 536991009 Client ID: SOOP001

Matrix: Ground Water Collect Date: 02-MAR-21 14:01 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Ana	lyst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	As Received"										
Radium-228	\mathbf{U}	0.552	+/-1.19	2.08	3.00	pCi/L		LXE	3 03/23/21	0646 2097455	5 1
Radium-226+Radium-2	28 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		1.52	+/-1.22			pCi/L		1 GXF	1 04/01/21	1330 2102994	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	iid "As Recei	ved"									
Radium-226		0.970	+/-0.283	0.158	1.00	pCi/L		MXI	I8 04/01/21	1211 2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

83.8 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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:

DF Analyst Date Time Batch Method

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Result Uncertainty

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96401
 Project:
 SOOP00119

 Sample ID:
 536991010
 Client ID:
 SOOP001

MDC

Matrix: Ground Water
Collect Date: 02-MAR-21 10:48
Receive Date: 05-MAR-21
Collector: Client

Qualifier

2 02 011110101	& comment	2000001	Chechanity	1.11	100	CHILD		r mary st rate	I IZIIC EMCCII	I, I C CII C CI
Rad Gas Flow Proportion	nal Counting									
GFPC, Ra228, Liquid "A	s Received"									
Radium-228	\mathbf{U}	0.141	+/-0.941	1.73	3.00	pCi/L		LXB3 03/23/21	0646 2097455	1
Radium-226+Radium-22	8 Calculation	ı "See Pa	rent Products"							
Radium-226+228 Sum		0.390	+/-0.955			pCi/L	1	GXR1 04/01/21	1330 2102994	2
Rad Radium-226										
Lucas Cell, Ra226, Liqui	d "As Receiv	red"								
Radium-226		0.250	+/-0.160	0.174	1.00	pCi/L		MXH8 04/01/21	0945 2100100	3

RI.

Units

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 89.5 (15%-125%)

Notes:

Parameter

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96402 Project: SOOP00119 Sample ID: 536991011 Client ID: SOOP001

Matrix: Ground Water Collect Date: 02-MAR-21 10:53 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	st Date	Time Batch	Method
Rad Gas Flow Proportio	nal Counting										
GFPC, Ra228, Liquid "A	As Received"										
Radium-228	\mathbf{U}	0.794	+/-0.929	1.56	3.00	pCi/L		LXB3	03/23/21	0646 2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		1.10	+/-0.947			pCi/L		1 GXR1	04/01/21	1330 2102994	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	id "As Recei	ved"									
Radium-226		0.308	+/-0.183	0.210	1.00	pCi/L		MXH	04/01/21	0945 2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Test Result Surrogate/Tracer Recovery Nominal Recovery% Acceptable Limits

88.5 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AE96413 Project: SOOP00119 Sample ID: 536991012 Client ID: SOOP001

Matrix: Ground Water Collect Date: 01-MAR-21 10:05 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batch	Method
Rad Gas Flow Proportio	nal Counting										
GFPC, Ra228, Liquid "A	As Received"										
Radium-228	\mathbf{U}	0.271	+/-0.926	1.67	3.00	pCi/L		LXB3	03/23/21	0646 2097455	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		1.24	+/-0.972			pCi/L		1 GXR1	04/01/21	1330 2102994	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	id "As Recei	ved"									
Radium-226		0.972	+/-0.297	0.173	1.00	pCi/L		MXH	04/01/21	0945 2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Test Result Surrogate/Tracer Recovery Nominal Recovery% Acceptable Limits

89.1 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

 Client Sample ID:
 AE96417
 Project:
 SOOP00119

 Sample ID:
 536991013
 Client ID:
 SOOP001

Matrix: Ground Water
Collect Date: 01-MAR-21 11:10
Receive Date: 05-MAR-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batch	Method
Rad Gas Flow Proportion	onal Counting										
GFPC, Ra228, Liquid ".	As Received"										
Radiun-228	\mathbf{U}	-0.953	+/-0.818	1.75	3.00	pCi/L		LXB3	03/23/21	0646 2097455	1
Radium-226+Radium-2	28 Calculatio	n "See Pa	rent Products"								
Radium-226+228 Sum		0.139	+/-0.830			pCi/L		1 GXR1	04/01/21	1330 2102994	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	uid "As Recei	ved"									
Radium-226	U	0.139	+/-0.140	0.220	1.00	pCi/L		MXH	04/01/21	0945 2100100	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 88 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96418 SOOP00119 Sample ID: 536991014 Client ID: SOOP001

Matrix: Ground Water Collect Date: 01-MAR-21 11:15 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batch	Method
Rad Gas Flow Proport	ional Counting										
GFPC, Ra228, Liquid	"As Received"										
Radium-228	U	1.63	+/-1.60	2.65	3.00	pCi/L		LXB3	03/23/21	0802 209745	5 1
Radium-226+Radium-	228 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		2.15	+/-1.61			pCi/L		1 GXR1	04/01/21	1330 210299	4 2
Rad Radium-226											
Lucas Cell, Ra226, Lie	quid "As Recei	ved"									
Radium-226		0.518	+/-0.221	0.172	1.00	pCi/L		MXH8	04/01/21	0945 210010	0 3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

87.3 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96416 SOOP00119 Sample ID: 536991015 Client ID: SOOP001

Matrix: Ground Water Collect Date: 01-MAR-21 12:31 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Ana	lyst Date	Time Batch	Method
Rad Gas Flow Proportion	onal Counting										
GFPC, Ra228, Liquid ".	As Received"										
Radium-228	\mathbf{U}	0.271	+/-1.13	2.03	3.00	pCi/L		LXE	3 03/23/21	0646 2097455	5 1
Radium-226+Radium-2	28 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		0.965	+/-1.16			pCi/L		1 GXF	1 04/01/21	1330 210299	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	uid "As Recei	ved"									
Radium-226		0.694	+/-0.264	0.222	1.00	pCi/L		MX	I8 04/01/21	0945 2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

90.1 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

DF: Dilution Factor Lc/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:

April 1, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Project: Client Sample ID: AE96415 SOOP00119 Sample ID: 536991016 Client ID: SOOP001

Matrix: Ground Water Collect Date: 01-MAR-21 13:48 Receive Date: 05-MAR-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	st Date	Time Batch	Method
Rad Gas Flow Proportion	onal Counting										
GFPC, Ra228, Liquid ".	As Received"										
Radiun-228	\mathbf{U}	1.32	+/-0.912	1.40	3.00	pCi/L		LXB3	03/23/21	0646 2097455	1
Radium-226+Radium-2	28 Calculatio	n "See Pa	rent Products"								
Radium-226+228 Sum		2.23	+/-0.964			pCi/L		1 GXR1	04/01/21	1330 2102994	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	uid "As Recei	ved"									
Radium-226		0.908	+/-0.311	0.264	1.00	pCi/L		MXH8	04/01/21	0945 2100100	3

The following Analytical Methods were performed:

Method Description **Analyst Comments**

EPA 904.0/SW846 9320 Modified 1

2 Calculation EPA 903.1 Modified

Result Surrogate/Tracer Recovery Test Nominal Recovery% Acceptable Limits

83.4 (15%-125%) Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

QC Summary

Report Date: April 1, 2021

Page 1 of 2

Santee Cooper P.O. Box 2946101

OCO3

Moncks Corner, South Carolina

Contact:

Ms. Jeanette Gilmetti

Workorder: 536991

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anist	Date Time
Rad Gas Flow Batch 2097455									
QC1204762520 536093004 DUP Radium-228	U Uncertainty	0.524 +/-0.903	U	0.739 +/-0.982	pCi/L	N/A		N/A LXB3	03/23/21 06:46
	oncerumiy	, 0.20		., 0.502					
QC1204762521 LCS Radium-228	54.3 Uncertainty			46.4 +/-3.39	pCi/L		85.4	(75%-125%)	03/23/21 06:46
QC1204762519 MB Radium-228	Uncertainty		U	1.67 +/-1.34	pCi/L				03/23/21 06:46
Rad Ra-226 Batch 2100100									
QC1204767958 536991001 DUP Radium-226	Uncertainty	0.982 +/- 0 .297		1.56 +/-0.385	pCi/L	45.6*		(0%-20%) MXH8	04/01/21 10:33
QC1204767960 LCS Radium-226	27.0 Uncertainty			22.3 +/-1.38	pCi/L		82.4	(75%-125%)	04/01/21 10:33
QC1204767957 MB Radium-226	Uncertainty		U	0.186 +/-0.227	pCi/L				04/01/21 10:33
QC1204767959 536991001 MS Radium-226	27.0 Uncertainty	0.982 +/-0.297		21.3 +/-1.36	pCi/L		75	(75%-125%)	04/01/21 10:33

Notes:

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

The Qualifiers in this report are defined as follows:

** Analyte is a Tracer compound

< Result is less than value reported</p>

> Result is greater than value reported

BD Results are either below the MDC or tracer recovery is low

FA Failed analysis.

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

QC Summary

Page 2 of 2 Parmname NOV Sample Qual \mathbf{OC} Units RPD% REC% Range Anist Date Time Η Analytical holding time was exceeded

T See case narrative for an explanation

536991

T Value is estimated

Workorder:

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

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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Radiochemistry Technical Case Narrative Santee Cooper SDG #: 536991

Product: GFPC, Ra228, Liquid

<u>Analytical Method:</u> EPA 904.0/SW846 9320 Modified <u>Analytical Procedure:</u> GL-RAD-A-063 REV# 5

Analytical Batch: 2097455

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

GEL Sample ID#	Client Sample Identification
536991001	AE96394
536991002	AE96395
536991003	AE96399
536991004	AE96393
536991005	AE96391
536991006	AE96392
536991007	AE96400
536991008	AE96414
536991009	AE96419
536991010	AE96401
536991011	AE96402
536991012	AE96413
536991013	AE96417
536991014	AE96418
536991015	AE96416
536991016	AE96415
1204762519	Method Blank (MB)
1204762520	536093004(AE96382) Sample Duplicate (DUP)
1204762521	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Recounts

Sample 536991014 (AE96418) was recounted to verify sample results. Recount is reported.

Product: Lucas Cell, Ra226, Liquid **Analytical Method:** EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Page 21 of 27 SDG: 536991

Analytical Batch: 2100100

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

GEL Sample ID#	Client Sample Identification
536991001	AE96394
536991002	AE96395
536991003	AE96399
536991004	AE96393
536991005	AE96391
536991006	AE96392
536991007	AE96400
536991008	AE96414
536991009	AE96419
536991010	AE96401
536991011	AE96402
536991012	AE96413
536991013	AE96417
536991014	AE96418
536991015	AE96416
536991016	AE96415
1204767957	Method Blank (MB)
1204767958	536991001(AE96394) Sample Duplicate (DUP)
1204767959	536991001(AE96394) Matrix Spike (MS)
1204767960	Laboratory Control Sample (LCS)

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

Data Summary:

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

Quality Control (QC) Information

Duplication Criteria between QC Sample and Duplicate Sample

The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1204767958 (AE96394DUP)	Radium-226	RPD 45.6* (0.00%-20.00%) RER 1.82 (0-3)

Technical Information

Recounts

Sample 536991009 (AE96419) was recounted to verify sample results. Recount is reported.

Certification Statement

Page 22 of 27 SDG: 536991

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.

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Chain of Custody

121



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

Customer Email/Report Recipient: Date Results Needed by: Project/Task/Unit #: Rerun request for any flagged QC LCWILLIA 121567/JM02.09.601/36500 Yes @santeecooper.com No **Analysis Group** Labworks ID# Sample Location/ Comments Q. Collection Time Matrix(see below) Collection Date (Internal use Description Method # Sample Collector container 226 Preservative (below) only) Reporting limit 22 ZAP TAP Bottle type: (G/Plastic-P) Grab (G) or Composite (Misc, sample info Total # of 288 RAP TOTAL Any other notes X 2 X P X G 2 GW AE96394 WAP-14 2/25/21 1110 MOG 1115 AE96395 WAP-14 DUP WAP-15 1540 AE96399 3/4/24 WAP-13 1155 AE96393 1309 AE96391 WAP-12 AE96392 WAP-12 DUP 1314 WAP-16 1427 4E96400 DEW 1253 WLF-H-1 3/2/21 TG/OJ 4E9644 1401 AE96419 WLF-AI-5 Sample Receiving (Internal Use Only) Relinquished by: Employee# Date Time Received by: Employee # Date Time TEMP (°C): 20 Initial: 145 3/5/21 0959 3/5/21 GEL Snowan 35594 0959 Correct pH: (Yes Received by: Relinquished by: Employee# Date Time Employee # Date Time Preservative Lot#: 1345 GEL 3-5-21 Kelinguished by: Received by: Employee# Date Time Employee# Date/Time/Init for preservative: ☐ METALS (all) **Nutrients** MISC. Gypsum Coal <u>Flyash</u> Oil □ Ag □ Cu Frans, Oil Qual. □ TOC BTEX □ Ultimate Ammonia \square A1 □ Fe □ Se □ Napthalene %Mostare Gypsum(all DOC □ % Moisture [] LOI □ ТНМ/НАА □ Sn below) $\Box \mathbf{K}$ ☐ As ☐ TP/TPO4 □ Ash @ % Carbon n voc Acuties ⊕:AIM □ NH3-N □ Sulfur □ Mineral $\square \mathbf{B}$ O Li \square Sr Dychectric Strength ☐ Oil & Grease DITOC $\Box \mathbf{F}$ ☐ BTUs Analysis u. 🗆 E. Coli □ Total metals □ Ba OTi □ CI □ Volatile Matter Dissolved Gases □ Sieve ☐ Total Coliform ☐ Soluble Metals □ Be ☐ Mn UTI □ NO2 ☐ CHN □ % Moisture Used Oil HqD □ Purity (CaSO4) f (gshpann ☐ Dissolved As Other Tests: O Br ☐ % Moisture □Мо $\Box V$ □ Ca Metals in oil □ Dissolved Fe □ XRF Scan □ NO3 El Sulfites NPDES eas, care i Niab □ Cd □ Zn ☐ Rad 226 □ HGI □ Na □pH □ SO4 □ Oil & Grease ☐ Rad 228 $H_{\mathcal{D}}$ Fineness ☐ Chlorides D Co □ Ni □ Hg 🛭 As ☐ Particulate Matter □ PCB D Particle Size O TSS COFER □ Cr □ Pb □ CrVI

Chain of Custody

2



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

Customer Email	/Report Recipient:	Date Results N		Pr	oject/1	Task/Unit #:	Rerun reques	Rerun request for any flagged Q				
LCWILLIA	@santeecooper.com		discount for more	121	567	/ JM	02.09.GØ1	<u> </u>	No			
			, a						<u> </u>	nalysi	s Group	
Labworks ID # (Internal use only)	(Internal use Description		Sample Collector	Total # of containers Bottle type: (Glass-G/Plastic-P)	Grab (G) or Composite (C)	Matrix(see below)	Rej	Comments thod # porting limit sc. sample info y other notes	RAD 226	RAD 228	TOTAL RAD CALC.	
AE96401	WAP-17	3/2/21 1048	DEN TG/DJ	2 P	G	GN	2		×	Х	Х	
AE96 402	WAP-17 DUP	T 1023	1	1 1	1	1	1		1)	
AE96418	WBW-AI-I	3/5/12 1005	DEN									
AE96417	WLF-A1-4	1110	op para year o									
AE96418	WLE-AI-4 DUP	1115	V V V									
AE96416	WLF-AI-B	1231										
AE96415	WLF-A1-2	1348		<u> </u>			1		I	1	1	
	,		1000				·					
			property () () ()									
			and the second second									
Relinquished by:	Employee# Date	Time Recei	ved by:	Employee	#	Date	Time	Sample Receiving (Internal	Use On Initial	ly)	<u> </u>	
Moun	35594 3/5/21	0959 M	0	GEL		3/5/2		Correct pH: (Yes) No		: 100		
Relinquished by:	Employee# Date	17 2 2 11 4	ved by:	Employee (AEL		- Date S - 2	Time	Preservative Lot#:				
Relinquished by:	Employee# Date	0 A - N - A	ved by:	Employee		Date	1345 Time					
								Date/Time/Init for preser	vative:			
□ MI □ Ag □ Co □ Ai □ Fe □ As □ K □ Ba □ Li □ Be □ M □ Ca □ M □ Cd □ Ni □ Co □ Ni □ Cf □ Pb	□ Sb	BTEX Napthal Napthal THM/H VOC Oil & Coli Total C PH Dissolv Dissolv Dissolv Dissolv	AA rease oliform ed As ed Fe	Q Wallba	osum(a) IM OC tol metal duble Me rity (CaS Moisture fiftes clorides rticle Siz	ls stats GO4).	Coal Ultimate % Mois Ash Sulfur BTUs Volatile CHN Other Tests: XRF Scan HGI Fineness Particulate M	☐ Ammonia ☐ LOI ☐ % Carbon ☐ Mineral Analysis ☐ Sieve ☐ % Moisture NPDES ☐ Oil & Grease	C A A B B B B B B B B B B B B B B B B B	Mois ofer citity electric hisotra of OII as hed citits to vs Cit.	Qual title Strongth od Kinsus	



SAMPLE RECEIPT & REVIEW FORM

Client: 460P		SD	G/AR/COC/Work Order: 53(09)
Received By: MLS			te Received: 3-5-21
Carrier and Tracking Number			Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Suspected Hazard Information	Ž	*16	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?	1	Ha	zard Class Shipped: UN#: If UN2910. Is the Radioactive Shipment Survey Compliant? YesNo
B) Did the client designate the samples are to be received as radioactive?	1	/ co	C notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	/	Ma	ximum Net Counts Observed* (Observed Counts - Area Background Counts):
D) Did the client designate samples are hazardous?	/		C notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		<u> 1</u>	O or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
Sample Receipt Criteria	Z	ž	
Shipping containers received intact and sealed?			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?			Circle Applicable: Client contacted and provided COC COC created upon receipt Preservation Method: Wet Ice Ice Packs Dry ice (None Other:
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	/		*all temperatures are recorded in Celsius TEMP:
4 Daily check performed and passed on IR temperature gun? ✓			Temperature Device Serial #: <u>IR3-18</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?			Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?		/	If Yes, are Encores or Soil Kits present for solids? YesNoNA(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? YesNoNA(If unknown, select No) Are liquid VOA vials free of headspace? YesNoNA Sample ID's and containers affected:
8 Samples received within holding time?			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?			ID's and containers affected:
Date & time on COC match date & time on bottles?			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?			Circle Applicable: No container count on COC Other (describe)
Are sample containers identifiable as GEL provided by use of GEL labels? COC form is properly signed in			Circle Applicable: Not relinquished Other (describe)
relinquished/received sections? Comments (Use Continuation Form if needed):			
Commens (USC Communition Point is recued).			

GL-CHL-SR-001 Rev 7

List of current GEL Certifications as of 01 April 2021

State Alabama	Certification 42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
· ·	↓
Louisiana Drinking Water Louisiana NELAP	LA024
	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122020-34
Vermont	VT87156
Virginia NELAP	460202
_	C780
Washington	1 0/80











PO Box 30712 Charleston, SC 29417 2040 Savage Road Charleston, SC 29407 P 843,556,8171 F 843,766,1178

gel.com

August 26, 2021

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

Re: ABS Lab Analytical Work Order: 551182

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on July 30, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

Julie Robinson Project Manager

Purchase Order: 367074

Enclosures



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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 551182 GEL Work Order: 551182

The Qualifiers in this report are defined as follows:

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

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

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

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

	Inlie	Robinson	
Reviewed by			

Page 2 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09053 Project: SOOP00119 Sample ID: 551182001 Client ID: SOOP001

Matrix: Ground Water Collect Date: 19-JUL-21 11:24 Receive Date: 30-JUL-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	yst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	s Received"										
Radium-228	U	-1.03	-/-0.843	1.84	3.00	pCi/L		JXC9	08/17/21	0929 2157720	1
Radium-226+Radium-22	8 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		1.40	+/-0.962			pCi/L		l AEA	08/24/21	1422 2157718	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		1.40	-/-0.463	0.290	1.00	pCi/L		LXPI	08/22/21	0714 2157760	3
		~									

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Barium-133 Tracer (15%-125%)

GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 3 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti ABS Lab Analytical Project:

Client Sample ID: AF09070 Project: SOOP00119 Sample ID: 551182002 Client ID: SOOP001

Matrix: Ground Water Collect Date: 19-JUL-21 10:30 Receive Date: 30-JUL-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Ar	alyst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	s Received"										
Radium-228	U	-0.396	-/-0.781	1.60	3.00	pCi/L		JX	C9 08/17/21	0930 2157720	1
Radium-226+Radium-22	8 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		0.983	+/-0.867			pCi/L		l AE	A 08/24/21	1422 2157718	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		0.983	-/-0.378	0.351	1.00	pCi/L		LX	PI 08/22/21	0714 2157760	3
		~									

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Barium-133 Tracer 82.8 (15%-125%)

GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 4 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09065 Project: SOOP00119 Sample ID: 551182003 Client ID: SOOP001

Matrix: Ground Water
Collect Date: 19-JUL-21 14:22
Receive Date: 30-JUL-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	yst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	s Received"										
Radium-228	U	0.453	-/-0.984	1.74	3.00	pCi/L		JXC9	08/17/21	0930 2157720	1
Radium-226+Radium-22	8 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		1.67	+/-1.08			pCi/L		l AEA	08/24/21	1422 2157718	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		1.21	-/-0.439	0.415	1.00	pCi/L		LXPI	08/22/21	0714 2157760	3
555 C 33 1 4 3											

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation 3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 81.1 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 5 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09066 Project: SOOP00119 Sample ID: 551182004 Client ID: SOOP001

Matrix: Ground Water Collect Date: 19-JUL-21 14:27 Receive Date: 30-JUL-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	yst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	As Received"										
Radium-228	U	2.67	+/-1.80	2.77	3.00	pCi/L		JXC9	08/17/21	0930 2157720	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		3.81	+/-1.85			pCi/L		l AEA	08/24/21	1422 2157718	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		1.15	-/-0.418	0.373	1.00	pCi/L		LXPI	08/22/21	0714 2157760	3
PPT 0 33 1 4 3		~									

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits 44.8 (15%-125%)

Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 6 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09050 Project: SOOP00119 Sample ID: 551182005 Client ID: SOOP001

Matrix: Ground Water
Collect Date: 20-JUL-21 12:28
Receive Date: 30-JUL-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	\mathbf{PF}	DF Analy	yst Date	Time Batch	Method
Rad Gas Flow Proportio	nal Counting										
GFPC, Ra228, Liquid "A	As Received"										
Radium-228		3.96	+/-1.44	1.96	3.00	pCi/L		JXC9	08/17/21	0930 2157720	1
Radium-226+Radium-228 Calculation "See Parent Products"											
Radium-226+228 Sum		5.01	+/-1.51			pCi/L		l AEA	08/24/21	1422 2157718	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	iid "As Recei	ved"									
Radium-226		1.05	-/-0.475	0.559	1.00	pCi/L		LXP1	08/22/21	0714 2157760	3
EET C 13 1 4 3 41	132 3 1										

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation
3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 85.5 (15%-125%)

Notes:

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 7 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09051 Project: SOOP00119 Sample ID: 551182006 Client ID: SOOP001

Matrix: Ground Water Collect Date: 20-JUL-21 13:28 Receive Date: 30-JUL-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	yst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	s Received"										
Radium-228		2.80	-/-0.988	1.18	3.00	pCi/L		JXC9	08/17/21	0930 2157720	1
Radium-226+Radium-22	8 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		7.52	+/-1.28			pCi/L		l AEA	08/24/21	1422 2157718	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		4.72	-/-0.810	0.505	1.00	pCi/L		LXPI	08/22/21	0714 2157760	3
PPT 0 33 1 4 3		~									

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits 90.5 (15%-125%)

Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 8 of 16 SDG: 551182

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

Certificate of Analysis

Report Date: August 26, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09083 Project: SOOP00119 Sample ID: 551182007 Client ID: SOOP001

Matrix: Ground Water
Collect Date: 20-JUL-21 11:07
Receive Date: 30-JUL-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting											
GFPC, Ra228, Liquid "A	As Received"											
Radium-228	U	0.0240	+/-1.24	2.26	3.00	pCi/L			JXC9	08/17/21	0929 2157720	I
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"									
Radium-226+228 Sum		0.626	+/-1.29			pCi/L		1	AEA	08/24/21	1422 2157718	2
Rad Radium-226												
Lucas Cell, Ra226, Liqui	id "As Recei	ved"										
Radium-226		0.602	-/-0.361	0.463	1.00	pCi/L			LXP1	08/22/21	0714 2157760	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation
3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 83.9 (15%-125%)

Notes

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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QC Summary

Report Date: August 26, 2021

Page 1 of 2

Santee Cooper P.O. Box 2946101

OCO3

Moncks Corner, South Carolina

Contact: Ms. Jeanette Gilmetti

Workorder: 551182

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anist	Date Time
Rad Gas Flow Batch 2157720									
QC1204877893 551609004 DUP Radium-228	U Uncertainty	1.13 +/-1.19	U	0.433 +/-0.901	pCi/L	N/A		N/A JXC9	08/17/21 09:29
QC1204877894 LCS Radium-228	51.5 Uncertainty			45.9 +/-3.67	pCi/L		89.2	(75%-125%)	08/17/21 11:13
QC1204877892 MB Radium-228	Uncertainty		U	-0.0456 +/-0.829	pCi/L				08/17/21 09:28
Rad Ra-226 Batch 2157760									
QC1204878006 551182006 DUP Radium-226	Uncertainty	4.72 +/-0.810		5.09 +/-0.873	pCi/L	7.59		(0%-20%) LXP1	08/22/21 07:49
QC1204878008 LCS Radium-226	27.0 Uncertainty			24.8 +/-2.01	pCi/L		91.9	(75%-125%)	08/22/21 07:49
QC1204878005 MB Radium-226	Uncertainty		-	0.126 +/-0.195	pCi/L				08/22/21 07:49
QC1204878007 551182006 MS Radium-226	135 Uncertainty	4.72 +/-0.810		130 +/-9.30	pCi/L		92.8	(75%-125%)	08/22/21 07:49

Notes:

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

The Qualifiers in this report are defined as follows:

** Analyte is a Tracer compound

< Result is less than value reported</p>

> Result is greater than value reported

BD Results are either below the MDC or tracer recovery is low

FA Failed analysis.

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

QC Summary

Workorder: 551182

Page 2 of 2

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

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

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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Radiochemistry Technical Case Narrative Santee Cooper SDG #: 551182

Product: GFPC, Ra228, Liquid

<u>Analytical Method:</u> EPA 904.0/SW846 9320 Modified <u>Analytical Procedure:</u> GL-RAD-A-063 REV# 5

Analytical Batch: 2157720

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

GEL Sample ID#	Client Sample Identification
551182001	AF09053
551182002	AF 0 9070
551182003	AF09065
551182004	AF09066
551182005	AF09050
551182006	AF09051
551182007	AF09083
1204877892	Method Blank (MB)
1204877893	551609004(AF09052) Sample Duplicate (DUP)
1204877894	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Recounts

Sample 1204877894 (LCS) was recounted due to low recovery. The recount is reported.

Product: Lucas Cell, Ra226, Liquid Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2157760

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

GEL Sample ID#	Client Sample Identification
551182001	AF09053
551182002	AF 0 9070
551182003	AF 0 9065
551182004	AF09066

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551182005	AF09050
551182006	AF09051
551182007	AF09083
1204878005	Method Blank (MB)
1204878006	551182006(AF09051) Sample Duplicate (DUP)
1204878007	551182006(AF09051) Matrix Spike (MS)
1204878008	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments

The matrix spike, 1204878007 (AF09051MS), aliquot was reduced to conserve sample volume.

Certification Statement

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

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Chain of Custody

551182



Santee Coope One Riverwood Drive Moneks Corner, SC 29461 e: (843)761-8000 Ext. 5148 Fax: (843)761-4175

Customer I	Email	/Rep	ort Recipi	ent:	Date R	lesults Ne	eded b	y:		P	roject/	/Task/	Unit #:	Rerui	n request	for ar	ny fla	gged	QC
LCWILL	IA		_@santee	cooper.com		//	usp ³ ************************************		1219	567	1 JM	102.0	9. GØ1	J_36500	Yes	No			
																A	nalysi	s Grou	<u>p</u>
Labworks II (Internal uso only)	F4(4)		nple Location	on/	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)	• Mo • Re • Mi • An	Comments thod # porting limit sc. sample info y other notes		1840 226	RAD 228		
AF0905	3	AW	+-4		7/19/21	1124	BRT	2	Þ	e	ew	2_				X	Х	Х	
AFO907	Ö	WA	P-15		7/19/21	1030									***************************************	1			
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Relinquishe			Employee#	Date	Time	Keceiv	ed by:	E	mployee		Date		Time	Correct pH: Y	es No				
Relinquishe	ed by:		Employee#	Date Date	1123 Fine	Receiv	ed by:		£C mployee		4/30 Date	and the same of the same	1327 Time	Preservative Lot Date/Time/Init fo		tive:		·	
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⊡Ba ⊡Be		14.470	□ Ti □ TI	O CI O NO	,	☐ Total Co	liform		Sof	ut met uble M	etals		□ Volatile □ CHN			†),		ti (1 87).	
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THE RESERVE AND ADDRESS OF THE PARTY OF THE	□Pb		□ CrVI						Sulfür					ETSS		(4)	8.84		
										. 7						,			

Laboratories us				SAMPLE RECEIPT & REVIEW FORM	
Client: TS SO	D		spe	G/AR/COC/Work Order: 551187	
	<u> </u>		\vdash	7	
Received By:			Dai	te Received: T = 50 - 10 1	
				FedEx Express FedEx Ground UPS Field Scrvices Courier Other	
Carrier and Tracking Number					
Carrier and Tracking Number					
Suspected Hazard Information	Yes	ž	*If !	Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.	
			Haz	zard Class Shipped: UN#:	
A)Shipped as a DOT Hazardous?		/		If UN2910, Is the Radioactive Shipment Survey Compliant? YesNo	
D) Did the client designate the samples are to be	Γ	Γ	J.CO.		
B) Did the client designate the samples are to be received as radioactive?		/		C notation or radioactive stickers on containers equal client designation.	
C) Did the RSO classify the samples as radioactive?		/	Ma	ximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM/ mR/Hr Classified as: Rad 1 Rad 2 Rad 3	
			100	C notation or hazard labels on containers equal client designation.	
D) Did the client designate samples are hazardous?	L	Z	1		
E) Did the RSO identify possible hazards?		/	If D	O or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:	
Sample Receipt Criteria	Yes	Y.	S _N	Comments/Qualifiers (Required for Non-Conforming Items)	
Shipping containers received intact and sealed?				Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
2 Chain of custody documents included with shipment?	/			Circle Applicable: Client contacted and provided COC COC created upon receipt	
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*		/		Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 1216)
4 Daily check performed and passed on IR temperature gun?				Temperature Device Serial #: 1125 4 Secondary Temperature Device Serial # (If Applicable):	
5 Sample containers intact and sealed?	1			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)	
6 Samples requiring chemical preservation		-		Sample ID's and Containers Affected:	
at proper pH?	\mathbb{Z}		<u> </u>	If Preservation added, Lot#:	
	İ			If Yes, are Encores or Soil Kits present for solids? YesNoNA(If yes, take to VOA Freezer)	
7 Do any samples require Volatile				Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA	
Analysis?				Sample ID's and containers affected:	
	-		-	ID's and tests affected:	
8 Samples received within holding time?	1			to s and tests attended.	
9 Sample ID's on COC match ID's on	<u> </u>		_	ID's and containers affected:	
bottles?	L		<u> </u>		
Date & time on COC match date & time on bottles?	1			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)	
Number of containers received match number indicated on COC?				Circle Applicable: No container count on COC Other (describe)	
Are sample containers identifiable as	١,				
GEL provided by use of GEL labels?	1			Circle Applicable: Not relinquished Other (describe)	
COC form is properly signed in relinquished/received sections?		1		Chicle Applicable. 110t telliquished Other (describe)	
Comments (Use Continuation Form if needed):	.T		<u> </u>		
a popular and a					

List of current GEL Certifications as of 26 August 2021

State Alabama	Certification 42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	
	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-35
Vermont	VT87156
Virginia NELAP	460202











gel.com

August 30, 2021

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

Re: ABS Lab Analytical Work Order: 551609

Dear Ms. Gilmetti:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 03, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

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

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

Sincerely,

Julie Robinson Project Manager

Purchase Order: 367074

Enclosures



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

Certificate of Analysis Report for

SOOP001 Santee Cooper

Client SDG: 551609 GEL Work Order: 551609

The Qualifiers in this report are defined as follows:

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

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

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

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

	Julie	Robinson	
Reviewed by			

Page 2 of 14 SDG: 551609

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

Certificate of Analysis

Report Date: August 30, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09064 Project: SOOP00119 Sample ID: 551609001 Client ID: SOOP001

Matrix: Ground Water Collect Date: 29-JUL-21 11:29 Receive Date: 03-AUG-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	\mathbf{PF}	DF Analy	yst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	As Received"										
Radium-228		2.68	+/-1.50	2.32	3.00	pCi/L		JXC9	08/17/21	0929 2157720	1
Radium-226+Radium-22	28 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		3.83	+/-1.56			pCi/L		l AEA	08/25/21	0423 2161475	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		1.16	-/-0.420	0.286	1.00	pCi/L		LXPI	08/22/21	0715 2157760	3
CCT C 11 1 4 1 1	232.3	~									

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits 84.5 (15%-125%)

Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 3 of 14 SDG: 551609

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

Certificate of Analysis

Report Date: August 30, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09062 Project: SOOP00119 Sample ID: 551609002 Client ID: SOOP001

Matrix: Ground Water
Collect Date: 29-JUL-21 13:54
Receive Date: 03-AUG-21
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	yst Date	Time Batch	Method
Rad Gas Flow Proportion	onal Counting										
GFPC, Ra228, Liquid ".	As Received"										
Radium-228	U	0.261	-/-0.943	1.71	3.00	pCi/L		JXC9	08/17/21	0929 2157720	1
Radium-226+Radium-2	28 Calculatio	n "See Pa	rent Products"								
Radium-226+228 Sum		0.840	+/-1.02			pCi/L		l AEA	08/25/21	0423 2161475	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	uid "As Recei	ved"									
Radium-226		0.579	-/-0.379	0.518	1.00	pCi/L		LXPI	08/22/21	0749 2157760	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation
3 EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits

Barium-133 Tracer GFPC, Ra228, Liquid "As Received" 85 (15%-125%)

Notes

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: August 30, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti ABS Lab Analytical Project:

Client Sample ID: AF09063 Project: SOOP00119 Sample ID: 551609003 Client ID: SOOP001

Matrix: Ground Water Collect Date: 29-JUL-21 13:59 Receive Date: 03-AUG-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF A	nalyst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	s Received"										
Radium-228		3.28	+/-1.41	1.96	3.00	pCi/L		JX	C9 08/17/21	1113 2157720	1
Radium-226+Radium-22	8 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		3.50	+/-1.44			pCi/L		1 A	EA 08/25/21	0423 2161475	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226	U	0.216	-/-0.282	0.483	1.00	pCi/L		L	KPI 08/22/21	0749 2157760	3
		~									

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits 85.1 (15%-125%)

Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Page 5 of 14 SDG: 551609

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

Certificate of Analysis

Report Date: August 30, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09052 Project: SOOP00119 Sample ID: 551609004 Client ID: SOOP001

Matrix: Ground Water Collect Date: 29-JUL-21 12:35 Receive Date: 03-AUG-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Anal	yst Date	Time Batch	Method
Rad Gas Flow Proportion	onal Counting										
GFPC, Ra228, Liquid ".	As Received"										
Radium-228	U	1.13	+/-1.19	1.97	3.00	pCi/L		JXC9	08/17/21	0929 2157720	1
Radium-226+Radium-2	28 Calculation	n "See Pa	rent Products"								
Radium-226+228 Sum		3.21	+/-1.30			pCi/L		l AEA	08/25/21	0423 2161475	2
Rad Radium-226											
Lucas Cell, Ra226, Liqu	uid "As Recei	ved"									
Radium-226		2.08	-/-0.533	0.321	1.00	pCi/L		LXP1	08/22/21	0749 2157760	3

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits Barium-133 Tracer

GFPC, Ra228, Liquid "As Received" 81 (15%-125%)

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: August 30, 2021

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

OCO3

Moncks Corner, South Carolina 29461

Contact: Ms. Jeanette Gilmetti Project: ABS Lab Analytical

Client Sample ID: AF09071 Project: SOOP00119 Sample ID: 551609005 Client ID: SOOP001

Matrix: Ground Water Collect Date: 29-JUL-21 15:38 Receive Date: 03-AUG-21 Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF Analy	yst Date	Time Batch	Method
Rad Gas Flow Proportion	nal Counting										
GFPC, Ra228, Liquid "A	s Received"										
Radium-228	U	1.78	+/-1.18	1.85	3.00	pCi/L		JXC9	08/17/21	0929 2157720	1
Radium-226+Radium-22	8 Calculation	n "See Pa	arent Products"								
Radium-226+228 Sum		3.31	+/-1.28			pCi/L		l AEA	08/25/21	0423 2161475	2
Rad Radium-226											
Lucas Cell, Ra226, Liqui	id "As Receiv	ved"									
Radium-226		1.52	-/-0.497	0.497	1.00	pCi/L		LXP1	08/22/21	0749 2157760	3
SST 0.33 1 4 3 -1											

The following Analytical Methods were performed:

Method Description Analyst Comments

1 EPA 904.0/SW846 9320 Modified

2 Calculation EPA 903.1 Modified

Surrogate/Tracer Recovery Test Result Nominal Recovery% Acceptable Limits 87.3 (15%-125%)

Barium-133 Tracer GFPC, Ra228, Liquid "As Received"

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

Column headers are defined as follows:

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

MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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

QC Summary

Report Date: August 30, 2021

Page 1 of 2

Santee Cooper P.O. Box 2946101

OCO3

Moncks Corner, South Carolina

Contact: Ms. Jeanette Gilmetti

Workorder: 551609

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow Batch 2157720									
QC1204877893 551609004 DUP Radium-228	U Uncertainty	1.13 +/-1.19	U	0.433 +/-0.901	pCi/L	N/A		N/A JXC9	08/17/21 09:29
QC1204877894 LCS Radium-228	51.5 Uncertainty			45.9 +/-3.67	pCi/L		89.2	(75%-125%)	08/17/21 11:13
QC1204877892 MB Radium-228	Uncertainty		U	-0.0456 +/-0.829	pCi/L				08/17/21 09:28
Rad Ra-226 Batch 2157760									
QC1204878006 551182006 DUP Radium-226	Uncertainty	4.72 +/-0.810		5.09 +/-0.873	pCi/L	7.59		(0%-20%) LXP1	08/22/21 07:49
QC1204878008 LCS Radium-226	27.0 Uncertainty			24.8 +/-2.01	pCi/L		91.9	(75%-125%)	08/22/21 07:49
QC1204878005 MB Radium-226	Uncertainty		IJ	0.126 +/-0.195	pCi/L				08/22/21 07:49
QC1204878007 551182006 MS Radium-226	135 Uncertainty	4.72 +/- 0 .810		130 +/-9.30	pCi/L		92.8	(75%-125%)	08/22/21 07:49

Notes:

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

The Qualifiers in this report are defined as follows:

** Analyte is a Tracer compound

< Result is less than value reported</p>

> Result is greater than value reported

BD Results are either below the MDC or tracer recovery is low

FA Failed analysis.

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QC Summary

Page 2 of 2 Parmname NOV Sample Qual \mathbf{OC} Units RPD% REC% Range Anist Date Time Η Analytical holding time was exceeded T See case narrative for an explanation T Value is estimated

K Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L Analyte present. Reported value may be biased low. Actual value is expected to be higher.

M M if above MDC and less than LLD

551609

REMP Result > MDC/CL and < RDL M

N/A RPD or %Recovery limits do not apply.

N1 See case narrative

Workorder:

ND Analyte concentration is not detected above the detection limit

NJConsult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

One or more quality control criteria have not been met. Refer to the applicable narrative or DER. Q

R Sample results are rejected

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

UI Gamma Spectroscopy--Uncertain identification

UJ Gamma Spectroscopy--Uncertain identification

UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y Other specific qualifiers were required to properly define the results. Consult case narrative.

٨ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

h Preparation or preservation holding time was exceeded

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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Radiochemistry Technical Case Narrative Santee Cooper SDG #: 551609

Product: GFPC, Ra228, Liquid

<u>Analytical Method:</u> EPA 904.0/SW846 9320 Modified <u>Analytical Procedure:</u> GL-RAD-A-063 REV# 5

Analytical Batch: 2157720

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

GEL Sample ID#	Client Sample Identification
551609001	AF09064
551609002	AF09062
551609003	AF09063
551609004	AF09052
551609005	AF09071
1204877892	Method Blank (MB)
1204877893	551609004(AF09052) Sample Duplicate (DUP)
1204877894	Laboratory Control Sample (LCS)

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

Data Summary:

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

Technical Information

Recounts

Sample 1204877894 (LCS) was recounted due to low recovery. The recount is reported. Sample 551609003 (AF09063) was recounted due to results more negative than the three sigma TPU. The second count is reported.

<u>Product:</u> Lucas Cell, Ra226, Liquid <u>Analytical Method:</u> EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 15

Analytical Batch: 2157760

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

Client Sample Identification
AF09064
AF09062
AF09063
AF09052
AF09071

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1204878005	Method Blank (MB)
1204878006	551182006(AF09051) Sample Duplicate (DUP)
1204878007	551182006(AF09051) Matrix Spike (MS)
1204878008	Laboratory Control Sample (LCS)

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

Data Summary:

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

Miscellaneous Information

Additional Comments

The matrix spike, 1204878007 (AF09051MS), aliquot was reduced to conserve sample volume.

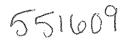
Certification Statement

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

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8/31/21

Chain of Custody





Customer E	mail/I	Report Recipi	ient:	Date	Results N	eeded b	γ:		P	roject <i>j</i>	Task/	'Unit #:	1	Rerun request	for a	ny fla	gged	QC
LCWILLI	Ą.	@santee	cooper.com	***************************************	J	*		1215	567	/ J^	102.	09.Gø	1 / 36500	_ Yes	No			
									,						£	<u>Analys</u>	s Grou	P
Labworks ID (internal use only)		Sample Locati Description	on/	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	A A	Comment Aethod # (eporting limit Aisc. sample info my other notes	S	RAD 226	RAD 228	TOTAL RAD CALC	
A=09064		WAP-13		7/29/2	1 1129	MOG		P	6	GW	2			ili eti eti eti eti eti eti eti eti eti et	X	X	×	minus qua
AF 0906	2 1	NAP -12	•		1354	Ŋ.				1							ì	
AF09063	3 1	NAP-12 D	<u>UP</u>	1 1	1357	1												***********
AF09052	V	vaP-3	ř		1235									en og skriver og skriver for til skriver og skriver og skriver og skriver og skriver og skriver og skriver og				
AF09071	V	vap-16	4		1238			1		1	1		······································	***************************************		1		
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Relinquished Anyoun Relinquished	by:	Employee# 35594 Employee# Employee#	Date 8/3/21 Date Date	Time (occ Time	Receiv	u Yetu	En CE	mployee	* 8	Date Both Date Date		Time oco Time 530 Time	Correct pH	iving (Internal U : 1 : Yes No e Lot#:	nitial			
Ωl	MET	ALS (all)			RAIS				ps em		21							
Ag E Al C As E Ba E Be E Ca E Cco E	Cu Fe K Li Mg Mn Mo Na	USB USC Sn USr UTi UTI UV UZn UHg	Depth of the second of the sec	TOTAL	MIS B BTEX Napthale THM/HA VOC Oil & Gr E. Coli Total Col B pH Dissolvec Rad 226 Rad 228 PCB	ne rA sase iform		Veraltina Elegan Bushin 190 190 190 190 190 190 190 190 190 190	ord Vi Si model Si model Si model Si model Vicenta Si model Si mod	Y VIII Charles	()	Cos Ultimate (i) % Mon (ii) Sulfer (ii) Sulfer (iii) BTUs (iii) CHN (her Tests (ki) Non (fil) (heness (attoniate)	e Matter 55		in the second se		Election of the second of the	

Client:			SDG/AR/COC/Work Orders 551609
Received By: TYE		7	Date Received:
Carrier and Tracking Number			Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courie Other
Suspected Hazard Information	Yes	٤ ,	If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?	Í	1	fazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No
Did the client designate the samples are to be eccived as radioactive?		1	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as adioactive?	-	T T	Maximum Net Counts Observed* (Observed Counts - Area Background Counts):CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?			f D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:
Did the RSO identify possible hazards?	8	<u> </u>	
Sample Receipt Criteria Shipping containers received intact and sealed?	Yes	NA	Comments/Qualifiers (Required for Non-Conforming Items) Circle Applicable: Scals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	V		Circle Applicable: Client contacted and provided COC COC created upon receipt GHPM-IC
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	V		Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: CHEAL—IC
Daily check performed and passed on IR temperature gun?	V		Temperature Device Serial #: IR2-20 Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	7		Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	V	200	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?			If Yes, are Encores or Soil Kits present for solids? Yes No NA (If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) Are liquid VOA vials free of headspace? Yes No NA Sample ID's and containers affected:
8 Samples received within holding time?			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?			ID's and containers affected:
Date & time on COC match date & time on bottles?	4		Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
Number of containers received match number indicated on COC?	レ		Circle Applicable: No container count on COC Other (describe)
Are sample containers identifiable as GEL provided by use of GEL labels? COC form is properly signed in	M		Circle Applicable: Not relinquished Other (describe)
relinquished/received sections? Comments (Use Continuation Form if needed):	14		
Sommens (Oso Communion Porm II needed);			

PM (or PMA) review: Initials ____

List of current GEL Certifications as of 30 August 2021

State Alabama	Certification 42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kausas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	
	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-35
Vermont	VT87156
Virginia NELAP	460202
Washington	C780
м аэшидин	1 000

Field Data Sheets

(Note: the color coding is to assist field personnel in determining when the well has stabilized enough to begin sample collection.)

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 1	29.44	4.16	4- 24	2/15/2021	1337	25.18

Drawdown: 4.19 depth to GW (ft)

Time	Temp	pН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1306	14.57	4.12	310	88	8.1	3.14
1311	14.35	4.15	271	86	6.5	1.04
1316	14.3	4.15	258	86	0.9	0.85
1321	14.36	4.16	247	86	0	0.74
1326	14.39	4.17	240	85	0	0.7
1331	14.22	4.2	231	85	0	0.67
1334	14.16	4.2	228	85	0	0.67
1337	14.13	4.2	227	85	0	0.65
						_

Comments/Conditions:

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 1	29.44	6.14	4- 24	7/20/2021	1228	25.18

Drawdown: 6.15 depth to GW (ft)

Time	Temp	pН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1154	27.12	4.24	166	89	1.2	2.63
1159	27.59	4.19	159	97	6.3	1.17
1204	27.7	4.18	158	94	3.9	1.71
1209	27.63	4.19	153	93	2.6	1.9
1214	27.78	4.21	144	92	2.3	1.64
1219	27.94	4.24	136	91	5.2	0.63
1222	28.18	4.22	139	90	1.7	0.49
1225	28	4.23	136	89	1	0.47
1228	28.33	4.24	133	88	0.9	0.44

Comments/Conditions:

Samples were collected by Ben Taylor and Melanie Goings

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WBW - 1	31.97	3.32	7- 17	2/15/2021	1221	19.77

Drawdown: 3.55 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1120	17.95	4.37	212	32	24.4	1.46
1125	17.41	4.27	229	27	0	1.04
1130	16.92	4.24	234	27	1.3	0.9
1135	16.47	4.21	235	27	0	0.79
1140	16.08	4.21	239	27	0_	0.86
1145	15.79	4.21	250	27	0	0.85
1148	15.64	4.2	260	27	0	0.83
1151	15.5	4.19	268	27	0	0.82
1154	15.35	4.2	277	27	0	0.81
1157	15.23	4.2	285	27	0	0.79
1200	15.13	4.19	294	28	0.	0.78
1203	15.03	4.19	303	28	0	0.73
1206	14.94	4.2	310	28	0	0.75
1209	14.84	4.2	317	28	0	0.76
1212	14.74	4.19	324	28	0	0.73
1215	14.64	4.2	329	28	0	0.72
1218	14.54	4.2	333	28	0	0.73
1221	14.41	4.2	339	28	0	0.72

Comments/Conditions:

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WBW - 1	31.97	18.27	7- 17	7/20/2021	1107	19.8

Drawdown: 17.79 depth to GW (ft)

Time	Temp	рН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1036	21.7	5.05	75	77	234	6.5
1041	22.27	4.82	92	63	32	1.39
1046	22.81	4.72	107	53	13.8	1.05
1051	23.34	4.75	117	48	7.4	0.87
1056	23.79	4.78	120	46	2.1	0.77
1101	24.19	4.76	120	43	0.2	0.72
1104	24.47	4.76	120	43	0	0.71
1107	24.72	4.77	121	42	0	0.69

Comments/Conditions:

Samples were collected by Ben Taylor and Melanie Goings

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 4	20.34	5.9	4- 24	2/23/2021	1428	26.9

Drawdown: 6.74 depth to GW (ft)

Time	Temp round 1	pH round 1	Eh ORP	Spec Cond round 1	Turbidity	Dissolved Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1345	18.61	7.26	-3	306	206	2.2
1350	19	7.29	-18	296	76	0.79
1355	18.97	7.28	-21	295	64.3	0.69
1400	19.09	7.26	-22	295	40.3	0.64
1405	19.37	7.24	-23	295	27.1	0.53
1410	19.4	7.22	-25	295	20.2	0.52
1413	19.49	7.21	-26	296	17.4	0.46
1416	19.6	7.19	-28	297	15.3	0.45
1419	19.68	7.17	-31	297	13.7	0.43
1422	19.72	7.15	-32	298	12.1	0.42
1425	19.78	7.14	-35	298	12	0.42
1428	19.76	7.12	-38	298	11.3	0.4

Comments/Conditions: Well posts need to be painted yellow

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 4	20.34	7.29	4- 24	7/19/2021	1124	27.21

Drawdown: 7.71 depth to GW (ft)

Time	Temp round 1	pH round 1	Eh ORP	Spec Cond round 1	Turbidity	Dissolved Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1101	26.18	7.05	-38	302	54.1	3.98
1106	26.04	7.1	-75	296	4.3	0.91
1111	26.04	7.13	-92	295	0	0.66
1116	26.08	7.16	-99	295	0	0.6
1121	26.18	7.17	-106	299	0	0.59
1124	26.26	7.19	-109	296	0	0.58

Comments/Conditions: Well posts need to be painted yellow

Samples were collected by Ben Taylor and Connor Smalling

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14	14.69	3.8	9.5- 19.5	2/25/2021	1110	22.52

Drawdown: 4.11 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1	Eh ORP	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen
1036	19.69	(units)	(mV) -125	2840	·	(ppm)
1036	20	7 7 06		2930	0	3.8
		7.06	-238		6.1	1.36
1046	20.27	7.08	-263	2930	0.4	1.16
1051	20.66	7.09	-290	2970	0	1.98
1056	21.12	7.11	-311	3190	0	5.27
1101	21.68	7.13	-321	3390	0	8.61
1104	22.1	7.14	-328	3460	0	9.59
1107	22.35	7.15	-333	3530	0	10.02
1110	22.67	7.16	-336	3590	0	10.19
TI						

Comments/Conditions:

Duplicate taken at 1115

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14	14.69	4.46	9.5- 19.5	7/19/2021	1422	22.45

Drawdown: 4.89 depth to GW (ft)

Time	Temp	pН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1412	26.4	7.31	-382	5910	3	3.79
1417	26.04	7.32	-384	5950	0	3.78
1422	25.91	7.33	-385	5950	0	3.84

Comments/Conditions:

Samples were collected by Ben Taylor and Connor Smalling

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14A	13.95	2.04	12'-22'	2/25/2021	1448	25.4

Drawdown: 2.36 depth to GW (ft)

Time	Temp round 1	pH round 1	Eh ORP	Spec Cond round 1	Turbidity	Dissolved Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1417	24.49	7.24	-326	3950	83.4	9.11
1422	24	7.01	-361	4280	35.5	10.34
1427	23.82	6.99	-364	4300	32.7	10.19
1432	23.58	6.99	-365	4320	29.4	9.97
1437	23.6	6.99	-366	4350	33.8	9.86
1442	23.72	6.98	-368	4400	43.6	9.92
1445	23.9	6.98	-371	4410	46.1	9.88
1448	23.96	6.98	-372	4410	48.5	9.77

Comments/Conditions:

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14A	13.95	3.04	12'-22'	7/19/2021	1346	25.35

Drawdown: 3.35 depth to GW (ft)

Time	Temp	pН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1326	26.36	6.86	-316	4600	0	8.52
1331	26.67	6.89	-336	4590	0	5.3
1336	26.66	6.9	-345	4610	0	4.88
1341	26.74	6.91	-350	4630	0	4.75
1346	26.73	6.92	-352	4610	0	4.63

Comments/Conditions:

Samples were collected by Ben Taylor and Connor Smalling

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14B	9.23	4.48	3'-13'	2/25/2021	1356	16.29

Drawdown: 5.08 depth to GW (ft)

Time	Temp round 1	pH round 1	Eh ORP	Spec Cond round 1	Turbidity	Dissolved Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1301	28.34	6.75	-86	3040	74.3	0.77
1306	27.16	6.78	-106	3210	46.9	0.54
1311	26.73	6.76	-114	3220	23.2	0.51
1316	26.37	6.73	-151	3250	12.9	0.55
1321	25.94	6.72	-206	3290	7.2	1.04
1326	25.83	6.72	-262	3340	2.1	3.38
1329	26.14	6.69	-301	3380	0	5.11
1332	26.32	6.67	-306	3440	0	6.2
1335	26.3	6.65	-312	3450	0	6.91
1338	26.43	6.62	-323	3460	0	7.51
1341	26.17	6.62	-335	3480	0.	7.75
1344	26.39	6.62	-338	3480	Ó	7.79
1347	26.65	6.63	-346	3480	0	7.64
1350	26.62	6.63	-352	3520	0	7.59
1353	26.65	6.63	-358	3540	Ó	7.42
1356	26.4	6,63	-358	3570	0	7.7

Comments/Conditions:

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14B	9.23	5.44	3'-13'	7/19/2021	1634	16.2

Drawdown: 6.63 depth to GW (ft)

Time	Temp round 1 (celcius)	pH round 1 (units)	Eh ORP (mV)	Spec Cond round 1 (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (ppm)
1557	25.02	6.67	-127	3190	0	2.86
1602	23.49	6.74	-184	3400	7.1	0.54
1607	23.46	6.72	-226	3460	3.6	0.92
1612	22.81	6.69	-257	3520	2.8	1.57
1617	22.6	6.54	-301	3570	9,2	1.92
1622	22.54	6.53	-344	3630	44.8	2.23
1625	22.26	6.53	-355	3620	28.4	2.42
1628	22.22	6.54	-370	3650	18.9	2.5
1631	22.11	6.55	-378	3680	9.9	2.56
1634	22.05	6.57	-380	3710	3.8	2.59

Comments/Conditions:

Samples were collected by Ben Taylor and Connor Smalling

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14C	13.88	8.38	9.5'-19.5'	2/25/2021	1220	23.14

Drawdown: 8.61 depth to GW (ft)

Time	Temp	рН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1205	21.85	6.86	-105	903	216	4.13
1210	21.81	6.85	-128	912	47,4	4.09
1215	21.8	6.8	-126	909	7.3	4.07
1220	21.39	6.75	-121	898	0	4.03

Comments/Conditions:

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 14C	13.88	10.33	9.5'-19.5'	7/19/2021	1539	23.07

Drawdown: 10.61 depth to GW (ft)

Time	Temp round 1	pH round 1	Eh ORP	Spec Cond round 1	Turbidity	Dissolved Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1510	25.73	7.17	-160	1130	20.5	1.1
1515	26.68	7.15	-158	1090	11	0.7
1520	25.69	7.15	-159	1100	3.1	0.61
1525	24.49	7.13	-157	1100	1.8	0.6
1530	24.39	7.07	-149	1110	0.5	0.58
1533	24.21	7.01	-142	1110	0	0.57
1536	24.09	6.97	-137	1120	0	0.56
1539	24.03	6.92	-132	1120	0	0.54

Comments/Conditions:

Samples were collected by Ben Taylor and Connor Smalling

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 15	20.41	6.18	10- 20	2/25/2021	1540	22.49

Drawdown: 6.41 depth to GW (ft)

Time	Temp	pН	Εħ	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1	,	Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1515	24.82	7.28	-122	1600	117	1.54
1520	23.98	6.95	-105	1640	25	0.79
1525	23.24	6.78	-105	1550	18.6	0.67
1530	22.77	6.63	-106	1540	2.8	0.59
1535	22.47	6.54	-107	1540	0	0.55
1540	22.24	6.47	-107	1580	0	0.52
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Comments/Conditions:

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 15	20.41	7.02	10- 20	7/19/2021	1030	23.14

Drawdown: 7.15 depth to GW (ft)

Time	Temp round 1	pH round 1	Eh ORP	Spec Cond round 1	Turbidity	Dissolved Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
953	20.84	5.94	44	1080	3.5	12.02
958	21.61	6.01	-1	1050	8.9	1.14
1003	21.95	6.01	-11	1000	7	0.93
1008	22.58	5.99	-28	843	3.2	0.83
1013	22.85	5.97	-33	779	0.8	0.7
1018	23.13	5.96	-36	738	0	0.63
1021	23.2	5.96	-37	730	0	0.61
1024	23.56	5.97	-41	707	0	0.56
1027	23.63	5.97	-41	707	0	0.55
1030	23.66	5.97	-42	704	0	0.55

Comments/Conditions:

Samples were collected by Connor Smalling and Ben Taylor

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 16	25.08	6.5	9- 19	3/4/2021	1427	21.26

Drawdown: 6.57 depth to GW (ft)

Time	Temp	pН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1359	22.65	6.41	43	1490	105	2.7
1404	21.63	6.56	-38	1520	98.5	0.89
1409	21.42	6.59	-58	1520	27.8	0.63
1414	21.44	6.63	-67	1500	26.4	0.53
1419	21.45	6.69	-74	1480	14.2	0.49
1424	21.54	6.7	-76	1450	9.7	0.46
1427	21.59	6.72	-77	1440	9.9	0.44

Comments/Conditions:

Samples were collected by Trey West and Marvin Lewis

Well ID	TOC	GW	Screen	Sample	Sample	Total
	Elevation	Depth	Intervals	Date	Time	Well
	(feet)	(feet)	(ft, bgs)			Depth
WAP - 16	25.08	6.91	9- 19	7/29/2021	1538	21.31

Drawdown: 7 depth to GW (ft)

Time	Temp	pН	Eh	Spec Cond	Turbidity	Dissolved
	round 1	round 1	ORP	round 1		Oxygen
	(celcius)	(units)	(mV)	(uS/cm)	(NTU)	(ppm)
1504	35.04	6.64	-107	1270	0	3.5
1509	32.53	6.58	-100	1500	0	3.79
1514	30.13	6.47	-90	1710	0	3.56
1519	28.91	6.48	-88	1750	0	3.16
1524	28.35	6.48	-87	1770	0	2.73
1529	28.03	6.51	-87	1740	0	2.43
1532	27.73	6.56	-88	1720	0	2.18
1535	27.56	6.57	-89	1710	0	2.05
1538	27.3	6.59	-89	1700	0	1.91

Comments/Conditions:

Samples were collected by Ben Taylor and Melanie Goings