DOMINION ENERGY SOUTH CAROLINA

WATEREE STATION CLASS III INDUSTRIAL LANDFILL

RICHLAND COUNTY, SOUTH CAROLINA

EPA CCR RULE COMPLIANCE

2022 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

January 31, 2023

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Executive Summary

Dominion Energy South Carolina (DESC) operates a Class III Industrial Landfill (Unit) for the disposal of coal combustion residuals (CCR) at the Wateree Generating Station (Station) located in Eastover, Richland County, South Carolina. The Unit receives CCR generated from the combustion of coal at the Station. Management of the CCR in the Unit is performed pursuant to national criteria established in Title 40 of the Code of Federal Regulations (40 CFR), Part 257 (CCR Rule), effective April 19, 2015, and subsequent revisions to the CCR Rule. Pursuant to the CCR Rule, the Station operator is required to complete an *Annual Groundwater Monitoring and Corrective Action Report* for the Unit by January 31st, annually.

This report documents the status of the CCR groundwater monitoring program for the Unit, summarizes key actions completed, describes issues encountered, actions taken to resolve identified concerns, and planned key activities for the upcoming year.

In accordance with 40 CFR Part 257.90(e)(6), the following information is being provided as an overview of the current status of groundwater monitoring and corrective action for the Unit:

i. At the start of the current annual reporting period, indicate whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95.

- At the start of 2022, the Unit was operating under the detection monitoring program in accordance with §257.94.

ii. At the end of the current annual reporting period, indicate whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95.

- At the end of 2022, the Unit was operating under the detection monitoring program in accordance with §257.94.

iii. If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III to this part pursuant to §257.94(e).

a. Identify those constituents listed in Appendix III to this part and the names of the monitoring wells associated with such an increase.

- In 2022, there were SSIs over background for the following Appendix III constituents at the following wells:
  - Calcium – MW-LF-10

- Chloride – MW-LF-10 and MW-LF-22
- Fluoride – MW-LF-10
- Sulfate – MW-LF-10
- TDS – MW-LF-10

b. Provide the date when the assessment program was initiated for the CCR unit.

- The Unit is in the detection monitoring program and has not initiated assessment monitoring to date.

iv. If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in Appendix IV to this part pursuant to §257.95(g).

a. *Identify those constituents listed in Appendix IV to this part and the names of the monitoring wells associated with such an increase.*

- The Unit is in the detection monitoring program and Appendix IV constituents were not evaluated in 2022.

b. Provide the date when the assessment of corrective measures was initiated for the CCR unit.

- The Unit has not entered the assessment monitoring program and therefore not applicable.

c. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.

- The Unit has not entered the assessment monitoring program and therefore not applicable.

d. Provide the date when the assessment of corrective measures was completed for the CCR unit.

- The Unit has not entered the assessment monitoring program and therefore not applicable.

v. Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of the remedy selection.

- The Unit has not entered the assessment monitoring program and therefore not applicable.

vi. Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period.

- Remedial activities were not initiated or are not ongoing during this current annual reporting period.

Section 1
Introduction

This *2022 CCR Annual Groundwater Monitoring and Corrective Action Report* (Report) was prepared on behalf of Dominion Energy South Carolina (DESC) for the Class III Industrial Landfill (Unit) at the Wateree Generating Station (Station) located in Eastover, Richland County, South Carolina. Coal combustion residuals (CCR) are produced as part of the electrical generation operations and is disposed of in the Unit. The CCR Unit is managed in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Class III Landfill Permit (Permit No. LF3-00026) and the national criteria established by the CCR Rule. DESC installed a groundwater monitoring system at the Unit that is subject to the groundwater monitoring and corrective action requirements provided under 40 CFR §257.90 through §257.98. In accordance with 40 CFR §257.90(e), DESC must prepare an annual report by January 31st that provides information regarding the groundwater monitoring and corrective action program at the Unit. This Report provides the monitoring and corrective action data and data evaluations for the semiannual CCR monitoring compliance events performed in March and September 2022.

1.1 Site Location

The Station is operated by DESC and is located at 142 Wateree Station Road in Richland County, South Carolina (**Figure 1**). The Station is located approximately 5 miles southeast of Eastover, South Carolina. The Unit is located on the western portion of the Station property approximately 2,000 feet from the generating plant.

1.2 Site History

The Wateree Generating Station is a coal-fired steam electric power generating facility. The facility includes two identical coal-fired generating units. Units 1 and 2, which began operation in 1970 and 1971, respectively. Each unit has a gross generating capacity of 372 megawatts. Both generating units are categorized as base load units.

The Station consists of a former coal ash storage pond (Ash Pond), a polishing pond (previously Ash Pond 2), a flue gas desulfurization (FGD) pond, and a Class III Industrial Landfill (Unit). **Figure 1** illustrates the locations of these CCR units. Discharge of treated wastewater to the Wateree River is monitored and permitted under a National Pollutant Discharge System (NPDES) permit (Permit No. SC0002038) issued by SCDHEC.

1.3 Key Actions

Key actions for the Unit are as follows:

- Permitted for management of CCR by SCDHEC under Class III Landfill Permit No. LF3-00026.
- Initiated the Detection Monitoring Program (DMP) on May 12, 2016, with the collection of eight (8) baseline/background samples and completed the background monitoring activities on July 24-25, 2017, pursuant to 40 CFR §257.94(b).
- Conducted the initial DMP compliance sampling event on September 26-27, 2017, pursuant to 40 CFR §257.94.
- Placed a copy of the Ash Pond's Groundwater Monitoring Plan (GMP) documenting the design information for the monitoring wells pursuant to 40 CFR §257.91(e)(1) in the Station's operating record on October 17, 2017, pursuant to 40 CFR §257.105(h)(2).
- Certified the groundwater monitoring system pursuant to 40 CFR §257.91(f) and posted the Certification in the Station's operating record on October 17, 2017, pursuant to 40 CFR §257.105(h)(3).
- Certified the selection of a statistical method pursuant to 40 CFR §257.93(f)(6) and posted the Certification in the Station's operating record on October 17, 2017, pursuant to 40 CFR §257.105(h)(4).
- Background concentrations of Appendix III constituents were updated using United States Environmental Protection Agency-approved statistical procedures in August 2021.
- In 2022, DESC completed a successful Alternate Source Demonstration (ASD) per 40 CFR §257.94(e)(2) in response to potential Statistically Significant Increases (SSIs) identified during the statistical evaluation of the data generated from the second semiannual 2021 (September 2021) detection monitoring event. The ASD was certified by a South Carolina-registered professional engineer. As required by 40 CFR §257.94(e)(2), a copy of the ASD is included in **Appendix A**. Based on the successful evaluation and the results presented in the ASD, DESC continued with detection monitoring in accordance with 40 CFR §257.94.
- Conducted the first semiannual 2022 detection monitoring between March 14-15, 2022 and completed the sample analyses on March 22, 2022, pursuant to the CCR Rule [§257.94(b)].
- Completed a successful ASD per 40 CFR §257.94(e)(2) for the potential SSIs identified during the first semiannual 2022 detection monitoring event. The ASD was certified by a South Carolina-registered professional engineer. As required by 40 CFR §257.94(e)(2), a copy of the ASD is included in this Report and provided in **Appendix B**. DESC continued with detection monitoring in accordance with 40 CFR §257.94.

Conducted the second semiannual 2022 detection monitoring between September 6-12, 2022 and completed the sample analyses on September 27, 2022, pursuant to the CCR Rule [§257.94(b)]. An ASD evaluation of the data will be performed during the first quarter of 2023 per 40 CFR §257.94(e)(2).

- The Unit remained in detection monitoring for the duration of 2022.

1.4 Monitoring Program Concerns

There were no monitoring program concerns identified during 2022.

Section 2
Site Information

2.1 Monitoring Well Network

Groundwater monitoring wells (MW-LF-07, MW-LF-08, MW-LF-10, and MW-LF-11) were installed in March 2016 at the Unit to serve as the EPA CCR Compliance Monitoring Well Network. Existing monitoring wells (MW-LF-01, MW-LF-06, and MW-LF-22) utilized for other monitoring programs for the Unit, were incorporated into the CCR Compliance Monitoring Well Network in 2016. Two additional groundwater monitoring wells, MW-LF-10A and MW-BG-73, were installed in November 2016 and November 2017, respectively. Three additional groundwater monitoring wells, AS-LF-01, AS-LF-02, and AS-LF-03, were installed in June 2017 to support an ASD investigation.

The Compliance Monitoring Well Network currently consists of six upgradient wells (MW-BG-73, MW-LF-01, AS-LF-01, AS-LF-02, AS-LF-03, and MW-LF-06) to monitor background groundwater quality entering the surficial aquifer of the Unit and six downgradient monitoring wells (MW-LF-07, MW-LF-08, MW-LF-10, MW-LF-10A, MW-LF-11, and MW-LF-22) that serve to monitor groundwater quality downgradient of the Unit. The location of the EPA CCR Rule Compliance Monitoring Well Network is presented on **Figure 2**.

2.2 Monitoring Well Installation and Decommissioning Activities

In December 2022, monitoring well MW-LF-10 was abandoned due to damage to the surface completion affecting the integrity of the well. Monitoring well MW-LF-10A was previously installed in November 2016 as a replacement well for MW-LF-10 and although both wells have historically been sampled as part of the Unit's monitoring well network, MW-LF-10A will serve as the downgradient compliance well beginning in January 2023.

Three (3) observations wells (MW-LF-01D, MW-BG-74, and MW-LF-12) were installed in December 2022 to further refine hydrogeologic conditions in the vicinity of the Unit.

2.3 Groundwater Potentiometric Surface Evaluation

Current and historical static water level data for the Station are summarized in **Table 1**. Per requirements of 40 CFR 257.93(c), the rate and direction of groundwater flow within the uppermost aquifer beneath the Unit must be determined after each sampling event. Groundwater potentiometric surface maps were prepared using water level data obtained from both semiannual sampling events conducted in March and

September 2022. Using the groundwater contours from March (**Figure 3**) and September (**Figure 4**), the average horizontal hydraulic gradient was calculated using the following equation:

$$i = (h^1 - h^2)/S$$

Where:

i = horizontal hydraulic gradient (unitless)
h^1 = water elevation in well 1 (feet)
h^2 = water elevation in well 2 (feet)
S = horizontal distance between well 1 and well 2 (feet)

The groundwater seepage velocity was calculated using the following formula:

$$Vs = ki/n_e$$

Where:

Vs = Groundwater seepage velocity (feet/day)
k = hydraulic conductivity (feet/day)
i = horizontal hydraulic gradient (unitless)
n_e = effective porosity (percent)

The result for each semiannual event is presented separately in Sections 2.3.1 and 2.3.2. As presented, the estimated groundwater seepage velocity in the uppermost aquifer beneath the Unit is between 145 to 147 ft/year. Furthermore, the overall interpreted data indicates that the groundwater flow direction and velocity remain consistent with previous calculations for the Unit. The groundwater monitoring network continues to monitor the uppermost aquifer in accordance with the CCR Rule.

2.3.1 First Semiannual 2022 Detection Monitoring Program

The groundwater potentiometric surface map for March 2022 is presented in **Figure 3**. Using an estimated effective porosity value of 20% and an estimated average hydraulic conductivity value of 15.30 ft/day, the average rate of groundwater flow for the uppermost aquifer beneath the Unit was calculated to be 146.93 ft/year.

Well 1	Well 2	h^1 (ft)	h^2 (ft)	S (ft)	i	K (ft/day) (1)	n_e	Vs (ft/day)	Vs (ft/yr.)
MW-LF-01	AS-LF-01	124.89	118.46	985	0.0065	15.30	0.20	0.4994	182.28
MW-LF-01	AS-LF-02	124.89	117.40	925	0.0081			0.6194	226.10
AS-LF-02	MW-LF-08	117.40	112.78	1,330	0.0035			0.2657	96.99
AS-LF-03	MW-LF-10A	118.85	112.09	1,570	0.0043			0.3294	120.23
AS-LF-03	MW-LF-11	118.85	113.09	1,475	0.0039			0.2987	109.04
1) Hydraulic conductivity and effective porosity values from February 2021: Analysis of Groundwater Flow Rate and Direction – Class III Landfill Wells (Nautilus 2021).						Average		0.4025	146.93

2.3.2 Second Semiannual 2022 Detection Monitoring Program

The groundwater potentiometric surface map for September 2022 is presented in **Figure 4**. Using an estimated effective porosity value of 20% and estimated average hydraulic conductivity value of 15.30 ft/day, the average rate of groundwater flow for the uppermost aquifer beneath the Unit was calculated to be 145.22 ft/year.

Well 1	Well 2	h^1 (ft)	h^2 (ft)	S (ft)	i	K (ft/day) (1)	n_e	Vs (ft/day)	Vs (ft/yr.)
MW-LF-01	AS-LF-01	124.35	117.80	985	0.0066	15.30	0.20	0.5087	185.68
MW-LF-01	AS-LF-02	124.35	116.67	925	0.0083			0.6352	231.83
AS-LF-02	MW-LF-08	116.67	112.51	1,330	0.0031			0.2393	87.34
AS-LF-03	MW-LF-10A	118.14	111.66	1,570	0.0041			0.3157	115.25
AS-LF-03	MW-LF-11	118.14	112.54	1,475	0.0038			0.2904	106.01
1) Hydraulic conductivity and effective porosity values from February 2021: Analysis of Groundwater Flow Rate and Direction – Class III Landfill Wells (Nautilus 2021).						Average		0.3979	145.22

Section 3
Field Activities

CCR-related groundwater sampling activities that occurred during 2022 are summarized in the following sections.

3.1 Compliance Monitoring Program Sampling Activities

As per 40 CFR §257.94(c), two semiannual DMP events were conducted for the constituents and parameters listed in Appendix III of the CCR Rule. Summaries of the 2022 DMP sampling events are presented below.

2022 Monitoring Event	Sample Dates	Final Laboratory Package Receipt Date
First Semiannual Detection Monitoring Program Event	March 14-15, 2022	March 22, 2022
Second Semiannual Detection Monitoring Program Event	September 6, 8, 9, and12, 2022	September 27, 2022

During each of the DMP sampling events, the compliance monitoring wells were sampled in accordance with the Station's Groundwater Monitoring Program (GWMP).

Samples collected during the semiannual sampling events were submitted to GEL Laboratories (GEL) in Charleston, South Carolina under proper chain-of-custody procedures. GEL is a SCDHEC Environmental Laboratory Certification Program (ELCP) accredited laboratory for analysis of CCR Rule constituents (GEL certification #10120001).

Section 4
Laboratory Analytical Results

Laboratory analytical results from the DMP sampling events conducted in 2022 are summarized in the following sections.

4.1 First Semiannual 2022 Detection Monitoring Program Event

The groundwater samples collected during the first semiannual DMP event were analyzed by GEL for the constituents and parameters listed in Appendix III of the CCR Rule. The laboratory certificates of analysis, chain-of-custody forms, and field notes for the sampling event are presented in **Appendix C**. A summary of the CCR sampling data for the Unit is included in **Table 2**.

4.2 Second Semiannual 2022 Detection Monitoring Program Event

The groundwater sampling collected during the second semiannual sampling event were analyzed by GEL for the constituents and parameters listed in Appendix III of the CCR Rule. The laboratory certificates of analysis, chain-of-custody forms, and field notes for the sampling event are presented in **Appendix D**. A summary of the CCR sampling data for the Unit is included in **Table 3**.

Section 5
Data Quality Validation

Third-party data validation services were provided by Environmental Standards, Inc. for the DMP sampling events. The reviews were performed with guidance from the USEPA data validation guidelines and in accordance with the Station's GWMP. A discussion of the findings is presented below.

5.1 First Semiannual 2022 Compliance Event Findings

The following field QA/QC samples for this event included:

- One blind duplicate sample was collected from the MW-LF-10 location on March 14, 2022.
- Additional sample volume was collected at MW-LF-11 on March 14, 2022, to allow for the laboratory to conduct a MS/MSD quality control check.
- A field blank was collected in the area of MW-LF-10A on March 14, 2022, using laboratory provided deionized water. The field blank was used to assess for potential contaminants from field conditions during sampling activities.
- A field blank was collected in the area of AS-LF-03 on March 15, 2022, using laboratory provided deionized water. The field blank was used to assess for potential contaminants from field conditions during sampling activities.

These QA/QC samples were analyzed for the same constituents as the groundwater samples. Based on review of the laboratory-provided QC data and Environmental Standards recommendations, the data for this sampling event were determined to meet the data quality objectives for the project. A copy of the data validation report is included in **Appendix C**.

5.2 Second Semiannual 2022 Compliance Event Findings

The following field QA/QC samples for this event included:

- One blind duplicate sample was collected from the AS-LF-03 location on September 9, 2022.
- Additional sample volume was collected at AS-LF-02 on September 9, 2022, to allow for the laboratory to conduct a MS/MSD quality control check.
- A field blank was collected in the area of MW-LF-01 on September 9, 2022, using laboratory provided deionized water. The field blank was used to assess for potential contaminants from field conditions during sampling activities.

- A field blank was collected in the area of MW-LF-10A on September 12, 2022, using laboratory provided deionized water. The field blank was used to assess for potential contaminants from field conditions during sampling activities.

These QA/QC samples were analyzed for the same constituents as the groundwater samples. Based on review of the laboratory-provided QC data and Environmental Standards recommendations, the data for this sampling event were determined to meet the data quality objectives for the project. A copy of the data validation report is included in **Appendix D**.

Section 6
Statistical Evaluation of Groundwater Data

Statistical evaluation of the semiannual DMP data was performed in accordance with the statistical method certified by a qualified South Carolina-registered professional engineer. The certified statistical method has been posted to the Unit's operating record. Statistical evaluations completed in 2022 are summarized in the following sections.

6.1 Site-Specific Background Evaluations

Compliance data from each semiannual event was evaluated against site-specific background values as follows.

6.1.1 First Semiannual 2022 Compliance Event

Pursuant to 40 CFR §257.95, TRC evaluated Appendix III constituent detections against site-specific background values that were established for the DMP (**Appendix E**). Based on that evaluation, the following Appendix III SSIs were identified for the first semiannual 2022 event (**Table 2**):

- Calcium (MW-LF-10)
- Chloride (MW-LF-10 and MW-LF-22)
- Fluoride (MW-LF-10)
- Sulfate (MW-LF-10)
- TDS (MW-LF-10)

An ASD and certification were prepared for these SSIs and is attached as **Appendix B**.

6.1.2 Second Semiannual 2022 Compliance Event

Pursuant to 40 CFR §257.95, TRC evaluated Appendix III constituent detections against site-specific background values that were established for the DMP (**Appendix F**). Based on that evaluation, the following Appendix III SSIs were identified for the second semiannual 2022 event (**Table 3**):

- Chloride (MW-LF-22)
- Sulfate (MW-LF-10)

An ASD evaluation of the data from the second semiannual 2022 compliance event will be performed during the first quarter of 2023 per 40 CFR §257.94(e)(2).

Section 7
Conclusions

7.1 Findings

The first semiannual 2022 DMP compliance sampling event was conducted on March 14-15, 2022, with sample analyses completed on March 22, 2022. The second semiannual 2022 DMP compliance sampling event was conducted on September 6, 8, 9, and 12, 2022, with sample analyses complete on September 27, 2022. These groundwater sampling and analysis activities were performed in general accordance with the requirements of the Unit's GWMP for the CCR Rule network.

Evaluation of the monitoring results from the first semiannual 2022 event identified an exceedance above the background value for calcium (MW-LF-10), chloride (MW-LF-10 and MW-LF-22), fluoride (MW-LF-10), sulfate (MW-LF-10), and TDS (MW-LF-10). DESC completed a successful ASD for the potential SSIs identified during the first semiannual 2022 detection monitoring event. The ASD was certified by a South Carolina-registered professional engineer and is presented in this Report. Monitoring results from the second semiannual 2022 event identified exceedances above the background value for chloride (MW-LF-22) and sulfate (MW-LF-10). An ASD evaluation is being conducted in accordance with the applicable CCR Rule timeframe.

7.2 Planned Activities

Based on the results from the 2022 monitoring activities, DESC intends to continue with semiannual groundwater monitoring activities in 2023 that are consistent with the provisions in the CCR Rule [Part 257.94] and prepare an ASD to address 2022 second semiannual SSIs.

Section 8
References

Environmental Protection Agency (EPA). 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. *40 CFR Parts 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule.* [EPA-HQ-RCRA–2009–0640; FRL–9919–44–OSWER]. RIN–2050–AE81.

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Nautilus 2021. Analysis of Groundwater Flow Rate and Direction: September 2020 Monitoring Data, Cope Station: Class III Landfill, Wateree Station: Class III Landfill, FGD Pond, Ash Pond, Williams Station: FGD Pond, Highway 52 Class III Landfill: Nautilus Geologic Consulting, PLLC. February 2021.

Section 9
Signature Page

This *2022 CCR Annual Groundwater Monitoring and Corrective Action Report* (Report) has been prepared by a qualified groundwater scientist on behalf of Dominion Energy South Carolina (DESC) for the Class III Industrial Landfill at Wateree Generating Station. This Report satisfied the reporting requirements specified in Title 40 CFR §257.90(e) *et seq.* [Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)].

Name: Richard A. Mayer Jr., P.G.

Expiration Date: June 30, 2023

Company: TRC Environmental Corporation

Date: January 31, 2023

(SEAL)

Tables

Table 1
Summary of Historical CCR Static Water Level Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

Monitoring Well ID	Top of Casing Elevation (ft. AMSL)	Date	Depth to Water (feet)	Static Water Level Elevation (ft. AMSL)
MW-LF-01	148.65	5/12/2016	22.48	126.17
		7/12/2016	22.48	126.17
		9/20/2016	22.82	125.83
		11/15/2016	22.94	125.71
		1/17/2017	23.02	125.63
		3/20/2017	22.73	125.92
		5/22/2017	22.40	126.25
		7/24/2017	22.46	126.19
		9/27/2017	22.75	125.90
		10/31/2017	22.90	125.75
		11/13/2017	22.94	125.71
		3/6/2018	23.78	124.87
		9/11/2018	24.85	123.80
		11/20/2018	26.80	121.85
		3/4/2019	23.68	124.97
		5/1/2019	23.21	125.44
		8/29/2019	23.48	125.17
		11/18/2019	23.98	124.67
		3/10/2020	23.78	124.87
		5/26/2020	24.61	124.04
		9/14/2020	23.55	125.10
		10/26/2020	23.49	125.16
		3/8/2021	22.90	125.75
		9/14/2021	22.43	126.22
		3/15/2022	23.76	124.89
		9/6/2022	24.30	124.35
MW-LF-06	145.97	11/15/2016	29.25	116.72
		1/17/2017	29.45	116.52
		3/20/2017	29.28	116.69
		5/22/2017	28.98	116.99
		7/24/2017	28.82	117.15
		9/27/2017	28.99	116.98
		10/31/2017	29.06	116.91
		11/13/2017	29.05	116.92
		3/6/2018	29.87	116.10
		9/11/2018	30.94	115.03
		3/5/2019	30.08	115.89
		8/29/2019	29.45	116.52
		11/18/2019	29.81	116.16
		3/11/2020	30.10	115.87
		5/26/2020	30.05	115.92
		9/14/2020	29.86	116.11
		3/8/2021	29.51	116.46
		9/14/2021	28.13	117.84
		3/15/2022	29.76	116.21
		9/6/2022	30.44	115.53

Notes:
1) ft AMSL = feet above mean sea level.

Table 1
Summary of Historical CCR Static Water Level Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

Monitoring Well ID	Top of Casing Elevation (ft. AMSL)	Date	Depth to Water (feet)	Static Water Level Elevation (ft. AMSL)
MW-LF-07	139.98	5/12/2016	23.23	116.75
		7/12/2016	23.34	116.64
		9/20/2016	23.65	116.33
		11/16/2016	23.82	116.16
		1/18/2017	23.98	116.00
		3/21/2017	24.03	115.95
		5/23/2017	23.96	116.02
		7/24/2017	23.89	116.09
		9/27/2017	24.10	115.88
		10/31/2017	24.27	115.71
		11/14/2017	24.27	115.71
		3/5/2018	24.71	115.27
		9/11/2018	24.54	115.44
		11/20/2018	25.40	114.58
		3/5/2019	23.67	116.31
		5/1/2019	23.60	116.38
		8/29/2019	24.10	115.88
		11/19/2019	24.47	115.51
		3/11/2020	22.60	117.38
		5/26/2020	23.55	116.43
		9/15/2020	23.23	116.75
		10/26/2020	23.18	116.80
		3/8/2021	22.43	117.55
		9/14/2021	23.29	116.69
		3/15/2022	24.15	115.83
		9/6/2022	24.65	115.33
MW-LF-08	137.67	5/12/2016	24.57	113.10
		7/12/2016	24.78	112.89
		9/20/2016	24.79	112.88
		11/16/2016	25.01	112.66
		1/18/2017	24.53	113.14
		3/21/2017	24.81	112.86
		5/23/2017	24.49	113.18
		7/25/2017	24.50	113.17
		9/27/2017	24.97	112.70
		10/31/2017	25.53	112.14
		11/14/2017	25.50	112.17
		3/5/2018	25.70	111.97
		9/11/2018	26.67	111.00
		3/4/2019	23.94	113.73
		8/29/2019	25.65	112.02
		3/11/2020	23.19	114.48
		9/15/2020	24.03	113.64
		3/8/2021	23.20	114.47
		9/14/2021	23.75	113.92
		3/15/2022	24.89	112.78
		9/6/2022	25.16	112.51

Notes:
1) ft AMSL = feet above mean sea level.

Table 1
Summary of Historical CCR Static Water Level Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

Monitoring Well ID	Top of Casing Elevation (ft. AMSL)	Date	Depth to Water (feet)	Static Water Level Elevation (ft. AMSL)
MW-LF-10	131.53	5/12/2016	15.94	115.59
		7/12/2016	17.53	114.00
		9/20/2016	18.27	113.26
		11/16/2016	18.50	113.03
		1/18/2017	18.05	113.48
		3/20/2017	17.85	113.68
		5/22/2017	17.59	113.94
		7/25/2017	18.01	113.52
		9/27/2017	18.61	112.92
		10/31/2017	19.00	112.53
		11/14/2017	19.15	112.38
		3/5/2018	19.32	112.21
		9/11/2018	19.53	112.00
		11/20/2018	18.78	112.75
		12/11/2018	18.53	113.00
		3/4/2019	17.34	114.19
		5/1/2019	17.55	113.98
		8/29/2019	19.37	112.16
		3/11/2020	17.42	114.11
		5/26/2020	18.09	113.44
		9/14/2020	18.30	113.23
		10/26/2020	18.09	113.44
		3/8/2021	16.90	114.63
		9/14/2021	18.38	113.15
		3/15/2022	19.19	112.34
		9/6/2022	19.61	111.92
MW-LF-10A	132.49	12/11/2018	19.72	112.77
		3/4/2019	18.54	113.95
		8/29/2019	20.54	111.95
		3/11/2020	18.65	113.84
		5/26/2020	19.37	113.12
		9/14/2020	19.48	113.01
		10/26/2020	19.24	113.25
		3/8/2021	18.05	114.44
		9/14/2021	19.73	112.76
		3/15/2022	20.40	112.09
		9/6/2022	20.83	111.66

Notes:
1) ft AMSL = feet above mean sea level.

Table 1
Summary of Historical CCR Static Water Level Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

Monitoring Well ID	Top of Casing Elevation (ft. AMSL)	Date	Depth to Water (feet)	Static Water Level Elevation (ft. AMSL)
MW-LF-11	135.26	5/12/2016	18.88	116.38
		7/12/2016	21.61	113.65
		9/20/2016	21.45	113.81
		11/16/2016	21.55	113.71
		1/17/2017	21.02	114.24
		3/20/2017	20.84	114.42
		5/22/2017	20.53	114.73
		7/25/2017	21.07	114.19
		9/27/2017	21.62	113.64
		10/31/2017	22.00	113.26
		11/14/2017	22.20	113.06
		3/5/2018	22.52	112.74
		9/11/2018	22.53	112.73
		3/4/2019	20.15	115.11
		5/1/2019	20.30	114.96
		8/28/2019	22.30	112.96
		3/11/2020	20.09	115.17
		9/14/2020	21.35	113.91
		3/8/2021	19.57	115.69
		9/14/2021	21.54	113.72
		3/15/2022	22.17	113.09
		9/6/2022	22.72	112.54
MW-LF-22	135.75	5/12/2016	20.98	114.77
		7/12/2016	21.61	114.14
		9/20/2016	22.13	113.62
		11/16/2016	22.32	113.43
		1/18/2017	21.70	114.05
		3/20/2017	21.77	113.98
		5/23/2017	21.48	114.27
		7/25/2017	21.72	114.03
		9/26/2017	22.38	113.37
		10/31/2017	22.94	112.81
		11/14/2017	22.96	112.79
		3/5/2018	23.02	112.73
		9/11/2018	23.64	112.11
		3/4/2019	20.97	114.78
		5/1/2019	21.45	114.30
		8/29/2019	23.23	112.52
		11/18/2019	23.61	112.14
		3/11/2020	20.75	115.00
		5/26/2020	21.88	113.87
		9/14/2020	21.87	113.88
		10/27/2020	21.57	114.18
		3/8/2021	20.76	114.99
		9/14/2021	21.83	113.92
		3/15/2022	22.59	113.16
		9/6/2022	22.82	112.93

Notes:
1) ft AMSL = feet above mean sea level.

Table 1 Summary of Historical CCR Static Water Level Data Dominion Energy South Carolina - Wateree Station Class III Landfill Eastover, Richland County, South Carolina				
Monitoring Well ID	**Top of Casing Elevation (ft. AMSL)**	**Date**	**Depth to Water (feet)**	**Static Water Level Elevation (ft. AMSL)**
AS-LF-01	149.90	7/25/2017	30.58	119.32
		9/12/2017	30.49	119.41
		9/27/2017	30.63	119.27
		10/10/2017	30.65	119.25
		11/1/2017	30.90	119.00
		11/13/2017	30.80	119.10
		3/6/2018	31.57	118.33
		9/11/2018	32.84	117.06
		3/5/2019	31.81	118.09
		5/1/2019	31.36	118.54
		8/28/2019	31.10	118.80
		3/11/2020	31.39	118.51
		5/27/2020	31.36	118.54
		9/15/2020	31.55	118.35
		10/26/2020	31.36	118.54
		3/8/2021	30.90	119.00
		9/14/2021	29.96	119.94
		3/15/2022	31.44	118.46
		9/6/2022	32.10	117.80
AS-LF-02	149.55	7/25/2017	31.32	118.23
		9/12/2017	31.18	118.37
		9/27/2017	31.40	118.15
		10/10/2017	31.51	118.04
		11/1/2017	31.09	118.46
		11/13/2017	31.57	117.98
		3/6/2018	32.17	117.38
		9/11/2018	33.45	116.10
		3/5/2019	31.37	118.18
		5/1/2019	31.86	117.69
		8/29/2019	32.29	117.26
		11/19/2019	32.47	117.08
		3/11/2020	32.18	117.37
		5/27/2020	31.99	117.56
		9/15/2020	31.94	117.61
		10/26/2020	31.78	117.77
		3/8/2021	31.25	118.30
		9/14/2021	30.89	118.66
		3/15/2022	32.15	117.40
		9/6/2022	32.88	116.67

Notes:

1) ft AMSL = feet above mean sea level.

Table 1
Summary of Historical CCR Static Water Level Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

Monitoring Well ID	Top of Casing Elevation (ft. AMSL)	Date	Depth to Water (feet)	Static Water Level Elevation (ft. AMSL)
AS-LF-03	146.15	7/25/2017	25.80	120.35
		9/12/2017	26.30	119.85
		9/27/2017	26.52	119.63
		10/10/2017	26.81	119.34
		11/1/2017	27.20	118.95
		11/13/2017	27.20	118.95
		3/6/2018	27.69	118.46
		9/11/2018	28.21	117.94
		11/20/2018	26.96	119.19
		3/4/2019	25.07	121.08
		5/1/2019	25.50	120.65
		8/28/2019	27.50	118.65
		11/19/2019	28.69	117.46
		3/10/2020	25.19	120.96
		9/14/2020	26.65	119.50
		10/27/2020	26.20	119.95
		3/8/2021	24.54	121.61
		9/14/2021	26.49	119.66
		3/15/2022	27.30	118.85
		9/6/2022	28.01	118.14
MW-BG-73	141.57	3/6/2018	11.20	130.37
		9/10/2018	13.28	128.29
		11/20/2018	9.02	132.55
		3/5/2019	7.81	133.76
		5/1/2019	10.05	131.52
		8/28/2019	14.60	126.97
		11/18/2019	13.11	128.46
		3/11/2020	8.21	133.36
		5/26/2020	11.56	130.01
		9/15/2020	11.71	129.86
		10/26/2020	9.88	131.69
		3/8/2021	5.69	135.88
		9/14/2021	10.36	131.21
		3/15/2022	7.52	134.05
		9/6/2022	9.72	131.85

Notes:
1) ft AMSL = feet above mean sea level.

Table 2
Summary of First Semiannual 2022 Detection Monitoring Program Sampling Event Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

			Background Wells																			
		Sample ID:	**MW-BG-73**				**MW-LF-01**				**AS-LF-01**				**AS-LF-02**				**AS-LF-03**			
		Sample Date:	**03/15/2022**				**03/14/2022**				**03/15/2022**				**03/15/2022**				**03/15/2022**			
Parameter Name	**Units**	**Background Threshold Values**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**
CCR Appendix III																						
Boron	µg/L	140	**9.18**	J	5.20	15.0	**12.7**	J	5.20	15.0	**10.3**	J	5.20	15.0	**11.3**	J	5.20	15.0	**8.98**	J	5.20	15.0
Calcium	µg/L	6670	**304**		80.0	200	**126**	J	80.0	200	**772**		80.0	200	**943**		80.0	200	**606**		80.0	200
Chloride	mg/L	9.14	**2.27**		0.0670	0.200	**7.18**		0.0670	0.200	**8.89**		0.0670	0.200	**2.74**		0.0670	0.200	**5.28**		0.0670	0.200
Fluoride	mg/L	0.1	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100
pH	SU	2.5 - 6.2	4.56		0.1	0.1	4.41		0.1	0.1	4.50		0.1	0.1	5.00		0.1	0.1	4.37		0.1	0.1
Sulfate	mg/L	7.89	**0.377**	J	0.133	0.400	**0.301**	J	0.133	0.400	**0.752**		0.133	0.400	**3.43**		0.133	0.400	**0.433**		0.133	0.400
Total Dissolved Solids	mg/L	111	**4.29**	J	3.40	14.3	**11.4**	J	3.40	14.3	**22.9**		3.40	14.3	**12.9**	J	3.40	14.3	3.40	U	3.40	14.3
Field Parameters																						
Conductivity	µS/cm	--	23.30		0.1	0.1	53.10		0.1	0.1	58.95		0.1	0.1	31.20		0.1	0.1	50.35		0.1	0.1
Dissolved Oxygen	mg/L	--	6.13		0.01	0.01	6.78		0.01	0.01	6.62		0.01	0.01	2.81		0.01	0.01	7.18		0.01	0.01
Temperature	C	--	20.48		0.01	0.01	17.82		0.01	0.01	18.36		0.01	0.01	22.28		0.01	0.01	20.49		0.01	0.01
Turbidity	NTU	--	2.41		0.1	0.1	1.82		0.1	0.1	1.46		0.1	0.1	12.9		0.1	0.1	1.35		0.1	0.1
Depth to Water*	ft btoc	--	7.52		0.01	0.01	23.76		0.01	0.01	31.44		0.01	0.01	32.15		0.01	0.01	27.30		0.01	0.01
Groundwater Elevation*	ft msl	--	134.05		0.01	0.01	124.89		0.01	0.01	118.46		0.01	0.01	117.40		0.01	0.01	118.85		0.01	0.01
Oxidation Reduction Potential	millivolts	--	90.2		0.1	0.1	123.3		0.1	0.1	108.6		0.1	0.1	105.2		0.1	0.1	96.1		0.1	0.1

Notes:
MDL = Method Detection Limit
QL = Quantitation Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
ft btoc = feet below top of casing
ft msl = feet above mean sea level

Qualifiers (Qual)
J = Estimated Results
U = Samples reported below their respective MDL
= Concentration greater than Background Threshold Values
Bold font = Detected constituent
* - Groundwater Elevation data collected on March 15, 2022

Table 2
Summary of First Semiannual 2022 Detection Monitoring Program Sampling Event Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

			Background Well				Downgradient Wells													
		Sample ID:	MW-LF-06				MW-LF-07				MW-LF-08				MW-LF-10				MW-LF-10 DUP			
		Sample Date:	03/14/2022				03/14/2022				03/14/2022				03/14/2022				03/14/2022			
Parameter Name	**Units**	**Background Threshold Values**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**
CCR Appendix III																						
Boron	µg/L	140	**9.16**	J	5.20	15.0	**8.97**	J	5.20	15.0	**8.16**	J	5.20	15.0	**21.7**		5.20	15.0	**23.2**		5.20	15.0
Calcium	µg/L	6670	**887**		80.0	200	**981**		80.0	200	**897**		80.0	200	**19800**		80.0	200	**20000**		80.0	200
Chloride	mg/L	9.14	**6.73**		0.0670	0.200	**8.91**		0.0670	0.200	**5.57**		0.0670	0.200	**13.1**		0.335	1.00	**13.3**		0.670	2.000
Fluoride	mg/L	0.1	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	**0.351**		0.0330	0.100	**0.346**		0.0330	0.100
pH	SU	2.5 - 6.2	4.91		0.1	0.1	4.41		0.1	0.1	4.75		0.1	0.1	4.21		0.1	0.1	4.21		0.1	0.1
Sulfate	mg/L	7.89	**0.604**		0.133	0.400	**1.18**		0.133	0.400	**0.424**		0.133	0.400	**93.8**		1.33	4.00	**96.9**		1.33	4.00
Total Dissolved Solids	mg/L	111	**10.0**	J	3.40	14.3	**4.29**	J	3.40	14.3	**15.7**		3.40	14.3	**117**		3.40	14.3	**119**		3.40	14.3
Field Parameters																						
Conductivity	µS/cm	--	52.52		0.1	0.1	59.92		0.1	0.1	46.33		0.1	0.1	73.78		0.1	0.1	73.78		0.1	0.1
Dissolved Oxygen	mg/L	--	4.91		0.01	0.01	7.04		0.01	0.01	7.49		0.01	0.01	6.88		0.01	0.01	6.88		0.01	0.01
Temperature	C	--	17.89		0.01	0.01	20.01		0.01	0.01	21.28		0.01	0.01	27.98		0.01	0.01	27.98		0.01	0.01
Turbidity	NTU	--	3.83		0.1	0.1	4.31		0.1	0.1	0.79		0.1	0.1	4.32		0.1	0.1	4.32		0.1	0.1
Depth to Water*	ft btoc	--	29.76		0.01	0.01	24.15		0.01	0.01	24.89		0.01	0.01	19.19		0.01	0.01	19.19		0.01	0.01
Groundwater Elevation*	ft msl	--	116.21		0.01	0.01	115.83		0.01	0.01	112.78		0.01	0.01	112.34		0.01	0.01	112.34		0.01	0.01
Oxidation Reduction Potential	millivolts	--	146.2		0.1	0.1	129.3		0.1	0.1	129.3		0.1	0.1	187.2		0.1	0.1	187.2		0.1	0.1

Notes:
MDL = Method Detection Limit
QL = Quantitation Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
ft btoc = feet below top of casing
ft msl = feet above mean sea level

Qualifiers (Qual)
J = Estimated Results
U = Samples reported below their respective MDL
= Concentration greater than Background Threshold Values
Bold font = Detected constituent
* - Groundwater Elevation data collected on March 15, 2022

Table 2
Summary of First Semiannual 2022 Detection Monitoring Program Sampling Event Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

			Downgradient Wells											
		Sample ID:	**MW-LF-10A**				**MW-LF-11**				**MW-LF-22**			
		Sample Date:	**03/14/2022**				**03/14/2022**				**03/14/2022**			
Parameter Name	**Units**	**Background Threshold Values**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**
CCR Appendix III														
Boron	µg/L	140	**10.2**	J	5.20	15.0	**10.5**	J	5.20	15.0	**15.8**		5.20	15.0
Calcium	µg/L	6670	**395**		80.0	200	**378**		80.0	200	**1950**		80.0	200
Chloride	mg/L	9.14	**4.14**		0.0670	0.200	**5.89**		0.0670	0.200	**10.3**		0.134	0.400
Fluoride	mg/L	0.1	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100
pH	SU	2.5 - 6.2	4.72		0.1	0.1	4.62		0.1	0.1	4.34		0.1	0.1
Sulfate	mg/L	7.89	**0.742**		0.133	0.400	**0.285**	J	0.133	0.400	**1.11**		0.133	0.400
Total Dissolved Solids	mg/L	111	3.40	U	3.40	14.3	**18.6**		3.40	14.3	**7.14**	J	3.40	14.3
Field Parameters														
Conductivity	µS/cm	--	34.55		0.1	0.1	40.21		0.1	0.1	78.97		0.1	0.1
Dissolved Oxygen	mg/L	--	5.07		0.01	0.01	6.07		0.01	0.01	4.77		0.01	0.01
Temperature	C	--	20.50		0.01	0.01	19.94		0.01	0.01	20.84		0.01	0.01
Turbidity	NTU	--	3.12		0.1	0.1	3.12		0.1	0.1	2.27		0.1	0.1
Depth to Water*	ft btoc	--	20.40		0.01	0.01	22.17		0.01	0.01	22.59		0.01	0.01
Groundwater Elevation*	ft msl	--	112.09		0.01	0.01	113.09		0.01	0.01	113.16		0.01	0.01
Oxidation Reduction Potential	millivolts	--	161.5		0.1	0.1	102.0		0.1	0.1	291.9		0.1	0.1

Notes:
MDL = Method Detection Limit
QL = Quantitation Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
ft btoc = feet below top of casing
ft msl = feet above mean sea level

Qualifiers (Qual)
J = Estimated Results
U = Samples reported below their respective MDL
= Concentration greater than Background Threshold Values
Bold font = Detected constituent
* - Groundwater Elevation data collected on March 15, 2022

Table 3
Summary of Second Semiannual 2022 Detection Monitoring Program Sampling Event Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

			Background Wells																			
		Sample ID:	**MW-BG-73**				**MW-LF-01**				**AS-LF-01**				**AS-LF-02**				**AS-LF-03**			
		Sample Date:	**09/09/2022**				**09/09/2022**				**09/09/2022**				**09/09/2022**				**09/09/2022**			
Parameter Name	**Units**	**Background Threshold Values**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**
CCR Appendix III																						
Boron	µg/L	140	**10.9**	J	5.20	15.0	**11.5**	J	5.20	15.0	**8.99**	J	5.20	15.0	**8.97**	J	5.20	15.0	**9.14**	J	5.20	15.0
Calcium	µg/L	6670	**280**		80.0	200	**125**	J	80.0	200	**1200**		80.0	200	**1220**		80.0	200	**658**		80.0	200
Chloride	mg/L	9.14	**2.52**		0.0670	0.200	**6.69**		0.0670	0.200	**8.91**		0.0670	0.200	**2.82**		0.0670	0.200	**5.48**		0.0670	0.200
Fluoride	mg/L	0.1	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100
pH	SU	2.5 - 6.2	4.13		0.1	0.1	4.38		0.1	0.1	4.54		0.1	0.1	4.94		0.1	0.1	3.93		0.1	0.1
Sulfate	mg/L	7.89	**0.398**	J	0.133	0.400	0.133	U	0.133	0.400	**0.891**		0.133	0.400	**3.25**		0.133	0.400	**0.587**		0.133	0.400
Total Dissolved Solids	mg/L	111	2.38	U	2.38	10.0	**9.00**	J	2.38	10.0	**17.0**		2.38	10.0	**7.00**	J	5.20	15.0	**10.0**		5.20	15.0
Field Parameters																						
Conductivity	µS/cm	--	25.09		0.1	0.1	54.71		0.1	0.1	58.65		0.1	0.1	34.01		0.1	0.1	53.59		0.1	0.1
Dissolved Oxygen	mg/L	--	5.50		0.01	0.01	5.62		0.01	0.01	7.45		0.01	0.01	3.15		0.01	0.01	6.78		0.01	0.01
Temperature	C	--	23.07		0.01	0.01	21.37		0.01	0.01	19.59		0.01	0.01	22.14		0.01	0.01	21.75		0.01	0.01
Turbidity	NTU	--	0.59		0.1	0.1	1.80		0.1	0.1	2.77		0.1	0.1	41		0.1	0.1	1.01		0.1	0.1
Depth to Water*	ft btoc	--	9.72		0.01	0.01	24.30		0.01	0.01	32.10		0.01	0.01	32.88		0.01	0.01	28.01		0.01	0.01
Groundwater Elevation*	ft msl	--	131.85		0.01	0.01	124.35		0.01	0.01	117.80		0.01	0.01	116.67		0.01	0.01	118.14		0.01	0.01
Oxidation Reduction Potential	millivolts	--	302.4		0.1	0.1	223.4		0.1	0.1	218.2		0.1	0.1	197.0		0.1	0.1	256.2		0.1	0.1

Notes:
MDL = Method Detection Limit
QL = Quantitation Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
ft btoc = feet below top of casing
ft msl = feet above mean sea level

Qualifiers (Qual)
J = Estimated Results
U = Samples reported below their respective MDL
= Concentration greater than Background Threshold Values
Bold font = Detected constituent
* - Groundwater Elevation data collected on September 6, 2022

Table 3
Summary of Second Semiannual 2022 Detection Monitoring Program Sampling Event Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

			Background Well								Downgradient Wells											
		Sample ID:	AS-LF-03 DUP				MW-LF-06				MW-LF-07				MW-LF-08				MW-LF-10			
		Sample Date:	09/09/2022				09/09/2022				09/09/2022				09/12/2021				09/12/2022			
Parameter Name	**Units**	**Background Threshold Values**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**
CCR Appendix III																						
Boron	µg/L	140	**8.56**	J	5.20	15.0	**7.41**	J	5.20	15.0	**8.83**	J	5.20	15.0	**9.02**	J	5.20	15.0	**11.3**	J	5.20	15.0
Calcium	µg/L	6670	**639**		80.0	200	**925**		80.0	200	**1010**		80.0	200	**850**		80.0	200	**2890**		80.0	200
Chloride	mg/L	9.14	**5.50**		0.0670	0.200	**6.46**		0.0670	0.200	**7.79**		0.0670	0.200	**5.07**		0.0670	0.200	**7.01**		0.335	1.00
Fluoride	mg/L	0.1	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	**0.0448**	J	0.0330	0.100	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100
pH	SU	2.5 - 6.2	3.93		0.1	0.1	4.79		0.1	0.1	3.97		0.1	0.1	4.37		0.1	0.1	4.10		0.1	0.1
Sulfate	mg/L	7.89	**0.870**		0.133	0.400	**0.590**		0.133	0.400	**1.41**		0.133	0.400	**0.563**		0.133	0.400	**9.79**		0.133	0.400
Total Dissolved Solids	mg/L	111	**8.00**	J	5.20	15.0	**11.0**		2.38	10.0	**3.00**	J	2.38	10.0	**7.00**	J	2.38	10.0	**33.0**		2.38	10.0
Field Parameters																						
Conductivity	µS/cm	--	53.59		0.1	0.1	49.80		0.1	0.1	55.34		0.1	0.1	41.91		0.1	0.1	74.37		0.1	0.1
Dissolved Oxygen	mg/L	--	6.78		0.01	0.01	6.22		0.01	0.01	6.64		0.01	0.01	6.85		0.01	0.01	6.01		0.01	0.01
Temperature	C	--	21.75		0.01	0.01	19.44		0.01	0.01	27.19		0.01	0.01	24.65		0.01	0.01	25.34		0.01	0.01
Turbidity	NTU	--	1.01		0.1	0.1	3.68		0.1	0.1	5.90		0.1	0.1	2.41		0.1	0.1	4.48		0.1	0.1
Depth to Water*	ft btoc	--	28.01		0.01	0.01	30.44		0.01	0.01	24.65		0.01	0.01	25.16		0.01	0.01	19.61		0.01	0.01
Groundwater Elevation*	ft msl	--	118.14		0.01	0.01	115.53		0.01	0.01	115.33		0.01	0.01	112.51		0.01	0.01	111.92		0.01	0.01
Oxidation Reduction Potential	millivolts	--	256.2		0.1	0.1	217.5		0.1	0.1	316.9		0.1	0.1	142.3		0.1	0.1	342.7		0.1	0.1

Notes:
MDL = Method Detection Limit
QL = Quantitation Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
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SU = Standard Units
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Bold font = Detected constituent
* - Groundwater Elevation data collected on September 6, 2022

Table 3
Summary of Second Semiannual 2022 Detection Monitoring Program Sampling Event Data
Dominion Energy South Carolina - Wateree Station Class III Landfill
Eastover, Richland County, South Carolina

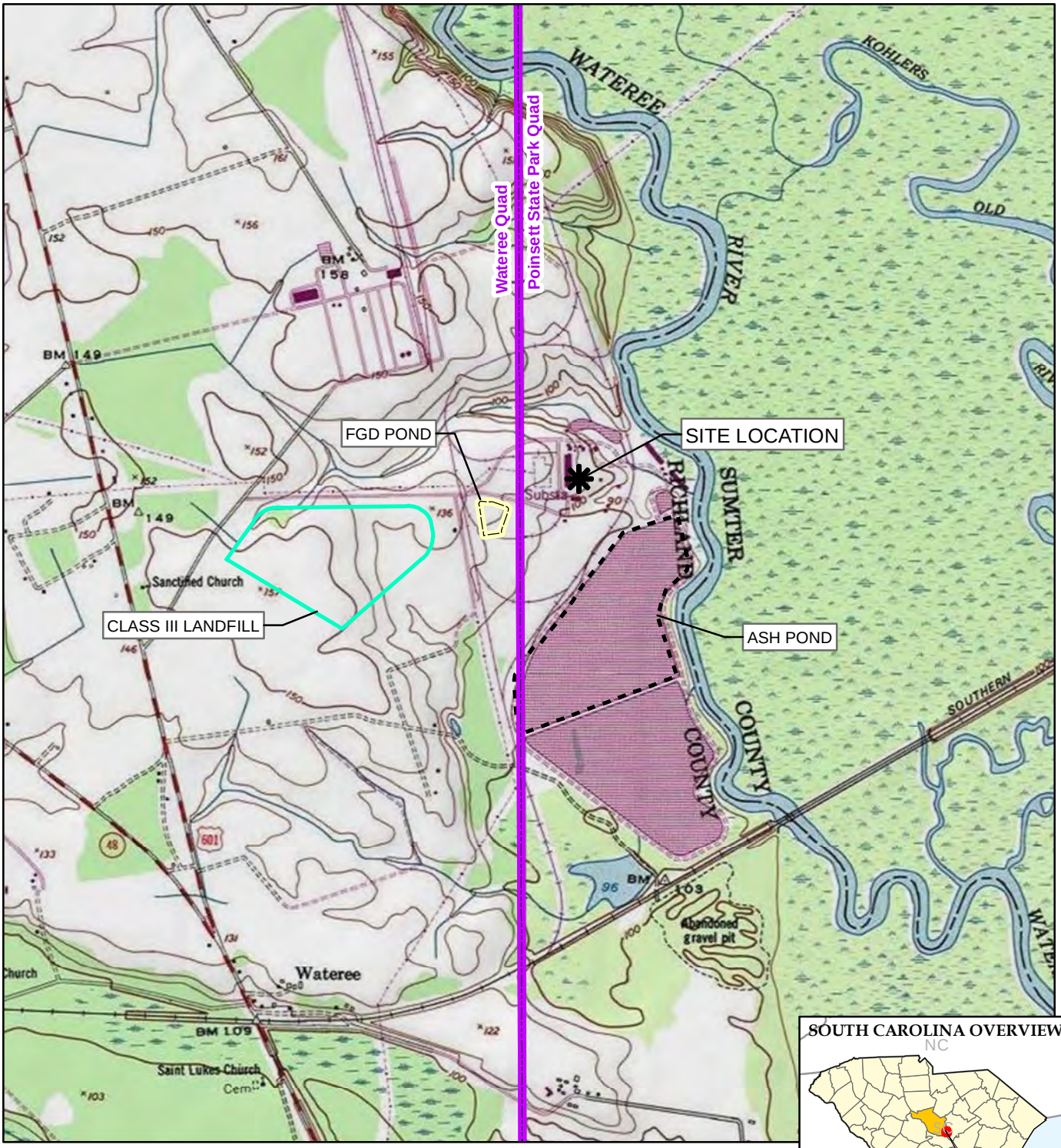
			Downgradient Wells											
		Sample ID:	**MW-LF-10A**				**MW-LF-11**				**MW-LF-22**			
		Sample Date:	**09/12/2022**				**09/12/2022**				**09/08/2022**			
Parameter Name	**Units**	**Background Threshold Values**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**	**Result**	**Qual**	**MDL**	**QL**
CCR Appendix III														
Boron	µg/L	140	**8.61**	J	5.20	15.0	**9.57**	J	5.20	15.0	**15.1**		5.20	15.0
Calcium	µg/L	6670	**332**		80.0	200	**379**		80.0	200	**2060**		80.0	200
Chloride	mg/L	9.14	**4.17**		0.0670	0.200	**5.75**		0.0670	0.200	**9.99**		0.134	0.400
Fluoride	mg/L	0.1	0.0330	U	0.0330	0.100	0.0330	U	0.0330	0.100	**0.0707**	J	0.0330	0.100
pH	SU	2.5 - 6.2	4.26		0.1	0.1	4.14		0.1	0.1	4.15		0.1	0.1
Sulfate	mg/L	7.89	**0.791**		0.133	0.400	**0.499**		0.133	0.400	**1.06**		0.133	0.400
Total Dissolved Solids	mg/L	111	**10.0**		2.38	10.0	**11.0**		2.38	10.0	**21.0**		2.38	10.0
Field Parameters														
Conductivity	µS/cm	--	33.79		0.1	0.1	41.41		0.1	0.1	81.80		0.1	0.1
Dissolved Oxygen	mg/L	--	4.88		0.01	0.01	6.06		0.01	0.01	3.60		0.01	0.01
Temperature	C	--	26.09		0.01	0.01	24.51		0.01	0.01	22.19		0.01	0.01
Turbidity	NTU	--	2.53		0.1	0.1	1.64		0.1	0.1	2.45		0.1	0.1
Depth to Water*	ft btoc	--	20.83		0.01	0.01	22.72		0.01	0.01	22.82		0.01	0.01
Groundwater Elevation*	ft msl	--	111.66		0.01	0.01	112.54		0.01	0.01	112.93		0.01	0.01
Oxidation Reduction Potential	millivolts	--	196.0		0.1	0.1	194.4		0.1	0.1	114.1		0.1	0.1

Notes:
MDL = Method Detection Limit
QL = Quantitation Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
ft btoc = feet below top of casing
ft msl = feet above mean sea level

Qualifiers (Qual)
J = Estimated Results
U = Samples reported below their respective MDL
= Concentration greater than Background Threshold Values
Bold font = Detected constituent
* - Groundwater Elevation data collected on September 6, 2022

Figures

TRC - GIS



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES (WATEREE & POINSETT STATE PARK).

USGS 24k QUAD BOUNDARY
SITE LOCATION
CLASS III LANDFILL BOUNDARY
ASH POND
FGD POND

N

1 " = 2,000 '
1:24,000

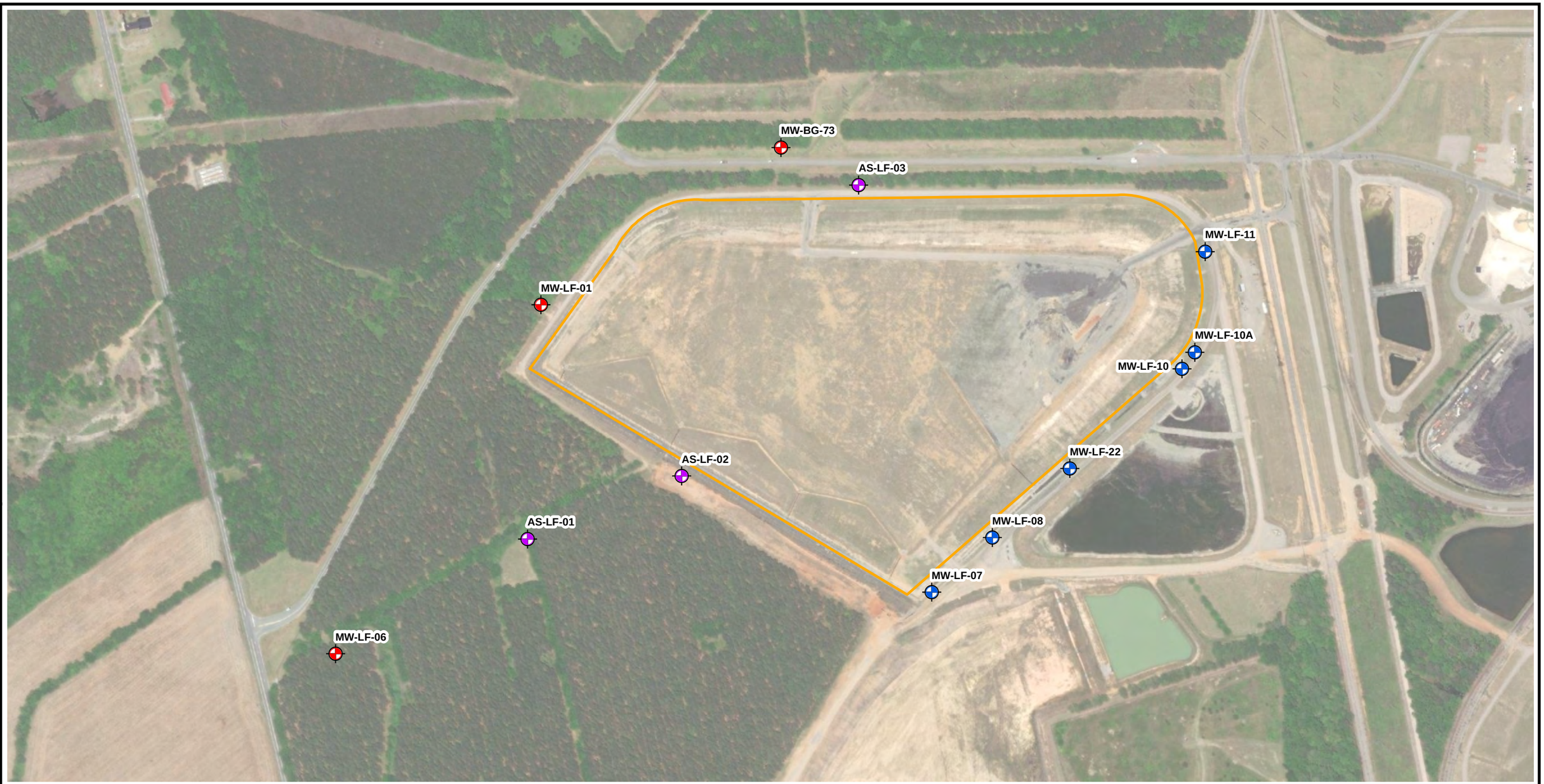
0 1,000 2,000 FEET

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030

DOMINION ENERGY SOUTH CAROLINA
WATEREE STATION
142 WATEREE STATION ROAD
EASTOVER, SOUTH CAROLINA 29044

FIGURE 1
SITE LOCATION MAP

DRAWN BY:	J. YONTS
APPROVED BY:	R. MAYER
PROJECT NO:	416559.0007.0000
FILE NO.	Figure1_Wateree_LF_Loc_Map_CCR.mxd
DATE:	DECEMBER 2022



LEGEND

- CCR Background Monitoring Well
- CCR Downgradient Monitoring Well
- CCR Background ASD Monitoring Well
- Class III Landfill Boundary

NOTE: Aerial Image from ESRI World Imagery dated April 2021.

N W E S

0 400 800 Feet

1 " = 400 '
1:4,800

PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
CCR RULE COMPLIANCE MONITORING WELL NETWORK

DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	R. MAYER		**FIGURE 2**
APPROVED BY:	R. MAYER		
DATE:	DECEMBER 2022		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
www.TRCcompanies.com

FILE NO.: Figure2_CCR_LF_Well_Network.mxd

Plot Date: 12/28/2022, 14:27:37 PM by JYONTS -- LAYOUT: ANSI B(11"x17")
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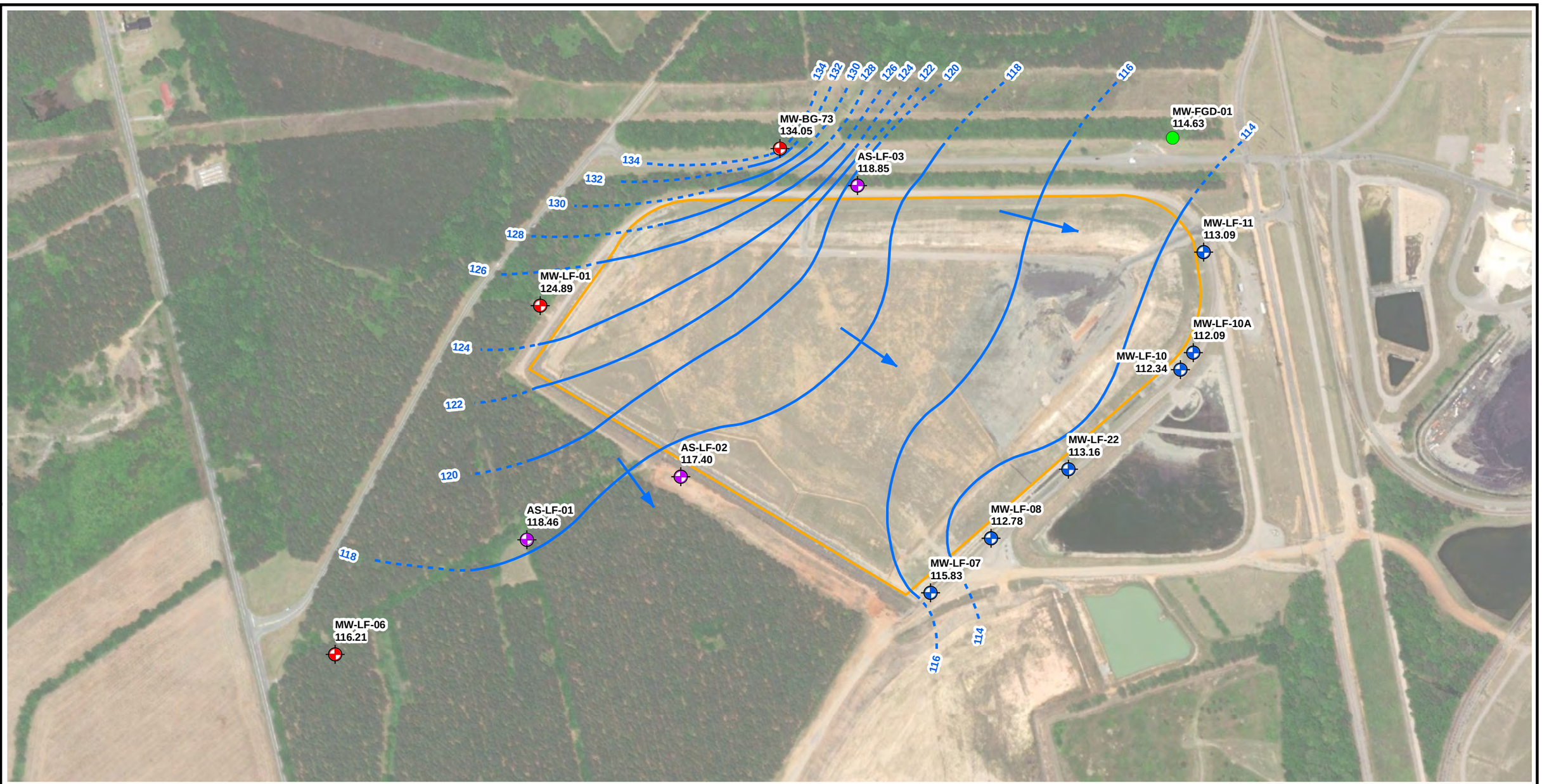
Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0

TRC - GIS



LEGEND

- CCR Background Monitoring Well
- CCR Downgradient Monitoring Well
- CCR Background ASD Monitoring Well
- Event Piezometer
- Class III Landfill Boundary

Water Table Elevation in feet above mean sea level (2' Contour Intervals) - Dashed where inferred.

Approximate Groundwater Flow Direction

117.40 Water Elevation (FT MSL)

NOTE: Aerial Image from ESRI World Imagery dated April 2021.

N W E S

0 400 800 Feet

1 " = 400 '
1:4,800

PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP - MARCH 15, 2022

DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	R. MAYER		
APPROVED BY:	R. MAYER		**FIGURE 3**
DATE:	JANUARY 2023		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
www.TRCcompanies.com

FILE NO.: Figure3_CCR_WT_LF_2022_Q1.mxd

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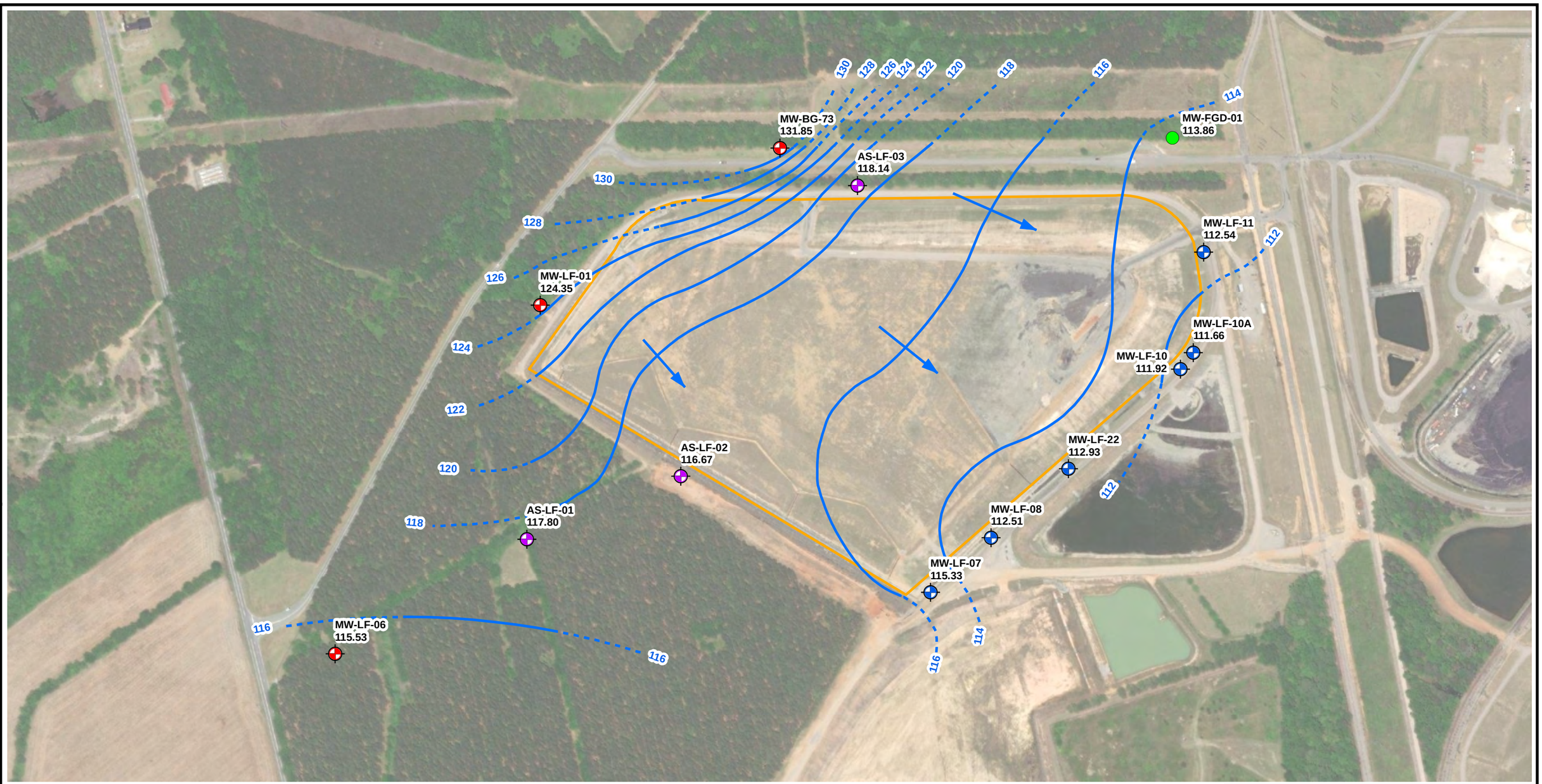
Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0
TRC - GIS



LEGEND

- CCR Background Monitoring Well
- CCR Downgradient Monitoring Well
- CCR Background ASD Monitoring Well
- Event Piezometer
- Class III Landfill Boundary

Water Table Elevation in feet above mean sea level (2' Contour Intervals) - Dashed where inferred.

Approximate Groundwater Flow Direction

116.67 Water Elevation (FT MSL)

NOTE: Aerial Image from ESRI World Imagery dated April 2021.

N W E S

0 400 800 Feet

1 " = 400 '
1:4,800

PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP - SEPTEMBER 6, 2022

DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	R. MAYER		
APPROVED BY:	R. MAYER		**FIGURE 4**
DATE:	DECEMBER 2022		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
www.TRCcompanies.com

FILE NO.: Figure4_CCR_WT_LF_2022_Q3.mxd

TRC - GIS
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Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0

Appendix A
September 2021 Alternate Source Demonstration

DOMINION ENERGY SOUTH CAROLINA

WATEREE STATION CLASS III LANDFILL

RICHLAND COUNTY, SOUTH CAROLINA

EPA CCR RULE COMPLIANCE

ALTERNATE SOURCE DEMONSTRATION REPORT

Second Semiannual 2021 Detection Monitoring Event

April 2022

Nakia W. Addison, P.E.
Senior Engineer

Richard A. Mayer Jr., P. G.
Project Hydrogeologist

\\greenville-fp1\WPGVL\PJT2\416559\0005 Wateree\R4165590005-011 Wateree_Class_III_LF_ASD Report_2nd Semiannual 2021.docx

50 INTERNATIONAL DRIVE, SUITE 150, GREENVILLE, SC 29615, ● 864.281.0030 PHONE ● 864.281.0288 FAX ● WWW.TRCCOMPANIES.COM

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Executive Summary

Dominion Energy South Carolina (DESC) completed the most recent semiannual detection monitoring sampling (second semiannual 2021 sampling event) in September 2021 for the Wateree Generating Station (Station) Class III Industrial Landfill (Unit) pursuant to the *Criteria for Classification of Solid Waste Disposal Facilities and Practices; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, 40 CFR Part 257 (CCR Rule). The Unit constitutes a coal combustion residuals (CCR) Unit per the CCR Rule. Per 40 CFR §257.94, the samples were analyzed for the Appendix III detection monitoring parameters. Upon receipt of the laboratory analytical results, statistical analysis was performed and evaluated for potential statistically significant increases (SSI) above background concentrations.

The following SSIs above the background concentrations were identified based on direct comparisons made between the statistically derived background threshold values (95 percent upper prediction limit) and the downgradient monitoring results:

- Calcium, fluoride, and sulfate (MW-LF-10).
- Chloride (MW-LF-11).

The information provided in this report serves as DESC's alternate source demonstration (ASD) prepared in accordance with 40 CFR §257.94(e)(2) and successfully demonstrates that the SSIs are not due to a release from the Unit to groundwater, but are due to the following:

- Natural variation in groundwater quality within the area.

Therefore, based on the information provided in this ASD report, DESC will continue to conduct semiannual detection monitoring for Appendix III constituents in accordance with 40 CFR §257.94 at the certified groundwater monitoring well system (Certified Monitoring Well Network) for the CCR Unit.

Section 1
Introduction

1.1 Background

Dominion Energy South Carolina, Inc. (DESC) operates the Wateree Generating Station (Station), a coal-fired power plant, to generate electricity. The Station is located at 142 Wateree Station Road in Eastover, Richland County, South Carolina as shown on **Figure 1**. Coal combustion residuals (CCR) are produced as part of the electrical generation operations at the Station. The Station has been generating and disposing of CCR on-site in a coal ash disposal landfill (Unit) since it began operations in 2008. The Unit is a Class 3 non-commercial industrial landfill and operates under South Carolina Department of Health and Environmental Control (SCDHEC) Solid Waste Permit No. LF-3-00026.

The on-site Unit consists of 18 landfill cells planned for development in multiple phases and encompasses a total of 141 future lined acres. The current landfill facility has constructed Cells 1 through 9. Cells 1 through 5 encompasses 34 acres while cells 6 through 9 encompasses an additional 37 acres. These cells were placed into operation in accordance with an operation plan approval issued by SCDHEC in 2010 (cells 1 through 5) and 2015 (cells 6 through 9), respectively.

The Unit receives both fly ash and flue gas desulfurization (FGD) waste from the Station and includes a liner system consisting of a minimum 2-foot-thick compacted clay layer (maximum permeability of 1×10^{-7} cm/sec) overlain by a 60-mil HDPE geomembrane and leachate collection system.

The Unit accepts CCR for disposal in accordance with the federal *Criteria for Classification of Solid Waste Disposal Facilities and Practices; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule* (CCR Rule), effective October 19, 2015, and subsequent Final Rules promulgated by the United States Environmental Protection Agency (USEPA).

1.2 Groundwater Monitoring and Statistical Analysis

In accordance with 40 CFR §257.90 through §257.94, DESC installed a groundwater monitoring system for the Unit and has collected samples from the Certified Monitoring Well Network for laboratory analysis for CCR constituents and performed statistical analysis of the collected samples. DESC installed a Certified Monitoring Well Network for the CCR Unit in accordance with 40 CFR §257.90 and §257.91. The location of the EPA CCR Rule Compliance Monitoring Well Network is presented on **Figure 2**. The

Certified Monitoring Well Network consists of 12 wells installed into the subsurface to monitor shallow groundwater as follows:

- Six wells were installed as background monitoring wells and include AS-LF-01, AS-LF-02, AS-LF-03, MW-BG-73, MW-LF-01, and MW-LF-06.
- Six wells were installed as compliance monitoring wells and include MW-LF-07, MW-LF-08, MW-LF-10, MW-LF-10A, MW-LF-11, and MW-LF-22.

Pursuant to 40 CFR §257.91(f), DESC obtained certification by a qualified South Carolina-registered professional engineer (P.E.) stating that the Certified Monitoring Well Network has been designed and constructed to meet the requirements of 40 CFR §257.91 of the CCR Rule (Garrett & Moore 2017).

As discussed above, the Unit is currently being monitored pursuant to the CCR Rule. A groundwater sampling and analysis plan including selection of statistical procedures to evaluate groundwater data was prepared per the CCR Rule (Nautilus 2016). Eight quarterly background CCR detection monitoring events were performed from May 2016 through July 2017 in accordance with 40 CFR §257.93(d) and §257.94(b). The eight quarterly detection monitoring background samples were analyzed for Appendix III to Part 257 – Constituents for Detection Monitoring and for Appendix IV to Part 257 – Constituents for Assessment Monitoring.

Following completion of quarterly background detection monitoring in July 2017, DESC implemented semiannual detection monitoring per 40 CFR §257.94(b) for the CCR Unit. The second semiannual (initial) detection monitoring event was performed in September 2017. Subsequent detection monitoring events, with associated verification sampling when appropriate, have been performed on a semiannual basis since September 2017. DESC completed the second 2021 semiannual detection monitoring event in September 2021. Per the CCR Rule, the semiannual detection monitoring event samples were analyzed for Appendix III constituents.

After completion of each semiannual detection monitoring event, the Appendix III data were statistically evaluated to identify potential statistically significant increases (SSIs) for Appendix III constituents above background levels. In accordance with 40 CFR §257.93(f)(6), DESC obtained certification by a qualified South Carolina-registered P.E. stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR Unit (SCE&G 2017).

Pursuant to 40 CFR §257.93(h), statistical analysis of the laboratory analytical data was performed to identify potential SSIs for the second semiannual 2021 detection monitoring event. Data from the second semiannual 2021 detection monitoring event is presented in **Table 1**. A total of 4 SSIs were identified for four Appendix III constituents: calcium, chloride, fluoride, and sulfate.

1.3 Purpose

Pursuant to 40 CFR §257.94(e)(2), DESC may demonstrate that a source other than the CCR Unit caused the SSIs identified or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The purpose of this report is to provide written documentation of the successful ASD for the SSIs identified for the second semiannual 2021 detection monitoring event, pursuant to 40 CFR §257.94(e)(2) of the CCR Rule.

1.4 Site Hydrogeology

The Station is located within the Catawba-Wateree River Subbasin (Santee River Basin watershed) of the Coastal Plain physiographic province. Aquifers and confining units in the South Carolina portion of the Coastal Plain are composed of crystalline carbonate rocks, sand, clay, silt, and gravel that contain large volumes of high-quality groundwater (SAWSC 2016). The Unit groundwater monitoring wells are within the surficial aquifer of the Black Creek geologic formation. This formation ranges from ground surface to a depth of approximately 350 feet and consists of medium to coarse-grained glauconitic and phosphatic quartz sands interbedded with lenses of lignitic and micaceous clay beds (SCDNR 2009). Groundwater flow beneath the Unit is generally to the southeast as depicted on **Figure 3**. Hydraulic conductivity values in the surficial aquifer at the Unit range from 2.47×10^{-4} cm/s to 2.33×10^{-2} cm/s with an estimated groundwater flow velocities of between 0.02 to 2.09 feet/day (Nautilus 2021).

1.5 General Groundwater Quality

Regionally, groundwater quality within the Black Creek Aquifer may contain high fluoride values attributed to the presence of fluorapatite from abundant fossilized shark teeth in the formation (SCDHEC 2013). Groundwater is generally alkaline in composition consisting of a sodium bicarbonate water type (SCDHEC 2013). The USEPA has established National Primary Drinking Water Regulations that define a permitted maximum contaminant level (MCL) for specific constituents in drinking water. The primary MCLs are legally enforceable standards that were established to protect public health by limiting the levels of contaminants in drinking water. Additionally, the USEPA has established non-enforceable secondary MCLs for guidelines to assist public water systems in managing their drinking water for aesthetic consideration such as taste, color, and odor. Reported water quality concentrations for select primary and/or secondary drinking water contaminants compared to USEPA MCLs are provided in the table below.

Catawba-Wateree River Subbasin Groundwater Water Quality

Constituent	Concentration Range		USEPA MCL
	Low	High	
Calcium (mg/L)	8	200	None
Chloride (mg/L)	1	36	250 (Secondary)
Fluoride (mg/L)	0.10	4.0	4.0 (Primary)
Sulfate (mg/L)	1	118	250 (Secondary)

Note: mg/L = milligram per liter

As noted in the table above, the natural range of groundwater quality within the Catawba-Wateree River Subbasin approaches the primary MCL established by the USEPA for drinking water with respect to fluoride and is less than the secondary MCLs for chloride and sulfate (SCDNR 2009). A primary or secondary drinking water MCL has not been established for calcium however, the natural range of groundwater quality in the Catawba-Wateree River Subbasin is reported to be in the range of 8 mg/L to 200 mg/L (SCDNR 2009).

Section 2
Alternate Source Demonstration

Pursuant to 40 CFR §257.94(e)(2), DESC may demonstrate that a source other than the CCR Unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. As discussed previously, the second semiannual 2021 detection monitoring event was performed in September 2021. Statistical analysis of the second semiannual 2021 detection monitoring data was performed pursuant to 40 CFR §257.93(f) and (g) and in accordance with the Statistical Methods Certification (SCE&G 2017) and the Statistical Analysis Plan (OBG 2017). Based on either increasing trends at 95% confidence levels using Thiel-Sen's trend test and/or interwell prediction limits statistical analyses, the following 4 SSIs were identified:

- Calcium, fluoride, and sulfate (MW-LF-10).
- Chloride (MW-LF-11).

All other Appendix III constituent concentrations were within their trends at 95% confidence levels using Thiel-Sen's trend and/or interwell prediction limits in all the CCR Rule groundwater downgradient monitoring system wells.

A discussion for each of the individual SSIs and associated evidence demonstrating that the SSIs were not caused by a release from the Unit is provided in the subsections below.

2.1 Calcium at MW-LF-10

The calcium SSI identified at MW-LF-10 is a result of natural variation in groundwater quality from areas upgradient from the Unit. The following evidence supports this determination:

- Because of upward trending in the background data set, the calcium SSI was identified based on a comparison of trend slopes, with the lower confidence limit (LCL) of the trend at MW-LF-10 (1.803) higher than the upper confidence limit (UCL) of the background trend at a 95% confidence level (1.063). Calcium was detected in MW-LF-10 at a concentration of 8.39 mg/L in the September 2021 sample. This concentration exceeds the concentration-based background threshold value of 6.67 mg/L. Reported regional calcium concentrations for groundwater in the Station area range between 8 mg/L to 200 mg/L (SCDNR 2009). The detected calcium concentration of 8.39 mg/L from September 2021 falls at the lower end of this naturally occurring range.

2.2 Fluoride at MW-LF-10

The fluoride SSI identified at MW-LF-10 is a result of natural variation in groundwater quality from areas upgradient from the Unit. The following evidence supports this determination:

- Fluoride was detected in MW-LF-10 at a concentration of 0.122 mg/L in the September 2021 sample. This concentration slightly exceeds the background threshold value of 0.10 mg/L, which is also the reporting limit of the analytical method. Reported regional fluoride concentrations for groundwater in the Station area range between 0.1 mg/L to 4.0 mg/L (SCDNR 2009). The detected fluoride concentration of 0.122 mg/L from September 2021 falls at the lower end of this naturally occurring range.
- Since November 2016, fluoride has been detected at concentrations above the 0.1 mg/L background threshold value only four times: in MW-LF-07 in November 2016, in MW-LF-10 in November 2018 and September 2021, and in MW-LF-10A in March 2021. Fluoride concentrations in these samples ranged from 0.118 mg/L to 0.23 mg/L. Because these detections are sporadic and infrequent, it is unlikely that they represent a release from the Unit, but more likely that they represent natural variability in groundwater quality.

2.3 Sulfate at MW-LF-10

The sulfate SSI identified at MW-LF-10 is a result of natural variation in groundwater quality from areas upgradient from the Unit. The following evidence supports this determination:

- Sulfate was detected in MW-LF-10 at a concentration of 28.7 mg/L in the September 2021 sample. This concentration exceeds the background threshold value of 7.89 mg/L. Reported regional sulfate concentrations for groundwater in the Station area range between 1 mg/L to 118 mg/L (SCDNR 2009). The detected sulfate concentration of 28.7 mg/L from September 2021 falls within the range of natural variation in area groundwater quality.

2.4 Chloride at MW-LF-11

The chloride SSI identified at MW-LF-11 is a result of natural variation in groundwater quality from areas upgradient from the Unit. The following evidence supports this determination:

- Because of downward trending in the background data set, the chloride SSI was identified based on a comparison of trend slopes, with the LCL of the trend at MW-LF-11 (0.000244) higher than the UCL of the background trend at a 95 percent confidence level (-0.0000703). Chloride was detected in MW-LF-11 at a concentration of 5.34 mg/L in the September 2021 sample. While this concentration does not exceed the concentration-based background threshold value of 9.14 mg/L, the SSI was based on the trend of the slope. Reported regional chloride concentrations for groundwater in the Station area range between 1 mg/L to 36 mg/L (SCDNR 2009). The detected sulfate concentration of 5.34 mg/L from September 2021 falls within the range of natural variation in area groundwater quality.

Section 3
Conclusions

The information provided in this report serves as the ASD prepared in accordance with 40 CFR §257.94(e)(2) of the CCR Rule and demonstrates that the SSIs determined based on statistical analysis of the second semiannual 2021 detection monitoring event performed in September of 2021 was not due to a release from the Unit to the subsurface.

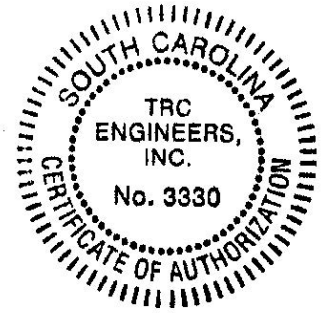
Based on the information provided in this ASD report, DESC will continue to conduct semiannual detection monitoring in accordance with 40 CFR §257.94 at the Certified Monitoring Well Network for the CCR Unit.

Section 4
Certification

I hereby certify that the alternative source demonstration presented within this document for the DESC Wateree Station Class III Industrial Landfill CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e)2 of the Federal CCR Rule. This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e) 2.

Name: Nakia W. Addison, P.E. **Expiration Date:** June 30, 2024

Company: TRC Engineers, Inc. **Date:** April 13, 2022



(SEAL)

Section 5
References

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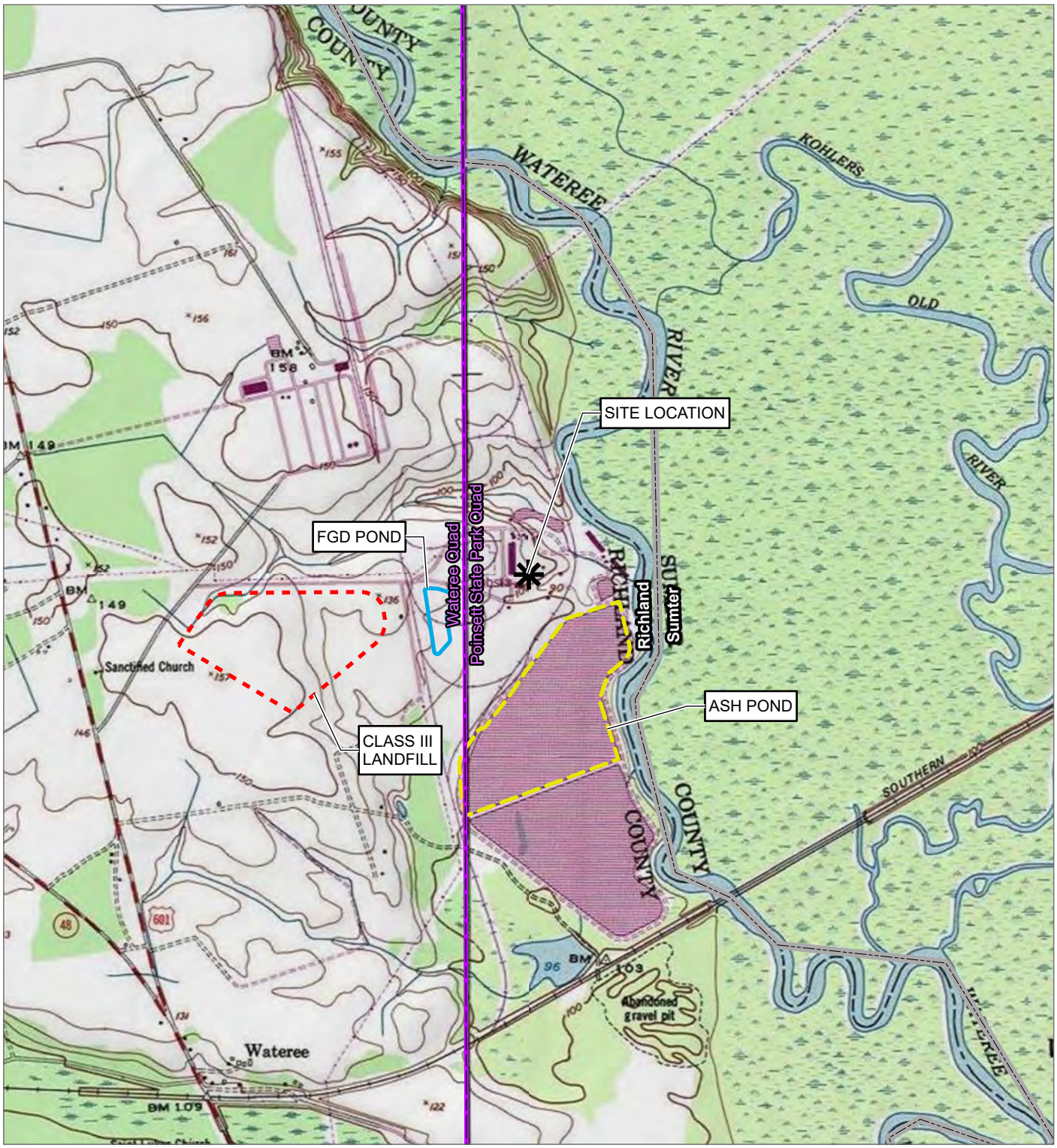
Figures



- SITE LOCATION
- ASH POND BOUNDARY
- CLASS III LANDFILL BOUNDARY
- FGD POND
- COUNTY BOUNDARY
- USGS 24K QUAD BOUNDARY

BASE MAP: USGS TOPO MAP
DATA SOURCES: TRC, USGS 7.5' QUADRANGLES:
POINSETT STATE PARK (1983) QUAD ID: 33080-G5, SC;
WATEREE (1983) QUAD ID: 33080-G6, SC

0 1,000 2,000 FEET

1:24,000 1" = 2,000'

PROJECT: **DOMINION ENERGY SOUTH CAROLINA WATEREE STATION**
142 WATEREE STATION ROAD, EASTOVER, SC 29044

TITLE:

SITE LOCATION MAP

DRAWN BY:	R. BARBER	PROJ. NO.:	416559.0005.0000
CHECKED BY:	A. HORRIE		
APPROVED BY:	R. MAYER		**FIGURE 1**
DATE:	JANUARY 2022		

TRC
708 HEARTLAND TRAIL
SUITE 3000
MADISON, WI 53717
PHONE: 608.826.3600

FILE: DOMINION_VARIOUS

TRC - GIS

Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0

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LEGEND

- Monitoring Well
- Event Piezometer
- Class III Landfill
- FGD Pond
- Backfilled Clean Closed Ash Pond Area

Notes:
1 - Aerial Image from ESRI World Imagery dated April 2021.

N
W E
S

0 375 750 Feet
1 " = 375 '
1:4,500

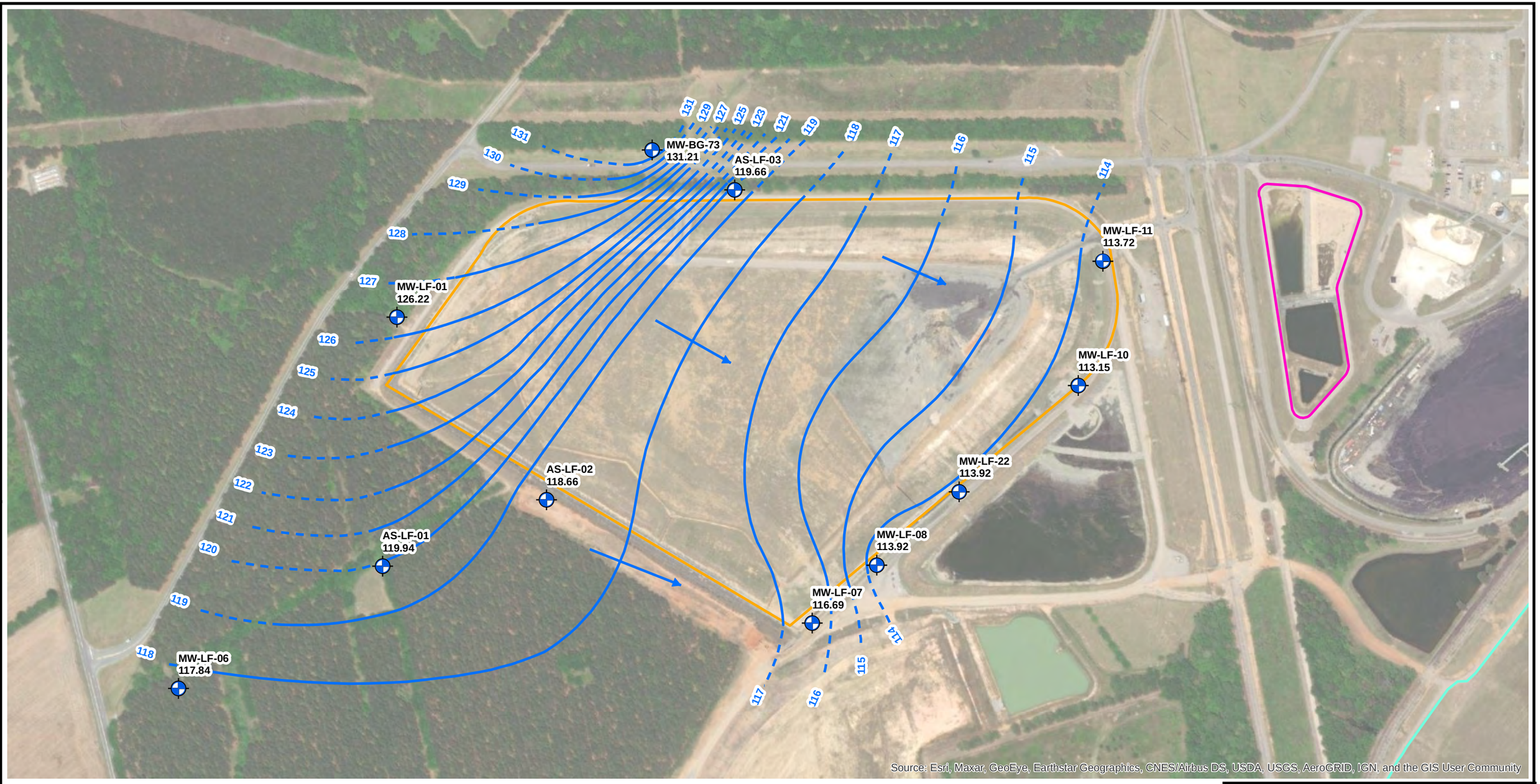
PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
CCR RULE COMPLIANCE
MONITORING WELL NETWORK

DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	D. SZYNAL		**FIGURE 2**
APPROVED BY:	R. MAYER		
DATE:	JANUARY 2022		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
www.TRCcompanies.com

FILE NO.: Figure2_CCR_LF_Well_Network.mxd



LEGEND

- Monitoring Well
- Class III Landfill
- FGD Pond
- Backfilled Clean Closed Ash Pond Area
- Approximate Groundwater Flow Direction
- Water Table Elevation in feet above mean sea level (1' Contour Intervals) - Dashed where inferred.
- **117.84** Water Elevation (FT MSL)

N W E S

Notes: Aerial Image from ESRI World Imagery dated April 2021.

0 375 750 Feet

1 " = 375 '
1:4,500

PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP
SEPTEMBER 14, 2021

DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	D. SZYNAL		
APPROVED BY:	R. MAYER		**FIGURE 3**
DATE:	FEBRUARY 2022		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
www.TRCcompanies.com

FILE NO.: Figure4_CCR_WT_Sept2021_LF.mxd

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Map Rotation: 0
TRC - GIS

Tables

Table 1

September 2021 Downgradient Results and Potential SSIs

Dominion Energy South Carolina

Wateree Station Class III Landfill

WELL	CONSTITUENT / BTV / RESULT (mg/L except as noted)[1]						
	BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
	140	1.063[2] (6,670)	-7.03E-5[2] (9.14)	0.1	2.5 - 6.2	7.89	111
BACKGROUND WELLS							
MW-BG-73	8.82 J	275	2.52	< 0.100	4.50	<0.133	12.9 J
MW-LF-01	7.86 J	128 J	6.31	< 0.100	4.39	0.353 J	14.3
AS-LF-01	7.66 J	711	7.81	< 0.100	4.58	0.506	27.1
AS-LF-02	7.62 J	1,190	2.66	< 0.100	4.82	5.28	70 J
AS-LF-03	5.63 J	525	4.95	< 0.100	4.34	< 0.133	20.0
MW-LF-06	11.8 J	3,210	7.37	< 0.100	4.29	2.38	58.6
DOWNGRADIENT WELLS							
MW-LF-07	6.93 J	-0.878 (637)	-4.63E-04 (10.4)	< 0.100	4.52	4.62	12.9 J
MW-LF-08	6.09 J	-0.0971 (939)	-9.23E-05 (5.21)	< 0.100	4.68	0.307 J	14.3
MW-LF-10	14.9	1.803 (8,390)	-4.64E-04 (8.36)	0.122	4.35	28.7	50.0
MW-LF-10A	7.76 J	-8.763 (1,300)	-0.0107 (4.54)	< 0.100	4.55	3.34	12.9 J
MW-LF-11	8.10 J	-0.0571 (360)	2.44E-04 (5.34)	< 0.100	4.78	< 0.133	15.7
MW-LF-22	11.4 J	-0.217 (2,000)	-0.00107 (9.99)	< 0.100	4.32	0.97	20.0

Shaded cells indicate an SSI.

[1] Boron and calcium concentration expressed in µg/L; pH expressed in standard units (s.u.)

[2] BTV for calcium and chloride are the UCLs of the trend. Downgradient values for calcium and chloride are the LCLs of the trend for the well with the September 2021 concentrations in parentheses

< Result is less than the stated detection limit

J Estimated value between the method detection limit and the practical quantitation limit

Appendix B
March 2022 Alternate Source Demonstration

DOMINION ENERGY SOUTH CAROLINA

WATEREE STATION CLASS III LANDFILL

RICHLAND COUNTY, SOUTH CAROLINA

EPA CCR RULE COMPLIANCE

ALTERNATE SOURCE DEMONSTRATION REPORT

First Semiannual 2022 Detection Monitoring Event

September 2022

Nakia W. Addison, P.E.
Senior Engineer

Richard A. Mayer Jr., P. G.
Project Hydrogeologist

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Executive Summary

Dominion Energy South Carolina (DESC) completed the most recent semiannual detection monitoring sampling (first semiannual 2022 sampling event) in March 2022 for the Wateree Generating Station (Station) Class III Landfill (Unit) pursuant to the *Criteria for Classification of Solid Waste Disposal Facilities and Practices; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, 40 CFR Part 257 (CCR Rule). The Unit constitutes a coal combustion residuals (CCR) Unit per the CCR Rule. Per 40 CFR §257.94, the samples were analyzed for the Appendix III detection monitoring parameters. Upon receipt of the laboratory analytical results, statistical analysis was performed and evaluated for potential statistically significant increases (SSI) above background concentrations.

The following SSIs above the background concentrations were identified based on direct comparisons made between the statistically derived background threshold values (95 percent upper prediction limit) and the downgradient monitoring results:

- MW-LF-10: calcium, chloride, fluoride, sulfate and total dissolved solids (TDS)
- MW-LF-22: chloride

The information provided in this report serves as DESC's Alternate Source Demonstration (ASD) prepared in accordance with 40 CFR §257.94(e)(2) and successfully demonstrates that the SSIs are not due to a release from the Unit to groundwater, but are due to the following:

- Potential compromised surface completion at MW-LF-10.
- Natural variation in groundwater quality within the area.

Therefore, based on the information provided in this ASD report, DESC will continue to conduct semiannual detection monitoring for Appendix III constituents in accordance with 40 CFR §257.94 at the certified groundwater monitoring well system (Certified Monitoring Well Network) for the CCR Unit.

Section 1
Introduction

1.1 Background

Dominion Energy South Carolina (DESC) operates the Wateree Generating Station (Station), a coal-fired power plant, to generate electricity. The Station is located at 142 Wateree Station Road in Eastover, Richland County, South Carolina as shown on **Figure 1**. Coal combustion residuals (CCR) are produced as part of the electrical generation operations. The Station has been generating and disposing of CCR on-site in a coal ash disposal landfill (Unit) since it began operations in 2008. The Unit is a Class 3 non-commercial industrial landfill and operates under South Carolina Department of Health and Environmental Control (SCDHEC) Solid Waste Permit No. LF-3-00026.

The on-site Unit consists of 18 landfill cells planned for development in multiple phases and encompasses a total of 141 future lined acres. The current landfill facility has constructed Cells 1 through 9. Cells 1 through 5 encompasses 34 acres while cells 6 through 9 encompasses an additional 37 acres. These cells were placed into operation in accordance with an operation plan approval issued by SCDHEC in 2010 (cells 1 through 5) and 2015 (cells 6 through 9), respectively.

The Unit receives both fly ash and flue gas desulfurization (FGD) waste from the Station and includes a liner system consisting of a minimum 2-foot-thick compacted clay layer (maximum permeability of 1×10^{-7} cm/sec) overlain by a 60-mil HDPE geomembrane and leachate collection system.

The Unit accepts CCR for disposal in accordance with the federal *Criteria for Classification of Solid Waste Disposal Facilities and Practices; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule* (CCR Rule), effective October 19, 2015, and subsequent Final Rules promulgated by the United States Environmental Protection Agency (USEPA).

1.2 Groundwater Monitoring and Statistical Analysis

In accordance with 40 CFR §257.90 through §257.94, DESC installed a groundwater monitoring system for the Unit, collected samples from the Certified Monitoring Well Network for laboratory analysis for CCR constituents, and performed statistical analysis of the collected samples. The location of the EPA CCR Rule Compliance Monitoring Well Network is presented on **Figure 2**. The Certified Monitoring Well Network consists of 12 wells installed into the subsurface to monitor shallow groundwater as follows:

- Six wells were installed as background monitoring wells and include AS-LF-01, AS-LF-02, AS-LF-03, MW-BG-73, MW-LF-01, and MW-LF-06.

- Six wells were installed as compliance monitoring wells and include MW-LF-07, MW-LF-08, MW-LF-10, MW-LF-10A, MW-LF-11, and MW-LF-22.

Pursuant to 40 CFR §257.91(f), DESC obtained certification by a qualified South Carolina-registered professional engineer (P.E.) stating that the Certified Monitoring Well Network has been designed and constructed to meet the requirements of 40 CFR §257.91 of the CCR Rule (Garrett & Moore 2017).

As discussed above, the Unit is currently being monitored pursuant to the CCR Rule. A groundwater sampling and analysis plan including selection of statistical procedures to evaluate groundwater data was prepared per the CCR Rule (Nautilus 2016). Eight quarterly background CCR detection monitoring events were performed from May 2016 through July 2017 in accordance with 40 CFR §257.93(d) and §257.94(b). The eight quarterly detection monitoring background samples were analyzed for Appendix III to Part 257 – Constituents for Detection Monitoring and for Appendix IV to Part 257 – Constituents for Assessment Monitoring.

Following completion of quarterly background detection monitoring in July 2017, DESC implemented semiannual detection monitoring per 40 CFR §257.94(b) for the Unit. The second semiannual (initial) detection monitoring event was performed in September 2017. Subsequent detection monitoring events, with associated verification sampling when appropriate, have been performed on a semiannual basis since September 2017. DESC completed the first semiannual 2022 detection monitoring event in March 2022. Per the CCR Rule, the semiannual detection monitoring event samples were analyzed for Appendix III constituents.

After completion of each semiannual detection monitoring event, the Appendix III data were statistically evaluated to identify potential statistically significant increases (SSIs) for Appendix III constituents above background levels. In accordance with 40 CFR §257.93(f)(6), DESC obtained certification by a qualified South Carolina-registered P.E. stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the Unit (SCE&G 2017).

Pursuant to 40 CFR §257.93(h), statistical analysis of the laboratory analytical data was performed to identify potential SSIs for the first semiannual 2022 detection monitoring event. Data from the first semiannual 2022 detection monitoring event is presented in **Table 1**. A total of 6 SSIs were identified for five Appendix III constituents: calcium, chloride, fluoride, sulfate and total dissolved solids (TDS).

1.3 Purpose

Pursuant to 40 CFR §257.94(e)(2), DESC may demonstrate that a source other than the CCR Unit caused the SSIs identified or that the SSIs resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The purpose of this report is to provide written

documentation of the successful ASD for the SSIs identified for the first semiannual 2022 detection monitoring event, pursuant to 40 CFR §257.94(e)(2) of the CCR Rule.

1.4 Site Hydrogeology

The Station is located within the Catawba-Wateree River Subbasin (Santee River Basin watershed) of the Coastal Plain physiographic province. Aquifers and confining units in the South Carolina portion of the Coastal Plain are composed of crystalline carbonate rocks, sand, clay, silt, and gravel that contain large volumes of high-quality groundwater (SAWSC 2016). The Unit groundwater monitoring wells are within the surficial aquifer of the Black Creek geologic formation. This formation ranges from ground surface to a depth of approximately 350 feet and consists of medium to coarse-grained glauconitic and phosphatic quartz sands interbedded with lenses of lignitic and micaceous clay beds (SCDNR 2009). Groundwater flow beneath the Unit is generally to the southeast as depicted on **Figure 3**. Hydraulic conductivity values in the surficial aquifer at the Unit range from 2.47 x 10^{-4} cm/s to 2.33 x 10^{-2} cm/s with an estimated groundwater flow velocities of between 0.02 to 2.09 feet/day (Nautilus 2021).

1.5 General Groundwater Quality

Regionally, groundwater quality within the Black Creek Aquifer may contain high fluoride values attributed to the presence of fluorapatite from abundant fossilized shark teeth in the formation (SCDHEC 2013). Groundwater is generally alkaline in composition consisting of a sodium bicarbonate water type (SCDHEC 2013). The USEPA has established National Primary Drinking Water Regulations that define a permitted maximum contaminant level (MCL) for specific constituents in drinking water. The primary MCLs are legally enforceable standards that were established to protect public health by limiting the levels of contaminants in drinking water. Additionally, the USEPA has established non-enforceable secondary MCLs for guidelines to assist public water systems in managing their drinking water for aesthetic consideration such as taste, color, and odor. Reported water quality concentrations for select primary and/or secondary drinking water contaminants compared to USEPA MCLs are provided in the table below.

Catawba-Wateree River Subbasin Groundwater Water Quality

Constituent	Concentration Range		USEPA MCL
	Low	High	
Calcium (mg/L)	8	200	None
Chloride (mg/L)	1	36	250 (Secondary)
Fluoride (mg/L)	0.10	4.0	4.0 (Primary)
Sulfate (mg/L)	1	118	250 (Secondary)
TDS (mg/L)	16	1,260	500 (Secondary)

Note: mg/L = milligram per liter

As noted in the table above, the natural range of groundwater quality within the Catawba-Wateree River Subbasin approaches the primary MCL established by the USEPA for drinking water with respect to fluoride, is less than the secondary MCLs for chloride and sulfate, and exceeds the secondary MCL for TDS (SCDNR 2009). A primary or secondary drinking water MCL has not been established for calcium however, the natural range of groundwater quality in the Catawba-Wateree River Subbasin is reported to be in the range of 8 mg/L to 200 mg/L (SCDNR 2009).

Section 2
Alternate Source Demonstration

Pursuant to 40 CFR §257.94(e)(2), DESC may demonstrate that a source other than the CCR Unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. As discussed previously, the first semiannual 2022 detection monitoring event was performed in March 2022. A verification resampling for MW-LF-10 (calcium, chloride, and sulfate) was conducted on June 2nd, 2022. Results from the June 2022 resampling event for MW-LF-10 were used for statistical analysis. Statistical analysis of the first semiannual 2022 detection monitoring data was performed pursuant to 40 CFR §257.93(f) and (g) and in accordance with the Statistical Methods Certification (SCE&G 2017) and the Statistical Analysis Plan (OBG 2017). Based on either increasing trends at 95% confidence levels using Thiel-Sen's trend test and/or interwell prediction limits statistical analyses, the following SSIs were identified:

- MW-LF-10: calcium, chloride, fluoride, sulfate and TDS
- MW-LF-22: chloride

All other Appendix III constituent concentrations were within their trends at 95% confidence levels using Thiel-Sen's trend and/or interwell prediction limits in all the CCR Rule groundwater downgradient monitoring system wells.

A discussion for each of the individual SSIs and associated evidence demonstrating that the SSIs were not caused by a release from the Unit is provided in the subsections below.

2.1 Calcium, Chloride, Fluoride, Sulfate, and TDS at MW-LF-10

The calcium, chloride, fluoride, sulfate, and TDS SSIs identified at MW-LF-10 are the result of potential surface water impacts to groundwater at the well and natural variation in groundwater quality from areas upgradient from the CCR Unit. The following evidence supports this determination:

- The steel protective cover for MW-LF-10 was accidently struck by a mowing contractor in 2018 during routine maintenance at the CCR Unit. The surface integrity of the steel protective cover and concrete well pad was suspected to have been compromised as the result of the accident and a replacement well (MW-LF-10A) was installed in December 2018. Monitoring well MW-LF-10A was installed approximately 80 feet northeast of MW-LF-10 and set to monitor the same groundwater interval (15 to 25 feet below ground surface) as MW-LF-10.
- Surface water is carried away from the CCR Unit via a drainage ditch that runs parallel to the perimeter of the CCR Unit boundary. Both MW-LF-10 and MW-LF-10A are located approximately

30 to 40 feet downgradient from this drainage ditch however, MW-LF-10 is located adjacent to a check dam within the ditch that serves to reduce the flow of surface water and prevent erosion in the area. During times of heavy precipitation, surface water accumulates at the check dam and infiltrates into the ground surface near MW-LF-10. The compromised surface completion at MW-LF-10 provides a conduit for surface water to potentially migrate to groundwater at the well.

- Given the potential for surface water impacts to groundwater at MW-LF-10, DESC intends to abandon this well in the fall/winter of 2022. MW-LF-10A will serve as the compliance monitoring well at this location.

- Because of upward trending in the background data set, the calcium SSI was identified based on a comparison of trend slopes, with the lower confidence limit (LCL) of the trend at MW-LF-10 (3.092) higher than the upper confidence limit (UCL) of the background trend at a 95% confidence level (1.063). Calcium was detected in MW-LF-10 at a concentration of 10.4 mg/L in the June 2022 verification resample event. This concentration exceeds the concentration-based background threshold value of 6.67 mg/L. Reported regional calcium concentrations for groundwater in the Station area range between 8 mg/L to 200 mg/L (SCDNR 2009). The detected calcium concentration of 10.4 mg/L from June 2022 falls at the lower end of this naturally occurring range.

- Chloride was detected in MW-LF-10 at a concentration of 9.22 mg/L in the June 2022 verification sample. Reported regional chloride concentrations for groundwater in the Station area range between 1 mg/L to 36 mg/L (SCDNR 2009). The detected chloride concentration of 9.22 mg/L from June 2022 falls within the range of natural variation in area groundwater quality.

- Fluoride was detected in MW-LF-10 at a concentration of 0.351 mg/L in the March 2022 sample. This concentration exceeds the background threshold value of 0.10 mg/L, which is also the reporting limit of the analytical method. Reported regional fluoride concentrations for groundwater in the Station area range between 0.1 mg/L to 4.0 mg/L (SCDNR 2009). The detected fluoride concentration of 0.351 mg/L from March 2022 falls at the lower end of this naturally occurring range.

- Since November 2016, fluoride has been detected at concentrations above the 0.1 mg/L background threshold value five times: in MW-LF-07 in November 2016, in MW-LF-10 in November 2018, September 2021 and March 2022, and in MW-LF-10A in March 2021. Fluoride concentrations in these samples ranged from 0.118 mg/L to 0.351 mg/L. Because these detections are sporadic and infrequent, it is unlikely that they represent a release from the Unit, but more likely that they represent natural variability in groundwater quality.

- Sulfate was detected in MW-LF-10 at a concentration of 36.0 mg/L in the June 2022 verification resample event. This concentration exceeds the background threshold value of 7.89 mg/L. Reported regional sulfate concentrations for groundwater in the Station area range between

1 mg/L to 118 mg/L (SCDNR 2009). The detected sulfate concentration of 36.0 mg/L from June 2022 falls within the range of natural variation in area groundwater quality.

- TDS was detected in MW-LF-10 at a concentration of 117 mg/L in the March 2022 sampling event. This concentration exceeds the background threshold value of 111 mg/L. Reported regional TDS concentrations for groundwater in the Station area range between 16 mg/L to 1,260 mg/L (SCDNR 2009). The detected TDS concentration of 117 mg/L from March 2022 falls within the range of natural variation in area groundwater quality.

2.2 Chloride at MW-LF-22

The chloride SSI identified at MW-LF-22 is a result of natural variation in groundwater quality from areas upgradient from the Unit. The following evidence supports this determination:

- Chloride was detected in MW-LF-22 at a concentration of 10.3 mg/L in the March 2022 sampling event. Reported regional chloride concentrations for groundwater in the Station area range between 1 mg/L to 36 mg/L (SCDNR 2009). The detected chloride concentration of 10.3 mg/L from March 2022 falls within the range of natural variation in area groundwater quality.
- Chloride concentrations in background monitoring wells have historically ranged from between 2.14 mg/L (MW-BG-73) to 9.14 mg/L (AS-LF-01). The March 2022 chloride concentration of 10.3 mg/L falls just outside the range of historical background levels but still within the range of naturally occurring chloride levels in the area.

Section 3
Conclusions

The information provided in this report serves as the ASD prepared in accordance with 40 CFR §257.94(e)(2) of the CCR Rule and demonstrates that the SSIs determined based on statistical analysis of the first semiannual 2022 detection monitoring event performed in March 2022 (verification resampling in June 2022) was not due to a release from the Unit to the subsurface.

Based on the information provided in this ASD report, DESC will continue to conduct semiannual detection monitoring in accordance with 40 CFR §257.94 at the Certified Monitoring Well Network for the CCR Unit.

Section 4
Certification

I hereby certify that the alternative source demonstration presented within this document for the DESC Wateree Station Class III Industrial Landfill CCR Unit has been prepared to meet the requirements of Title 40 CFR §257.94(e)2 of the Federal CCR Rule. This document is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of Title 40 CFR §257.94(e) 2.

Name: Nakia W. Addison, P.E.

Expiration Date: June 30, 2024

Company: TRC Engineers, Inc.

Date: 9/21/2022

9/21/2022

(SEAL)

Section 5
References

Garrett and Moore 2017. Groundwater Monitoring System Certification, Wateree Station Landfill, FGD Pond, Ash Pond, Richland County, SC: Garrett & Moore, Inc.

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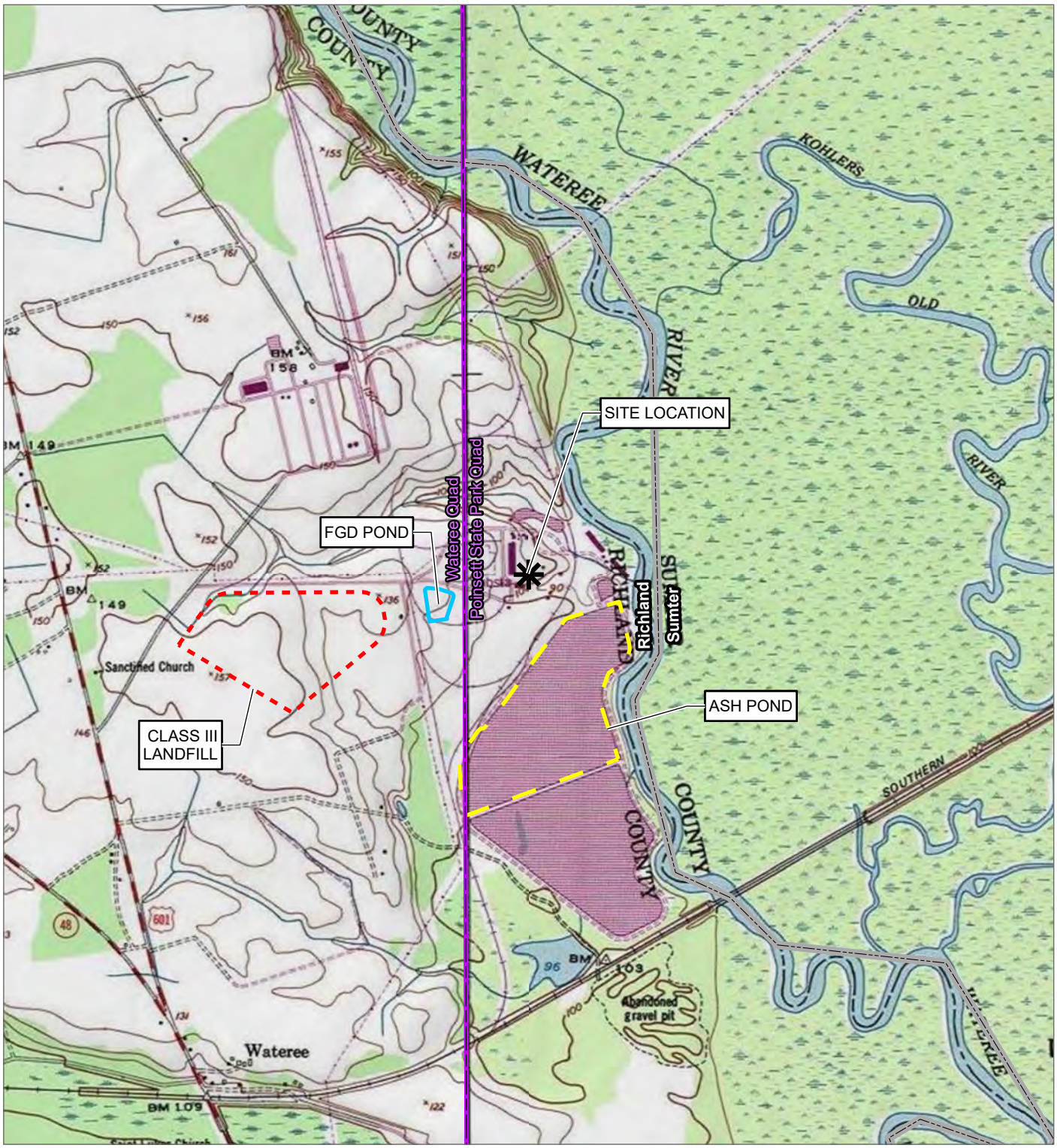
Figures



- SITE LOCATION
- ASH POND BOUNDARY
- CLASS III LANDFILL BOUNDARY
- FGD POND
- COUNTY BOUNDARY
- USGS 24K QUAD BOUNDARY

BASE MAP: USGS TOPO MAP
DATA SOURCES: TRC, USGS 7.5' QUADRANGLES:
POINSETT STATE PARK (1983) QUAD ID: 33080-G5, SC;
WATEREE (1983) QUAD ID: 33080-G6, SC

0 1,000 2,000 FEET

1:24,000 1" = 2,000'

PROJECT: **DOMINION ENERGY SOUTH CAROLINA WATEREE STATION**
142 WATEREE STATION ROAD, EASTOVER, SC 29044

TITLE:

SITE LOCATION MAP

DRAWN BY:	R. BARBER	PROJ. NO.:	416559.0005.0000
CHECKED BY:	A. HORRIE		
APPROVED BY:	R. MAYER		**FIGURE 1**
DATE:	AUGUST 2022		

TRC
708 HEARTLAND TRAIL
SUITE 3000
MADISON, WI 53717
PHONE: 608.826.3600

FILE: DOMINION_VARIOUS

LEGEND

- Monitoring Well
- Event Piezometer
- Class III Landfill
- FGD Pond

N
W E
S

Notes:
1 - Aerial Image from ESRI World Imagery dated April 2021.

0 375 750 Feet

1 " = 375 '
1:4,500

PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
CCR RULE COMPLIANCE
MONITORING WELL NETWORK

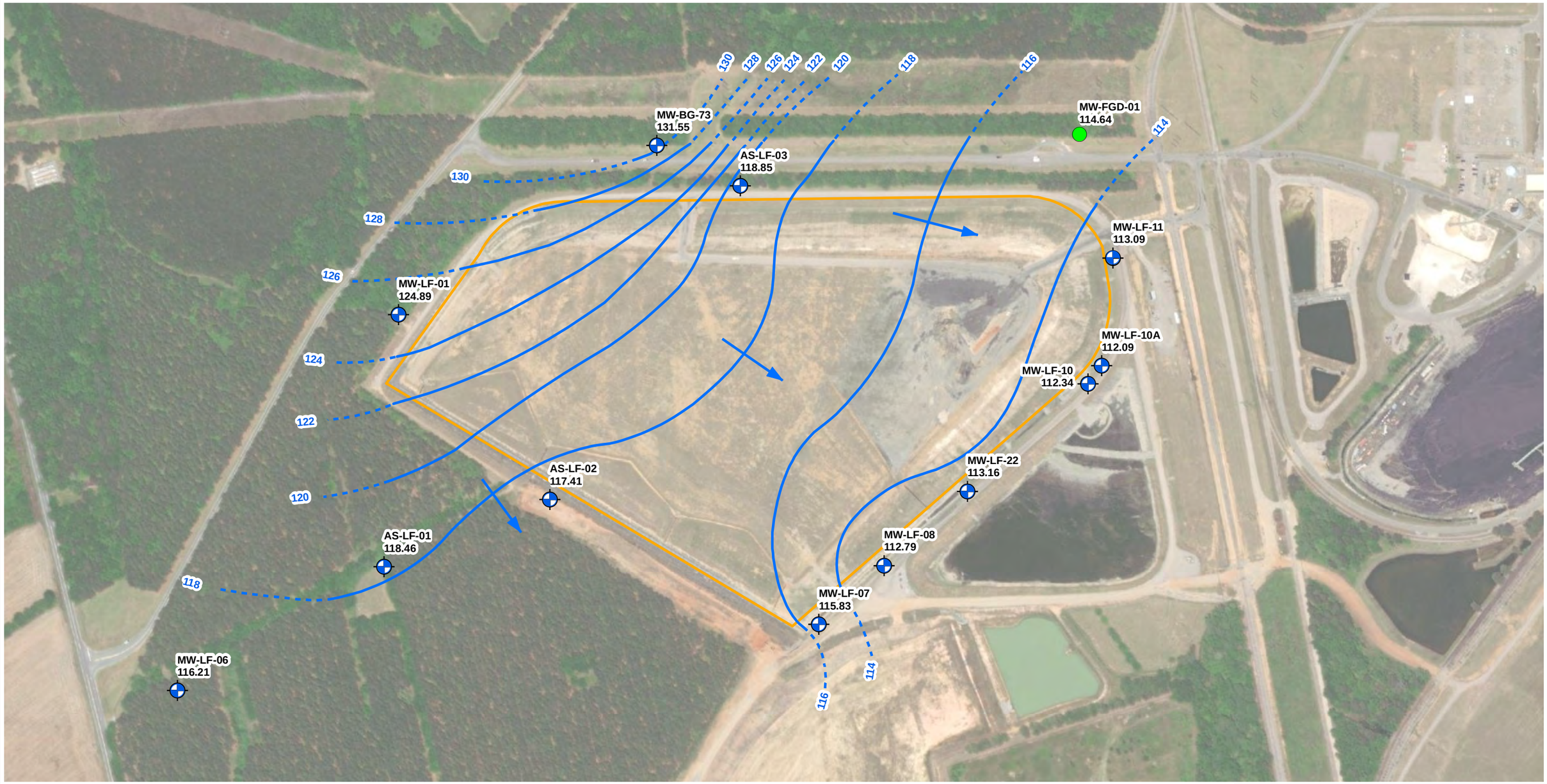
DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	D. SZYNAL		
APPROVED BY:	R. MAYER		**FIGURE 2**
DATE:	SEPTEMBER 2022		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
www.TRCcompanies.com

FILE NO.: Figure2_CCR_LF_Well_Network.mxd

Plot Date: 9/15/2022, 09:57:29 AM by JYONTS - - LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\Dominion\South Carolina\5 Wateree SC\Landfill\2022\Figure2 CCR LF Well Network.mxd
Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0
TRC - GIS

Plot Date: 9/1/2022, 15:47:09 PM by JYONTS – LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\Dominion\South Carolina\5 Wateree SC\Landfill\2022\Figure3 CCR WT Map\Figure3_CCR_WT_LF_2022_Q1.mxd
Coordinate System: NAD 1983 StatePlane South Carolina FIPS 3900 Feet (Foot US)
Map Rotation: 0



LEGEND

- Monitoring Well
- Event Piezometer
- **118.48** Water Elevation (FT MSL)
- Class 3 Landfill
- Water Table Elevation in feet above mean sea level (2' Contour Intervals) - Dashed where inferred.
- Approximate Groundwater Flow Direction

N W E S

0 375 750 Feet

1 " = 375 '
1:4,500

Notes:
1 - Aerial Image from ESRI World Imagery dated April 2021.

PROJECT:
DESC WATEREE STATION
CLASS III LANDFILL
EASTOVER, SOUTH CAROLINA

TITLE:
GROUNDWATER POTENTIOMETRIC SURFACE MAP - MARCH 15, 2022

DRAWN BY:	J. YONTS	PROJ. NO.:	416559.0005.0000
CHECKED BY:	R. MAYER		
APPROVED BY:	R. MAYER		**FIGURE 3**
DATE:	SEPTEMBER 2022		

TRC
50 International Drive, Suite 150
Patewood Plaza Three
Greenville, SC 29615
Phone: 864.281.0030
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FILE NO.: Figure3_CCR_WT_LF_2022_Q1.mxd

Tables

Table 1

March 2022 Summary of Potentially Statistical Significant Increases

Dominion Energy South Carolina

Wateree Station Class III Landfill

WELL	CONSTITUENT / BTV / RESULT (mg/L except as noted)[1]						
	BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
	140	1.063[2] (6,670)	-7.03E-5[2] (9.14)	0.1	2.5 - 6.2	7.89	111
BACKGROUND WELLS							
MW-BG-73	9.18 J	304	2.27	0.0330 U	4.56	0.377 J	4.29 J
MW-LF-01	12.7 J	126 J	7.18	0.0330 U	4.41	0.301 J	11.4 J
AS-LF-01	10.3 J	772	8.89	0.0330 U	4.50	0.752	22.9
AS-LF-02	11.3 J	943	2.74	0.0330 U	5.00	3.43	12.9 J
AS-LF-03	8.98 J	606	5.28	0.0330 U	4.37	0.433	3.40 U
MW-LF-06	9.16 J	887	6.73	0.0330 U	4.91	0.604	10.0 J
DOWNGRADIENT WELLS							
MW-LF-07	8.97 J	-0.831 (981)	8.91	0.0330 U	4.41	1.18	4.29 J
MW-LF-08	8.16 J	-0.0748 (897)	5.57	0.0330 U	4.75	0.424	15.7
MW-LF-10	21.7	3.092 (10,400)[3]	9.22[3]	0.351	4.21	36.0[3]	117
MW-LF-10A	10.2 J	-7.441 (395)	4.14	0.0330 U	4.72	0.742	3.40 U
MW-LF-11	10.5 J	-0398 (378)	5.89	0.0330 U	4.62	0.285 J	18.6
MW-LF-22	15.8	-0.314 (1,950)	10.3	0.0330 U	4.34	1.11	7.14 J

Shaded cells indicate an SSI.

[1] Boron and calcium concentration expressed in µg/L; pH expressed in standard units (s.u.).

[2] BTV for calcium is the UCL of the trend. Downgradient values for calcium are the LCLs of the trend for the well with the March 2022 concentrations in parentheses.

[3] Verification resample conducted on 6/2/2022; result of verification resample data used.

U The analyte was not detected above the level of the sample reporting limit.

J Estimated concentration.

Appendix C
First Semiannual Detection Monitoring Program Event Field Data Sheets, Laboratory Reports, and Data Validation Forms

Wateree Station - Landfill - CCR Sampling Event

Date(s) Measured: 3-15-2022

Well ID	Well Diameter (inches)	Well Total Depth (ft BTOC)	Well Completion	Screen length (ft)	Depth to Water (ft below TOC)	Pump Type
MW-LF-01	2	33.55	Stickup	15	23.76	Peristaltic
MW-LF-06	2	41.10	Stickup	15	29.76	Dedicated Bladder
MW-LF-07	2	31.73	Stickup	10	24.15	Peristaltic
MW-LF-08	2	36.05	Stickup	10	24.89	Peristaltic
MW-LF-10	2	27.40	Stickup	10	19.19	Peristaltic
MW-LF-10A	2	28.69	Stickup	10	20.40	Peristaltic
MW-LF-11	2	30.25	Stickup	10	22.17	Peristaltic
MW-LF-22	2	34.45	Stickup	15	22.59	Peristaltic
AS-LF-01	2	48.85	Stickup	10	31.44	Dedicated Bladder
AS-LF-02	2	55.66	Stickup	10	32.15	Dedicated Bladder
AS-LF-03	2	38.07	Stickup	10	27.30	Peristaltic
MW-BG-73	2	23.38	Stickup	10	7.52	Peristaltic
mw-FGD-01	2		stickup		24.51	water level only

TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: JMB	DATE: 3/14/2022	BY: RAM	DATE: 3-21-22

SAMPLE ID: **MW-LF-01** / MW-01LF WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1600	DATE: 3/14/2022	SAMPLE	TIME: 1635	DATE: 3/14/2022
PURGE METHOD:	☑ PUMP PERISTALTIC PUMP ☐ BAILER		PH: 4.41 SU	CONDUCTIVITY: 53.10 umhos/cm	
			ORP: 123.3 mV	DO: 6.78 mg/L	
DEPTH TO WATER:	23.79 T/ PVC		TURBIDITY: 1.82 NTU		
DEPTH TO BOTTOM:	33.55 T/ PVC		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	1.7 ☐ LITERS ☑ GALLONS		TEMPERATURE: 17.82 °C	OTHER:	
VOLUME REMOVED:	0.7 ☐ LITERS ☑ GALLONS		COLOR: clear	ODOR: none	
COLOR:	cloudy ODOR: none		FILTRATE (0.45 um) ☐ YES	☒ NO	
TURBIDITY			FILTRATE COLOR: —	FILTRATE ODOR: —	
☐ NONE ☐ SLIGHT ☒ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD:	☐ GROUND ☐ DRUM ☑ OTHER		COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1606	130	4.52	50.88	99.9	6.59	54.8	19.86	23.80	INITIAL
1620		4.43	52.95	115.8	6.72	2.14	17.95	23.80	
1625		4.42	52.87	119.2	6.76	1.79	18.04	23.80	
1630		4.41	53.05	121.8	6.77	1.53	17.91	23.80	
1635		4.41	53.10	123.3	6.78	1.82	17.82	23.80	
post 1645						2.46	—	23.80	0.7

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED		NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	
1	250 mL	PLASTIC	B	☐ Y	☑ N					☐ Y	☐ N
1	250 mL	PLASTIC	A	☐ Y	☑ N					☐ Y	☐ N
1	125 mL	PLASTIC	A	☐ Y	☑ N					☐ Y	☐ N
				☐ Y	☐ N					☐ Y	☐ N
				☐ Y	☐ N					☐ Y	☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-2022

REVISED 06/2011

TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: RAM	DATE: 3-14-22	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-LF-06 / MW-06LF WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1611	DATE: 3-14-22

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER

DEPTH TO WATER: 29.81 T/ PVC

DEPTH TO BOTTOM: 41.10 T/ PVC

WELL VOLUME: 1.9 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.1 ☐ LITERS ☑ GALLONS

COLOR: Clear ODOR: none

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 1648	DATE: 3-14-22

PH: 4.91 SU CONDUCTIVITY: 52.52 umhos/cm

ORP: 146.2 mV DO: 4.91 mg/L

TURBIDITY: 3.83 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 17.89 °C OTHER:

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: FBLK-WAT-LF-22101 @ 1625

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1613	100	4.78	49.34	198.3	5.75	13.50	21.51	29.86	INITIAL
1618	100	4.80	52.20	188.6	6.33	10.62	18.65	29.86	
1623	100	4.79	52.59	184.3	5.99	8.15	18.25	29.86	
1628	100	4.78	52.77	180.4	6.10	5.51	18.16	29.86	
1633	100	4.81	52.64	172.7	5.82	4.79	18.03	29.86	
1638	100	4.85	52.45	162.0	5.41	4.05	17.94	29.86	
1643	100	4.89	52.46	152.6	5.39	4.11	17.90	29.86	
1648	100	4.91	52.52	146.2	4.91	3.83	17.89	29.86	1.1
1710	100	—	—	—	—	3.17	—	29.86	—

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-22

REVISED 06/2011

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: JMB	DATE: 3/14/2022	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-LF-07	WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER
WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL	☐ OTHER
SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE	☐ OTHER

PURGING	TIME: 1224	DATE: 3/14/2022	SAMPLE	TIME: 1300	DATE: 3/14/2022
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 4.41 SU	CONDUCTIVITY: 59.92 umhos/cm	
			ORP: 129.3 mV	DO: 7.04 mg/L	
DEPTH TO WATER: 24.21 T/ PVC			TURBIDITY: 4.31 NTU		
DEPTH TO BOTTOM: 31.73 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: 1.3 ☐ LITERS ☑ GALLONS			TEMPERATURE: 20.01 °C	OTHER:	
VOLUME REMOVED: 0.8 ☐ LITERS ☑ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear ODOR: none			FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY			FILTRATE COLOR: —	FILTRATE ODOR: —	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1227	90	4.52	84.58	123.1	6.70	6.80	20.97	24.36	INITIAL
1240		4.42	62.16	126.2	7.17	6.47	19.77	24.60	
1245		4.42	61.22	125.5	7.12	5.31	19.67	24.61	
1250		4.41	60.96	129.5	7.11	4.59	19.82	24.64	
1255		4.41	60.48	126.8	7.01	4.20	19.95	24.64	
1300		4.41	59.92	129.3	7.04	4.31	20.01	24.64	
post 1311	✓					3.36		24.64	0.8 ✓

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED		NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	
1	250 mL	PLASTIC	B	☐ Y	☑ N					☐ Y	☐ N
1	250 mL	PLASTIC	A	☐ Y	☑ N					☐ Y	☐ N
1	125 mL	PLASTIC	A	☐ Y	☑ N					☐ Y	☐ N
				☐ Y	☐ N					☐ Y	☐ N
				☐ Y	☐ N					☐ Y	☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-2022

REVISED 06/2011

TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: RAM	DATE: 3-14-22	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-LF-08 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1221	DATE: 3-14-22	SAMPLE	TIME: 1254	DATE: 3-14-22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP #106308 ☐ BAILER

DEPTH TO WATER: 25.02 T/ PVC

DEPTH TO BOTTOM: 36.05 T/ PVC

WELL VOLUME: 1.9 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.1 ☐ LITERS ☑ GALLONS

COLOR: Clear ODOR: none

TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 4.75 SU CONDUCTIVITY: 46.33 umhos/cm

ORP: 129.3 mV DO: 7.49 mg/L

TURBIDITY: 0.79 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 21.28 °C OTHER:

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1226	100	5.18	55.66	114.1	6.89	3.68	21.96	25.05	INITIAL
1230	100	4.76	49.51	107.8	7.29	1.82	21.28	25.05	
1234	100	4.76	47.61	108.2	7.51	1.52	21.19	25.05	
1238	100	4.75	46.73	111.7	7.54	1.11	21.12	25.05	
1242	100	4.75	46.56	116.2	7.51	1.05	21.28	25.05	
1246	100	4.73	46.69	121.4	7.59	0.96	21.27	25.05	
1250	100	4.73	46.38	126.5	7.50	0.85	21.37	25.05	
1254	100	4.75	46.33	129.3	7.49	0.79	21.28	25.05	1.1
Post 1101	100	—	—	—	—	1.04	—	25.05	—

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-22

REVISED 06/2011

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: RAM	DATE: 3-14-22	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-LF-10 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1330	DATE: 3-14-22	SAMPLE	TIME: 1412	DATE: 3-14-22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP 106308 ☐ BAILER

DEPTH TO WATER: 19.22 T/ PVC

DEPTH TO BOTTOM: 27.4 T/ PVC

WELL VOLUME: 1.4 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.3 ☐ LITERS ☑ GALLONS

COLOR: Clear ODOR: none

TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: _____ SU CONDUCTIVITY: _____ umhos/cm

ORP: _____ mV DO: _____ mg/L

TURBIDITY: _____ NTU

☐ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: _____ °C OTHER: _____

COLOR: _____ ODOR: _____

FILTRATE (0.45 um) ☐ YES ☐ NO

FILTRATE COLOR: _____ FILTRATE ODOR: _____

QC SAMPLE: ☐ MS/MSD ☒ DUP WAT-CCR-LF-22101

COMMENTS: * Duplicate *

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	~~CUMULATIVE PURGE VOLUME (GALLONS)~~ CONDUCTIVITY uS/cm
1332	100	5.03	0.00	101.8	8.05	28.5	27.93	19.22	INITIAL
1336	100	4.34	0.00	109.8	7.91	12.4	26.53	19.22	110.89
1340	100	4.33	0.34	198.1	7.91	10.89	26.16	19.22	78.33
1344	100	4.28	0.28	185.6	7.78	11.05	26.78	19.22	75.33
1348	100	4.26	0.27	194.9	7.56	11.71	27.36	19.22	74.89
1352	100	4.31	0.21	197.6	7.32	8.35	28.07	19.22	72.66
1356	100	4.31	0.18	198.3	7.18	7.22	28.57	19.22	75.39
1400	100	4.30	0.13	197.1	7.09	5.55	28.86	19.22	74.12
1404	100	4.29	0.13	184.1	6.99	4.89	29.17	19.22	73.78
1408	100	4.28	0.13	182.7	6.80	4.78	28.73	19.22	73.67

125.34

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC

WATER SAMPLE LOG

(CONTINUED FROM PREVIOUS PAGE)

PROJECT NAME: Wateree Station	PREPARED		CHECKED	
PROJECT NUMBER: 416559.0005.0000	BY: B / BM / AM	DATE: 3-14-22	BY: RAM	DATE: 3-21-22

RAM

SAMPLE ID: MW-LF-10

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1412	100	4.21	73.78	187.2	6.88	4.32	27.98	19.22	1.3
Post 1428	100	—	—	—	—	4.73	—	19.22	—

SIGNATURE: _____ DATE SIGNED: 3-14-2022

TRC WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: RAM	DATE: 3-14-22	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-LF-10A WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1453	DATE: 3-14-22	SAMPLE	TIME: 1524	DATE: 3-14-22
PURGE METHOD: ☑ PUMP ☐ BAILER	PERISTALTIC PUMP 106308		PH: 4.72 SU	CONDUCTIVITY: 34.55 umhos/cm	
			ORP: 161.5 mV	DO: 5.07 mg/L	
DEPTH TO WATER: 20.38 T/ PVC			TURBIDITY: 3.12 NTU		
DEPTH TO BOTTOM: 28.69 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: 1.4 ☐ LITERS ☑ GALLONS			TEMPERATURE: 20.50 °C	OTHER:	
VOLUME REMOVED: 1.3 ☐ LITERS ☑ GALLONS			COLOR: Clear	ODOR: none	
COLOR: Clear	ODOR: none		FILTRATE (0.45 um) ☐ YES	☒ NO	
TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR: —	FILTRATE ODOR: —	
			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: FBLK-WAT-CCR-LF-22101 @ 1445		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1456	115	4.84	122.9	33.55	5.42	9.26	26.65	20.38	INITIAL
1500	115	4.70	35.61	131.6	5.23	5.93	21.35	20.40	
1504	115	4.69	35.54	139.3	5.24	6.10	20.70	20.40	
1508	115	4.72	35.20	144.7	5.14	5.77	20.57	20.40	
1512	115	4.70	34.85	151.9	5.18	4.26	20.63	20.40	
1516	115	4.70	34.68	156.2	5.05	3.94	20.56	20.40	
1520	115	4.72	34.76	158.3	5.10	3.22	20.57	20.40	
1524	115	4.72	34.55	161.5	5.07	3.12	20.50	20.40	1.3
1331	115	—	—	—	—	2.77	—	20.40	—

Truck Traffic

post

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-2022

REVISED 06/2011

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: JMB	DATE: 3/14/2022	BY: RAM	DATE: 3-24-22

SAMPLE ID: MW-LF-11 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1456	DATE: 3/14/2022	SAMPLE	TIME: 1530	DATE: 3/14/2022

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 22.15 T/ PVC

DEPTH TO BOTTOM: 30.25 T/ PVC

WELL VOLUME: 1.4 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.0 ☐ LITERS ☑ GALLONS

COLOR: cloudy ODOR: none

TURBIDITY ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 4.62 SU CONDUCTIVITY: 40.21 umhos/cm

ORP: 102.0 mV DO: 6.07 mg/L

TURBIDITY: 3.12 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 19.94 °C OTHER:

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☒ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1458	115	4.68	39.59	104.3	5.95	18.6	21.12	22.21	INITIAL
1520		4.62	40.28	102.2	6.14	4.77	19.87	22.21	
1525		4.61	40.40	102.2	6.10	3.46	19.90	22.21	
1530		4.62	40.21	102.0	6.07	3.12	19.94	22.21	
post 1544		—	—	—	—	2.85	—	22.21	1.0

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or **</= 5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-2022

REVISED 06/2011

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: JMB	DATE: 3/14/2022	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-LF-22 / MW-22LF — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1323	DATE: 3/14/2022

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 22.70 T/ PVC

DEPTH TO BOTTOM: 34.45 T/ PVC

WELL VOLUME: 2.0 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.5 ☐ LITERS ☑ GALLONS

COLOR: clear ODOR: none

TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 1415	DATE: 3/14/2022

PH: 4.34 SU CONDUCTIVITY: 78.97 umhos/cm

ORP: 291.9 mV DO: 4.77 mg/L

TURBIDITY: 2.27 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 20.84 °C OTHER:

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR: —

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1326	105	4.36	79.69	128.3	4.41	7.88	22.87	22.72	INITIAL
1345		4.33	79.60	221.8	4.80	2.41	20.66	22.72	
1350		4.33	79.45	233.6	4.85	2.98	20.66	22.72	
1355		4.33	79.34	250.0	4.70	2.47	20.93	22.72	
1400		4.33	79.13	261.2	4.71	2.11	20.97	22.72	
1405		4.33	79.60	277.0	4.76	2.49	20.84	22.72	
1410		4.33	79.16	285.0	4.81	2.45	20.86	22.72	
1415		4.34	78.97	291.9	4.77	2.27	20.84	22.72	
									✓
post 1432						2.15		22.72	1.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	3-14-2022

REVISED 06/2011

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: BJM	DATE: 3.15.22	BY: RAM	DATE: 3-21-22

SAMPLE ID:	**AS-LF-01**	WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6"	☐ OTHER		
WELL MATERIAL:	☑ PVC ☐ SS	☐ IRON	☐ GALVANIZED STEEL	☐ OTHER	
SAMPLE TYPE:	☑ GW ☐ WW	☐ SW ☐ DI	☐ LEACHATE	☐ OTHER	

PURGING	TIME: 1048	DATE: 3.15.22	SAMPLE	TIME: 1130	DATE: 3.15.22
PURGE METHOD:	☑ PUMP ~~BLADDER PUMP (DEDICATED)~~ ☐ BAILER Alexis peri.		PH: 4.50 SU	CONDUCTIVITY: 58.95 umhos/cm	
			ORP: 108.6 mV	DO: 6.62 mg/L	
DEPTH TO WATER: 31.44 T/ PVC			TURBIDITY: 1.46 NTU		
DEPTH TO BOTTOM: 48.85 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: 2.8 ☐ LITERS ☑ GALLONS			TEMPERATURE: 18.36 °C	OTHER:	
VOLUME REMOVED: 1.6 ☐ LITERS ☑ GALLONS			COLOR: Clear	ODOR: none	
COLOR: Clear	ODOR: none		FILTRATE (0.45 um) ☐ YES	☒ NO	
TURBIDITY			FILTRATE COLOR: ~~Clear~~	FILTRATE ODOR:	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: Post turb: 0.77		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1050	150	4.49	60.06	124.7	6.69	17.1	18.20	31.44	INITIAL
1055		4.49	60.23	108.7	6.62	11.1	18.03		
1100		4.49	59.04	102.4	6.50	8.81	17.99		
1105		4.48	59.17	102.8	6.41	6.31	18.01		
1110		4.47	59.32	103.3	6.35	5.13	18.02		
1115		4.49	59.15	104.3	7.25	3.29	18.43		
1120		4.49	59.17	105.2	6.47	2.76	18.35		
1125		4.49	59.18	107.3	6.41	2.07	18.35		
1130		4.50	58.95	108.6	6.62	1.46	18.36		1.6

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED		NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	
1	250 mL	PLASTIC	B	☐ Y	☑ N					☐ Y	☐ N
1	250 mL	PLASTIC	A	☐ Y	☑ N					☐ Y	☐ N
1	125 mL	PLASTIC	A	☐ Y	☑ N					☐ Y	☐ N
				☐ Y	☐ N					☐ Y	☐ N
				☐ Y	☐ N					☐ Y	☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	

TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: BJM	DATE: 3.15.22	BY: RAM	DATE: 3.21.22

SAMPLE ID: AS-LF-02 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1200	DATE: 3.15.22	SAMPLE	TIME: 1235	DATE: 3.15.22

PURGE METHOD: ☑ PUMP ~~BLADDER PUMP (DEDICATED)~~ ☐ BAILER Alexis peri.

DEPTH TO WATER: 32.15 T/ PVC

DEPTH TO BOTTOM: 55.66 T/ PVC

WELL VOLUME: 3.8 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 0.5 ☐ LITERS ☑ GALLONS

COLOR: clear ODOR: non

TURBIDITY: ☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 5.00 SU | CONDUCTIVITY: 31.20 umhos/cm

ORP: 105.2 mV | DO: 2.81 mg/L

TURBIDITY: 12.9 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 22.28 °C | OTHER:

COLOR: clear | ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: | FILTRATE ODOR:

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: Post turb: 10.14

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1205	60	4.92	30.82	126.5	3.59	30.7	22.72	32.75	INITIAL
1210		4.95	30.46	108.7	3.06	17.7	21.57	32.82	
1215		4.96	30.76	105.8	3.01	14.6	21.72	32.89	
1220		4.98	30.26	104.1	3.17	11.8	22.11	32.95	
1225		5.00	30.30	104.2	2.98	11.6	22.22	32.97	
1230		5.01	30.33	104.4	2.85	11.7	22.35	33.00	
1235		5.00	31.20	105.2	2.81	12.9	22.28	33.02	0.5

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: JMB	DATE: 3/15/2022	BY: RAM	DATE: 3-21-22

SAMPLE ID: AS-LF-03 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1133	DATE: 3/15/2022	SAMPLE	TIME: 1205	DATE: 3/15/2022

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 27.31 T/ PVC

DEPTH TO BOTTOM: 38.07 T/ PVC

WELL VOLUME: 1.9 ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 0.7 ☐ LITERS ☑ GALLONS

COLOR: clear ODOR: none

TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 4.37 SU CONDUCTIVITY: 50.35 umhos/cm

ORP: 96.1 mV DO: 7.18 mg/L

TURBIDITY: 1.35 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 20.49 °C OTHER:

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☐ NO

FILTRATE COLOR: FILTRATE ODOR:

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: FBLK-WAT-CCR-LF-22102 collected @ 1202

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1136	100	4.40	51.44	79.5	6.99	2.79	20.48	27.34	INITIAL
1155		4.38	50.44	88.1	7.08	1.59	20.35	27.34	
1200		4.37	50.30	95.6	7.18	1.46	20.44		
1205		4.37	50.35	96.1	7.18	1.35	20.49		
post 1215						1.51			0.7

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: JMB	DATE: 3/15/2022	BY: RAM	DATE: 3-21-22

SAMPLE ID: MW-BG-73	WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER
WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL	☐ OTHER
SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE	☐ OTHER

PURGING	TIME: 1232	DATE: 3/15/2022	SAMPLE	TIME: 1305	DATE: 3/15/2022
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 4.56 SU	CONDUCTIVITY: 23.30 umhos/cm	
			ORP: 90.2 mV	DO: 6.13 mg/L	
DEPTH TO WATER: 7.50 T/ PVC			TURBIDITY: 2.41 NTU		
DEPTH TO BOTTOM: 23.38 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: 2.7 ☐ LITERS ☑ GALLONS			TEMPERATURE: 20.48 °C	OTHER:	
VOLUME REMOVED: 0.8 ☐ LITERS ☑ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☐ NO		
TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR:	FILTRATE ODOR:	
			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS:		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1234	130	4.63	22.83	82.1	6.14	2.19	22.05	7.57	INITIAL
1250		4.57	23.29	84.5	6.20	1.82	20.33	7.60	
1255		4.56	23.21	86.3	6.16	2.70	20.32	7.60	
1300		4.56	23.10	89.1	6.12	2.006	20.55		
1305		4.56	23.30	90.2	6.13	2.41	20.48		
post 1315						2.49			0.8

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED		PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____							
NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
1	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station	MODEL: Aqua Troll 400	SAMPLER: (JB) / BM / AM
PROJECT NO.:	416559.0005.0000	SERIAL #: 728566	DATE: 3/14/2022

PH CALIBRATION CHECK

	pH 7 (LOT #): 21010066 (EXP. DATE): 08/2022 PRE-CAL. READING / STANDARD	pH 4 / 10 (LOT #): a1470032 21080189 (EXP. DATE): 04/2023 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
pre	6.75 / 7.00	9.93 / 10.00	☐ WITHIN RANGE	1125
pre	/	4.40 / 4.00	☐ WITHIN RANGE	1128
post	7.06 / 7.00	10.13 / 10.00	☒ WITHIN RANGE	1133
post	/	4.00 / 4.00	☒ WITHIN RANGE	1134

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

	CAL. READING (LOT #): a1470032 (EXP. DATE): 04/2023 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
pre	4474 / 4490	11.52	☐ WITHIN RANGE	1142
post	4489 / 4490	11.61	☒ WITHIN RANGE	1143
	/		☐ WITHIN RANGE	
	/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

	CAL. READING (LOT #): 21140143 (EXP. DATE): 04/2023 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
pre	241.3 / 228	10.92	☐ WITHIN RANGE	1144
post	227 / 228	10.73	☒ WITHIN RANGE	1145
	/		☐ WITHIN RANGE	
	/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 772.22 Temp: 12.57 Act: 11.01 Calc: 10.8	☐ WITHIN RANGE	1120
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.02 / 0.00	0.01 / 0.00	☒ WITHIN RANGE	1137
1.95 / 1.00	1.90 / 1.00	☐ WITHIN RANGE	
8.23 / 10.00	9.98 / 10.00	☐ WITHIN RANGE	1136
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):

☐ STANDARD SOLUTION (S) — LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS
NONE	NA

SIGNED _____ DATE 3-14-2022

CHECKED BY J. Yonts DATE 3/18/2022

REVISED 06/2011

TRC

WATER QUALITY METER CALIBRATION LOG

RM

PROJECT NAME:	Wateree Station	MODEL: Aqua Troll 400	SAMPLER: JB / BM / AM
PROJECT NO.:	416559.0005.0000	SERIAL #: 851425	DATE: 3-14-2022

PH CALIBRATION CHECK AC

pH 7 (LOT #): 2138010Z (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 2008005G (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.71 / 7.00	3.73 / 4.00	☐ WITHIN RANGE	1143
7.00 / 7.00	3.98 / 4.00	☑ WITHIN RANGE	1145
/	9.64 / 10.00	☐ WITHIN RANGE	1152
/	10.00 / 10.00	☑ WITHIN RANGE	1153

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): AC (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4279 / 4490	14.95	☐ WITHIN RANGE	~~0854~~ 1141
/		☑ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140143 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
224 / 228	12.94	☑ WITHIN RANGE	1154
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
18.90 °C 9.63 mg/L Act Pressure = 772.98 mm Hg Calc 10.01 mg/L	☑ WITHIN RANGE	1138
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.03 / 0.00	0.00 / 0.00	☑ WITHIN RANGE	1155
0.98 / 1.00	1.00 / 1.00	☑ WITHIN RANGE	1155
10.02 / 10.00	10.01 / 10.00	☑ WITHIN RANGE	1156
/	/	☐ WITHIN RANGE	

COMMENTS

☑ AUTOCAL SOLUTION (LOT #): 21470032 (EXP. DATE): 4/23

☐ STANDARD SOLUTION (S)

LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS	CALIBRATION RANGES [1]	
☑ pH	pH:	+/- 0.2 S.U.
☑ COND	COND:	+/- 1% OF CAL. STANDARD
☐ ORP	ORP:	+/- 25 mV
☐ D.O.	D.O.:	VARIES
☐ TURB	TURB:	+/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐ _____		

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS
NONE	NA

SIGNED _____ DATE 3-14-2022

CHECKED BY J. Yonts DATE 3/18/2022

REVISED 06/2011

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station	MODEL:	AquaTroll	SAMPLER:	JB / BM / AM
PROJECT NO.:	416559.0005.0000	SERIAL #:	728550	DATE:	3.15.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21010066 (EXP. DATE): 8/22 PRE-CAL. READING / STANDARD	pH 4 / 10 (LOT #): Autocal (EXP. DATE): PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.83 / 7.00	4.25 / 4.00	☐ WITHIN RANGE	0850/0900
Post 7.00 / 7.00	4.01 / 4.00	☐ WITHIN RANGE	0855/0905
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): Autocal (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.32 / 4.49	12.69	☐ WITHIN RANGE	0855
Post 4.49 / 4.49	12.82	☐ WITHIN RANGE	0905
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140143 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
246 / 228	13.26	☐ WITHIN RANGE	0915
Post 228 / 228	13.28	☐ WITHIN RANGE	0920
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: ~~13~~ 8 770mmHg Temp: 13° Calc: 10.7 Actual: 10.65	☐ WITHIN RANGE	0910
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
3.07 / 0	0 / 0	☐ WITHIN RANGE	0900
2.28 / 1	1 / 1	☐ WITHIN RANGE	
8.29 / 10	/ 10	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☑ AUTOCAL SOLUTION (LOT #): 21070193 (EXP. DATE): 8/22	☐ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☑ pH	pH: +/- 0.2 S.U.
☑ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

Lamotte Turbidimeter S/N 2949-0413

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS
NONE	NONE

SIGNED _____ DATE 3-15-22

J. Yonts CHECKED BY 3/18/2022 DATE

REVISED 06/2011

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station	MODEL: AquaTroll 400	SAMPLER: (RM) JB / BM / AM
PROJECT NO.:	416559.0005.0000	SERIAL #: 851425	DATE: 3-15-2022

PH CALIBRATION CHECK

pH 7 (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	pH 4 / 10 (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
7.04 / 7.00	3.94 / 4.00	☑ WITHIN RANGE	0825
/	10.01 / 10.00	☑ WITHIN RANGE	0830
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4730 / 4490	10.68	☑ WITHIN RANGE	0823
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
245 / 228	11.89	☑ WITHIN RANGE	0831
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Temp = ~~12.64°C~~ 10.87 Baro = 769.04 mm Hg Calc = 11.2 mg/L Act = 11.3 mg/L	☑ WITHIN RANGE	0819
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.13 / 0.00	0.01 / 0.00	☑ WITHIN RANGE	0820
0.88 / 1.00	0.97 / 1.00	☑ WITHIN RANGE	0821
8.91 / 10.00	9.71 / 10.00	☑ WITHIN RANGE	0821
/	/	☐ WITHIN RANGE	

COMMENTS

☑ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☐ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS
NONE	NONE

SIGNED [signature] DATE 3-15-22

CHECKED BY J. Yonts DATE 3/18/2022

REVISED 06/2011

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station	MODEL:	Aqua Troll 400	SAMPLER:	(JB) / BM / AM
PROJECT NO.:	416559.0005.0000	SERIAL #:	728566	DATE:	3-15-22

PH CALIBRATION CHECK

	pH 7 (LOT #): 21010066 (EXP. DATE): 08/2022 PRE-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 21470032 21080189 (EXP. DATE): 04/2023 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
pre	6.79 / 7.00	9.91 / 10.00	☐ WITHIN RANGE	0822
pre	/	4.40 / 4.00	☐ WITHIN RANGE	0826
post	7.06 / 7.00	10.09 / 10.00	☒ WITHIN RANGE	0828
post	/	4.00 / 4.00	☒ WITHIN RANGE	0831

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

	CAL. READING (LOT #): 21470032 (EXP. DATE): 04/2023 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
pre	4549 / 4490	12.67	☐ WITHIN RANGE	0832
post	4489 / 4490	12.72	☒ WITHIN RANGE	0835
	/		☐ WITHIN RANGE	
	/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

	CAL. READING (LOT #): 21140143 (EXP. DATE): 04/2023 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
pre	225 / 228	12.46	☐ WITHIN RANGE	0837
post	227 / 228	12.49	☒ WITHIN RANGE	0840
	/		☐ WITHIN RANGE	
	/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 768.08 Temp: ~~23.93~~ JB 11.57 Act: 10.91 Calc: 11.00	☒ WITHIN RANGE	0820
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.19 / 0.00	0.01 / 0.00	☒ WITHIN RANGE	0824
2.34 / 1.00	1.68 / 1.00	☐ WITHIN RANGE	0839
8.34 / 10.00	9.92 / 10.00	☒ WITHIN RANGE	0838
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION
(LOT #):
(EXP. DATE):

☐ STANDARD SOLUTION (S)
LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES (1)	
☐	pH	pH:	+/- 0.2 S.U.
☐	COND	COND:	+/- 1% OF CAL. STANDARD
☐	ORP	ORP:	+/- 25 mV
☐	D.O.	D.O.:	VARIES
☐	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS
NONE	NONE

MM 3-15-22
SIGNED DATE

J. Yonts 3/18/2022
CHECKED BY DATE

GEL Laboratories LLC
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 22, 2022

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia 23219

Re: CCR Groundwater Monitoring - Level 1 Package
Work Order: 573245

Dear Kelly Hicks:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 15, 2022. 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. 1648.

Sincerely,

Meredith Boddiford

Meredith Boddiford
Project Manager

Purchase Order: 50149867
Enclosures

Table of Contents

Case Narrative

Receipt Narrative
for
Dominion Energy (50149867)
SDG: 573245

March 22, 2022

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary:

Sample receipt: The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on March 15, 2022 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

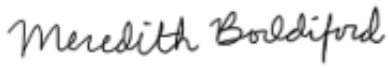
Sample Identification: The laboratory received the following samples:

Laboratory ID	Client ID
573245001	MW-LF-01-2022Q1
573245002	MW-LF-06-2022Q1
573245003	MW-LF-07-2022Q1
573245004	MW-LF-08-2022Q1
573245005	MW-LF-10-2022Q1
573245006	MW-LF-10A-2022Q1
573245007	MW-LF-11-2022Q1
573245008	DU-WAT-CCR-LF-22101
573245009	FLBK-WAT-CCR-LF-22101
573245010	MW-LF-22-2022Q1
573245011	AS-LF-01-2022Q1
573245012	AS-LF-02-2022Q1
573245013	AS-LF-03-2022Q1
573245014	MW-BG-73-2022Q1
573245015	FBLK-WAT-CCR-LF-22102

Case Narrative:

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.



Meredith Boddiford
Project Manager

Chain of Custody and Supporting Documentation

Page: 1 of 2
Project # 416559.0005.0000.2.2
GEL Quote #:
COC Number (1): 2022143
PO Number: PO 50149867

573245

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

GEL Work Order Number: 200774 *GEL Project Manager: Taylor Cannon*

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Dominion Energy Phone # 803-258-1528
Project/Site Name: Wateree Station Class 3 Landfill CCR 2022Q1 Fax #
Address: Wateree, South Carolina
Collected By: B. Medlin / J. Bradley Send Results To: AReed@envstd.com

Page 5 of 10 SDG: 573245

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	TDS - SM2540C	Cl, Fl, SO4 - 300.0	Total B, and Ca 6020B	NI	<-- Preservative Type (6)	Comments
MW-LF-01-2022Q1	3-14-2022	1635	N	N	GW	N		3	1	1	1			
MW-LF-06-2022Q1	3-14-2022	1648	N	N	GW	N		3	1	1	1			See attached work
MW-LF-07-2022Q1	3-14-2022	1300	N	N	GW	N		3	1	1	1			order for details
MW-LF-08-2022Q1	3-14-2022	1254	N	N	GW	N		3	1	1	1			
MW-LF-10-2022Q1	3-14-2022	1412	N	N	GW	N		3	1	1	1			
MW-LF-10A-2022Q1	3-14-2022	1524	N	N	GW	N		3	1	1	1			
MW-LF-11-2022Q1 MS/MSD	3-14-2022	1530	N	N	GW	N		6	2	2	2			
DU-WAT-CCR-LF-22101	3-14-2022	—	FD	N	GW	N		3	1	1	1			
FBLK-WAT-CCR-LF-22101	3-14-2022	1445	FB	N	AQ	N		3	1	1	1			
MW-LF-22-2022Q1	3-14-2022	1415	N	N	GW	N		3	1	1	1			

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
[signature]	3-15-22	1641	1 [signature]	3/15/22	1641
2			2		
3			3		

TAT Requested: **Normal:** X **Rush:** ____ **Specify:** ____

Fax Results: [ ] Yes [X] No

Select Deliverable: [ ] C of A [ ] QC Summary [X] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [ ] *Yes* [ ] *No* ***Cooler Temp:*** ____ °C

> ***For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)***

Sample Collection Time Zone : [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

3.) Field Filtered: For liquid matrices, indicate with a **- Y -** for yes the sample was field filtered or **- N -** for sample was not field filtered.

4.) Matrix Codes: **DW**=Drinking Water, **GW**=Groundwater, **SW**=Surface Water, **WW**=Waste Water, **W**=Water, **ML**=Misc Liquid, **SO**=Soil, **SD**=Sediment, **SL**=Sludge, **SS**=Solid Waste, **O**=Oil, **F**=Filter, **P**=Wipe, **U**=Urine, **F**=Fecal, **N**=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B, 6010B/7470A**) and number of containers provided for each (i.e. *8260B* - **3**, *6010B/7470A* - **1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals
As = Arsenic **Hg**= Mercury
Ba = Barium **Se**= Selenium
Cd = Cadmium **Ag**= Silver
Cr = Chromium **MR**= Misc. RCRA metals
Pb = Lead

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

Page: 2 of 2

Project # 416559.0005.0000.2.2

GEL Quote #:

COC Number [1]: 2022143

PO Number: PO 50149867

GEL Laboratories LLC

gel.com

Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

GEL Work Order Number: 200774 **GEL Project Manager: Taylor Cannon**

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: Dominion Energy Phone # 803-258-1528

Project/Site Name: Wateree Station Class 3 Landfill CCR 2022Q1 Fax #

Address: Wateree, South Carolina

Collected By: B. Medlin / J. Bradley Send Results To: AReed@envstd.com

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	TDS - SM2540C	Cl, Fl, SO4 - 300.0	Total B, and Ca 6020B Ni								<-- Preservative Type (6)	Comments
AS-LF-01-2022Q1	3-15-22	1130	N	N	GW	N		3	1	1	1									
AS-LF-02-2022Q1	3-15-22	1235	N	N	GW	N		3	1	1	1									See attached work
AS-LF-03-2022Q1	3-15-22	1205	N	N	GW	N		3	1	1	1									order for details
MW-BG-73-2022Q1	3-15-22	1305	N	N	GW	N		3	1	1	1									
FBLK-WAT-CCR-LF-22102	3-15-22	1202	FB	N	AQ	N		3	1	1	1									

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
	3-15-22	1641	1	3/15/22	641
2			2		
3			3		

TAT Requested: **Normal:** X **Rush:** **Specify:**

Fax Results: [ ] Yes [X] No

Select Deliverable: [ ] C of A [ ] QC Summary [X] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [ ] *Yes* [ ] *No* ***Cooler Temp:*** ____ °C

> ***For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)***

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

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5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B, 6010B/7470A**) and number of containers provided for each (i.e. *8260B* **- 3**, *6010B/7470A* **- 1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals
As = Arsenic **Hg**= Mercury
Ba = Barium **Se**= Selenium
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Pb = Lead

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

Page 9 of 24
SDG: 73245

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: DMNN	SDG/AR/COC/Work Order: 573245 | 573246
Received By: SB	Date Received: 3/15/22
Enter one tracking number per line below. Enter courier if applicable and no tracking available.	IR temperature gun #: IR1-22 Daily Calibration performed? (Y) / N
	Uncorrected temperature readings are to the 0.1 degree with final recorded temperatures rounded to the 0.5 degree. Provide individual container details when a cooler requiring 0 </=6oC is identified as out of specification.
N/A	Uncorrected Temp: 1 C IR Correction Factor: + / - Final Recorded Temp: 1 C Within 0.0-6.0C? Y / N
N/A	Uncorrected Temp: 1 C IR Correction Factor: + / - Final Recorded Temp: 1 C Within 0.0-6.0C? Y / N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N

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

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
4	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
5	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:
6	Samples received within holding time?	✓			ID's and tests affected:
7	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
8	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
9	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
10	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
11	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials AM Date 3/16/22 Page 1 of 1

Laboratory Certifications

List of current GEL Certifications as of 22 March 2022

State	Certification
Alabama	42200
Alaska	17−018
Alaska Drinking Water	SC00012
Arkansas	88−0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH−0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330−15−00283, P330−15−00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C−SC−01
Kansas NELAP	E−10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M−SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE−OS−26−13
Nevada	SC000122021−1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R−158
Oklahoma	2019−165
Pennsylvania NELAP	68−00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235−21−19
Utah NELAP	SC000122021−36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Metals Analysis

Case Narrative

Metals
Technical Case Narrative
Dominion Energy
SDG #: 573245

Product: Determination of Metals by ICP-MS
Analytical Method: SW846 3005A/6020B
Analytical Procedure: GL-MA-E-014 REV# 35
Analytical Batch: 2245781

Preparation Method: SW846 3005A
Preparation Procedure: GL-MA-E-006 REV# 14
Preparation Batch: 2245780

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

GEL Sample ID#	Client Sample Identification
573245001	MW-LF-01-2022Q1
573245002	MW-LF-06-2022Q1
573245003	MW-LF-07-2022Q1
573245004	MW-LF-08-2022Q1
573245005	MW-LF-10-2022Q1
573245006	MW-LF-10A-2022Q1
573245007	MW-LF-11-2022Q1
573245008	DU-WAT-CCR-LF-22101
573245009	FLBK-WAT-CCR-LF-22101
573245010	MW-LF-22-2022Q1
573245011	AS-LF-01-2022Q1
573245012	AS-LF-02-2022Q1
573245013	AS-LF-03-2022Q1
573245014	MW-BG-73-2022Q1
573245015	FBLK-WAT-CCR-LF-22102
1205050488	Method Blank (MB)**ICP-MS**
1205050489	Laboratory Control Sample (LCS)
1205050492	573245007(MW-LF-11-2022Q1L) Serial Dilution (SD)
1205050490	573245007(MW-LF-11-2022Q1D) Sample Duplicate (DUP)
1205050491	573245007(MW-LF-11-2022Q1S) Matrix Spike (MS)

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.

Calibration Information

ICSA/ICSAB Statement
For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities

indigenous to the purchased standard.

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

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.

GEL LABORATORIES LLC

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

Qualifier Definition Report
for

DMNN001 Dominion Energy (50149867)

Client SDG: 573245 GEL Work Order: 573245

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Edmund Frampton**

Date: 29 MAR 2022 **Title: Group Leader**

Sample Data Summary

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245001 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−01−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	12.7	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:33	220329−1	2245781
7440−70−2	Calcium	126	ug/L	J	80.0	200	200	1	MS	SKJ	03/29/22 11:33	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245002 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−06−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	9.16	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:35	220329−1	2245781
7440−70−2	Calcium	887	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 11:35	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245003 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−07−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.97	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:37	220329−1	2245781
7440−70−2	Calcium	981	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 11:37	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245004 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−08−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.16	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:39	220329−1	2245781
7440−70−2	Calcium	897	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 11:39	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245005 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−10−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	21.7	ug/L		5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:41	220329−1	2245781
7440−70−2	Calcium	19800	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 11:41	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245006 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−10A−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	10.2	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:44	220329−1	2245781
7440−70−2	Calcium	395	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 11:44	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245007 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−11−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	10.5	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 11:56	220329−1	2245781
7440−70−2	Calcium	378	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 11:56	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245008 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: DU−WAT−CCR−LF−22101 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	23.2	ug/L		5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:07	220329−1	2245781
7440−70−2	Calcium	20000	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 12:07	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245009 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: FLBK−WAT−CCR−LF−2210 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: AQ **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	5.20	ug/L	U	5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:09	220329−1	2245781
7440−70−2	Calcium	80.0	ug/L	U	80.0	200	200	1	MS	SKJ	03/29/22 12:09	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245010 **BASIS:** As Received **DATE COLLECTED** 14−MAR−22

CLIENT ID: MW−LF−22−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	15.8	ug/L		5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:15	220329−1	2245781
7440−70−2	Calcium	1950	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 12:15	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245011 **BASIS:** As Received **DATE COLLECTED** 15−MAR−22

CLIENT ID: AS−LF−01−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	10.3	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:17	220329−1	2245781
7440−70−2	Calcium	772	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 12:17	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245012 **BASIS:** As Received **DATE COLLECTED** 15−MAR−22

CLIENT ID: AS−LF−02−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	11.3	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:19	220329−1	2245781
7440−70−2	Calcium	943	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 12:19	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245013 **BASIS:** As Received **DATE COLLECTED** 15−MAR−22

CLIENT ID: AS−LF−03−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.98	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:21	220329−1	2245781
7440−70−2	Calcium	606	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 12:21	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245014 **BASIS:** As Received **DATE COLLECTED** 15−MAR−22

CLIENT ID: MW−BG−73−2022Q1 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	9.18	ug/L	J	5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:23	220329−1	2245781
7440−70−2	Calcium	304	ug/L		80.0	200	200	1	MS	SKJ	03/29/22 12:23	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 573245 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 573245015 **BASIS:** As Received **DATE COLLECTED** 15−MAR−22

CLIENT ID: FBLK−WAT−CCR−LF−2210 **LEVEL:** Low **DATE RECEIVED** 15−MAR−22

MATRIX: AQ **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	5.20	ug/L	U	5.20	15.0	15.0	1	MS	SKJ	03/29/22 12:25	220329−1	2245781
7440−70−2	Calcium	80.0	ug/L	U	80.0	200	200	1	MS	SKJ	03/29/22 12:25	220329−1	2245781

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2245781	2245780	SW846 3005A	50	mL	50	mL	03/25/22	RG1

***Analytical Methods:**

MS **SW846 3005A/6020B**

Quality Control Summary

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 573245

Contract: DMNN00101 **Lab Code:** GEL

Instrument ID: ICPMS11

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
ICV01										
	Boron	106	ug/L	100	ug/L	105.9	90.0 − 110.0	MS	29−MAR−22 10:16	220329−1
	Calcium	5140	ug/L	5000	ug/L	102.9	90.0 − 110.0	MS	29−MAR−22 10:16	220329−1
CCV01										
	Boron	99.4	ug/L	100	ug/L	99.4	90.0 − 110.0	MS	29−MAR−22 10:26	220329−1
	Calcium	5010	ug/L	5000	ug/L	100.3	90.0 − 110.0	MS	29−MAR−22 10:26	220329−1
CCV02										
	Boron	102	ug/L	100	ug/L	101.8	90.0 − 110.0	MS	29−MAR−22 10:33	220329−1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 − 110.0	MS	29−MAR−22 10:33	220329−1
CCV03										
	Boron	93.5	ug/L	100	ug/L	93.5	90.0 − 110.0	MS	29−MAR−22 11:25	220329−1
	Calcium	5070	ug/L	5000	ug/L	101.5	90.0 − 110.0	MS	29−MAR−22 11:25	220329−1
CCV04										
	Boron	94.6	ug/L	100	ug/L	94.6	90.0 − 110.0	MS	29−MAR−22 11:52	220329−1
	Calcium	5110	ug/L	5000	ug/L	102.3	90.0 − 110.0	MS	29−MAR−22 11:52	220329−1
CCV05										
	Boron	93.9	ug/L	100	ug/L	93.9	90.0 − 110.0	MS	29−MAR−22 12:11	220329−1
	Calcium	5090	ug/L	5000	ug/L	101.7	90.0 − 110.0	MS	29−MAR−22 12:11	220329−1
CCV06										
	Boron	90.8	ug/L	100	ug/L	90.8	90.0 − 110.0	MS	29−MAR−22 12:34	220329−1
	Calcium	5120	ug/L	5000	ug/L	102.4	90.0 − 110.0	MS	29−MAR−22 12:34	220329−1

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−2b−
CRDL Standard for ICP & ICPMS

SDG No: 573245

Contract: DMNN00101 **Lab Code:** GEL

Instrument ID: ICPMS11

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M*	Analysis Date/Time	Run Number
CRDL01										
	Boron	19.1	ug/L	15	ug/L	127.4	70.0 − 130.0	MS	29−MAR−22 10:20	220329−1
	Calcium	246	ug/L	200	ug/L	122.9	70.0 − 130.0	MS	29−MAR−22 10:20	220329−1
CRDL02										
	Boron	13.8	ug/L	15	ug/L	91.8	70.0 − 130.0	MS	29−MAR−22 11:18	220329−1
	Calcium	242	ug/L	200	ug/L	120.8	70.0 − 130.0	MS	29−MAR−22 11:18	220329−1
CRDL03										
	Boron	14	ug/L	15	ug/L	93.1	70.0 − 130.0	MS	29−MAR−22 11:46	220329−1
	Calcium	237	ug/L	200	ug/L	118.3	70.0 − 130.0	MS	29−MAR−22 11:46	220329−1
CRDL04										
	Boron	12.6	ug/L	15	ug/L	84.1	70.0 − 130.0	MS	29−MAR−22 12:27	220329−1
	Calcium	233	ug/L	200	ug/L	116.3	70.0 − 130.0	MS	29−MAR−22 12:27	220329−1

***Analytical Methods:**

MS **SW846 3005A/6020B**

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 573245

Contract: DMNN00101

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
ICB01										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 10:18	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 10:18	220329−1
CCB01										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 10:28	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 10:28	220329−1
CCB02										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 10:35	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 10:35	220329−1
CCB03										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 11:27	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 11:27	220329−1
CCB04										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 11:54	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 11:54	220329−1
CCB05										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 12:13	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 12:13	220329−1
CCB06										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	29−MAR−22 12:36	220329−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	29−MAR−22 12:36	220329−1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−3b−
PREPARATION BLANK SUMMARY

SDG NO. 573245
Contract: DMNN00101
Matrix: GW

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M*	MDL	RDL
1205050488								
	Boron	5.20	ug/L	+/−7.5	U	MS	5.20	15.0
	Calcium	80.0	ug/L	+/−100	U	MS	80.0	200

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−4−
Interference Check Sample

SDG No: 573245

Contract: DMNN00101 **Lab Code:** GEL

Instrument: ICPMS11

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Boron	3.78	ug/L					29−MAR−22 10:22	220329−1
	Calcium	103000	ug/L	100000	ug/L	103	80.0 − 120.0	29−MAR−22 10:22	220329−1
ICSAB01									
	Boron	21.8	ug/L	20	ug/L	109	80.0 − 120.0	29−MAR−22 10:24	220329−1
	Calcium	101000	ug/L	100000	ug/L	101	80.0 − 120.0	29−MAR−22 10:24	220329−1
ICSA02									
	Boron	4.08	ug/L					29−MAR−22 10:56	220329−1
	Calcium	101000	ug/L	100000	ug/L	101	80.0 − 120.0	29−MAR−22 10:56	220329−1
ICSAB02									
	Boron	21.1	ug/L	20	ug/L	106	80.0 − 120.0	29−MAR−22 10:58	220329−1
	Calcium	100000	ug/L	100000	ug/L	100	80.0 − 120.0	29−MAR−22 10:58	220329−1
ICSA03									
	Boron	2.44	ug/L					29−MAR−22 11:21	220329−1
	Calcium	100000	ug/L	100000	ug/L	100	80.0 − 120.0	29−MAR−22 11:21	220329−1
ICSAB03									
	Boron	21.5	ug/L	20	ug/L	107	80.0 − 120.0	29−MAR−22 11:23	220329−1
	Calcium	103000	ug/L	100000	ug/L	103	80.0 − 120.0	29−MAR−22 11:23	220329−1
ICSA04									
	Boron	2.3	ug/L					29−MAR−22 11:48	220329−1
	Calcium	101000	ug/L	100000	ug/L	101	80.0 − 120.0	29−MAR−22 11:48	220329−1
ICSAB04									
	Boron	20.4	ug/L	20	ug/L	102	80.0 − 120.0	29−MAR−22 11:50	220329−1
	Calcium	101000	ug/L	100000	ug/L	101	80.0 − 120.0	29−MAR−22 11:50	220329−1
ICSA05									
	Boron	3.41	ug/L					29−MAR−22 12:30	220329−1
	Calcium	102000	ug/L	100000	ug/L	102	80.0 − 120.0	29−MAR−22 12:30	220329−1
ICSAB05									
	Boron	20.7	ug/L	20	ug/L	103	80.0 − 120.0	29−MAR−22 12:32	220329−1

METALS
−4−
Interference Check Sample

SDG No: 573245

Contract: DMNN00101 **Lab Code:** GEL

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Calcium	103000	ug/L	100000	ug/L	103	80.0 − 120.0	29−MAR−22 12:32	220329−1

METALS
−5a−

Matrix Spike Summary

SDG NO. 573245 **Client ID** MW−LF−11−2022Q1S

Contract: DMNN00101 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 573245007 **Spike ID:** 1205050491

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Boron	ug/L	75−125	120		10.5	B	100	110		MS
Calcium	ug/L	75−125	2630		378		2000	113		MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

Metals
−6−
Duplicate Sample Summary

SDG No.: 573245 **Lab Code:** GEL

Contract: DMNN00101 **Client ID:** MW−LF−11−2022Q1D

Matrix: GROUND WATER **Level:** Low

Sample ID: 573245007 **Duplicate ID:** 1205050490 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Boron	ug/L	+/−30	10.5	B	10.4	B	.229		MS
Calcium	ug/L	+/−400	378		378		.136		MS

***Analytical Methods:**
MS SW846 3005A/6020B

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 573245

Contract: DMNN00101

Aqueous LCS Source: Enviromental Express **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205050489								
	Calcium	ug/L	2000	2260		113	80−120	MS
	Boron	ug/L	100	115		115	80−120	MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 573245 **Client ID** MW−LF−11−2022Q1L

Contract: DMNN00101

Matrix: LIQUID **Level:** Low

Sample ID: 573245007 **Serial Dilution ID:** 1205050492

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Boron	10.5	B	27.1	B	158.665			MS
Calcium	378		400	U	4.392			MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 573245 **Method Type:** MS

Contract: DMNN00101 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 2245780							
1205050488	MB for batch 2245780	MB	G	25−MAR−22	50mL	50mL	
1205050489	LCS for batch 2245780	LCS	G	25−MAR−22	50mL	50mL	
1205050491	MW−LF−11−2022Q1S	MS	G	25−MAR−22	50mL	50mL	
1205050490	MW−LF−11−2022Q1D	DUP	G	25−MAR−22	50mL	50mL	
573245001	MW−LF−01−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245002	MW−LF−06−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245003	MW−LF−07−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245004	MW−LF−08−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245005	MW−LF−10−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245006	MW−LF−10A−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245007	MW−LF−11−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245008	DU−WAT−CCR−LF−22101	SAMPLE	G	25−MAR−22	50mL	50mL	
573245009	FLBK−WAT−CCR−LF−22101	SAMPLE	G	25−MAR−22	50mL	50mL	
573245010	MW−LF−22−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245011	AS−LF−01−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245012	AS−LF−02−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245013	AS−LF−03−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245014	MW−BG−73−2022Q1	SAMPLE	G	25−MAR−22	50mL	50mL	
573245015	FBLK−WAT−CCR−LF−22102	SAMPLE	G	25−MAR−22	50mL	50mL	

SW846

General Chem Analysis

Case Narrative

General Chemistry
Technical Case Narrative
Dominion Energy
SDG #: 573245

Product: **Ion Chromatography**
Analytical Method: EPA 300.0
Analytical Procedure: GL-GC-E-086 REV# 30
Analytical Batches: 2241660 and 2241672

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

GEL Sample ID#	Client Sample Identification
573245001	MW-LF-01-2022Q1
573245002	MW-LF-06-2022Q1
573245003	MW-LF-07-2022Q1
573245004	MW-LF-08-2022Q1
573245005	MW-LF-10-2022Q1
573245006	MW-LF-10A-2022Q1
573245007	MW-LF-11-2022Q1
573245008	DU-WAT-CCR-LF-22101
573245009	FLBK-WAT-CCR-LF-22101
573245010	MW-LF-22-2022Q1
573245011	AS-LF-01-2022Q1
573245012	AS-LF-02-2022Q1
573245013	AS-LF-03-2022Q1
573245014	MW-BG-73-2022Q1
573245015	FBLK-WAT-CCR-LF-22102
1205042137	Method Blank (MB)
1205042138	Laboratory Control Sample (LCS)
1205042139	573245007(MW-LF-11-2022Q1) Sample Duplicate (DUP)
1205042140	573245007(MW-LF-11-2022Q1) Post Spike (PS)
1205042165	Method Blank (MB)
1205042166	Laboratory Control Sample (LCS)
1205042167	573246002(MW-02LF-2022Q1) Sample Duplicate (DUP)
1205042168	573246002(MW-02LF-2022Q1) Post Spike (PS)
1205042169	573246007(DU-WAT-LF-22101) Sample Duplicate (DUP)
1205042170	573246007(DU-WAT-LF-22101) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less

than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Chloride	1205042140 (MW-LF-11-2022Q1PS)	112* (90%-110%)
	1205042168 (MW-02LF-2022Q1PS) and 1205042170 (DU-WAT-LF-22101PS)	117* (90%-110%)

Technical Information

Sample Dilutions

The following samples 573245005 (MW-LF-10-2022Q1), 573245008 (DU-WAT-CCR-LF-22101) and 573245010 (MW-LF-22-2022Q1) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	573245		
	005	008	010
Chloride	5X	10X	2X
Sulfate	10X	10X	1X

Miscellaneous Information

Manual Integrations

Sample 1205042169 (DU-WAT-LF-22101DUP) was manually integrated to correctly position the baseline as set in the calibration standards.

Additional Comments

All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

Product: **Solids, Total Dissolved**
Analytical Method: SM 2540C
Analytical Procedure: GL-GC-E-001 REV# 19
Analytical Batch: 2243637

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

GEL Sample ID#	Client Sample Identification
573245001	MW-LF-01-2022Q1
573245002	MW-LF-06-2022Q1
573245003	MW-LF-07-2022Q1
573245004	MW-LF-08-2022Q1
573245005	MW-LF-10-2022Q1
573245006	MW-LF-10A-2022Q1
573245007	MW-LF-11-2022Q1
573245008	DU-WAT-CCR-LF-22101
573245009	FLBK-WAT-CCR-LF-22101
573245010	MW-LF-22-2022Q1
573245011	AS-LF-01-2022Q1
573245012	AS-LF-02-2022Q1
573245013	AS-LF-03-2022Q1
573245014	MW-BG-73-2022Q1
573245015	FBLK-WAT-CCR-LF-22102
1205046121	Method Blank (MB)
1205046122	Laboratory Control Sample (LCS)
1205046123	573129001(NonSDG) Sample Duplicate (DUP)
1205046124	573245007(MW-LF-11-2022Q1) Sample Duplicate (DUP)
1205046125	573257001(NonSDG) Sample Duplicate (DUP)

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

Duplicate Relative Percent Difference (RPD) Statement
The Relative Percent Difference (RPD) between the sample and duplicate falls outside of the established acceptance limits because of the heterogeneous matrix of the sample:

Analyte	Sample	Value
Total Dissolved Solids	1205046125 (Non SDG 573257001DUP)	12.7* (0%-5%)

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

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.

GEL LABORATORIES LLC

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

Qualifier Definition Report
for

DMNN001 Dominion Energy (50149867)

Client SDG: 573245 GEL Work Order: 573245

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Aubrey Kingsbury**

Date: 25 MAR 2022 **Title: Team Leader**

Sample Data Summary

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: MW-LF-01-2022Q1
Sample ID: 573245001
Matrix: GW
Collect Date: 14-MAR-22 16:35
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		7.18	0.0670	0.200	mg/L		1	HXC1	03/15/22	1742	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	J	0.301	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	11.4	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: MW-LF-06-2022Q1
Sample ID: 573245002
Matrix: GW
Collect Date: 14-MAR-22 16:48
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		6.73	0.0670	0.200	mg/L		1	HXC1	03/15/22	1812	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.604	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	10.0	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: MW-LF-07-2022Q1
Sample ID: 573245003
Matrix: GW
Collect Date: 14-MAR-22 13:00
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.91	0.0670	0.200	mg/L		1	HXC1	03/15/22	1843	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		1.18	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	4.29	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-08-2022Q1	Project:	DMNN00101
Sample ID:	573245004	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	14-MAR-22 12:54		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.57	0.0670	0.200	mg/L		1	HXC1	03/15/22	1914	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.424	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		15.7	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-10-2022Q1	Project:	DMNN00101
Sample ID:	573245005	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	14-MAR-22 14:12		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride		0.351	0.0330	0.100	mg/L		1	HXC1	03/15/22	1945	2241660	1
Chloride		13.1	0.335	1.00	mg/L		5	HXC1	03/16/22	0226	2241660	2
Sulfate		93.8	1.33	4.00	mg/L		10	HXC1	03/17/22	1029	2241660	3
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		117	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	EPA 300.0	
4	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-10A-2022Q1	Project:	DMNN00101
Sample ID:	573245006	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	14-MAR-22 15:24		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		4.14	0.0670	0.200	mg/L		1	HXC1	03/15/22	2016	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.742	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-11-2022Q1	Project:	DMNN00101
Sample ID:	573245007	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	14-MAR-22 15:30		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.89	0.0670	0.200	mg/L		1	HXC1	03/15/22	2047	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	J	0.285	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		18.6	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: March 25, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	DU-WAT-CCR-LF-22101	Project:	DMNN00101
Sample ID:	573245008	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	14-MAR-22 12:00		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride		0.346	0.0330	0.100	mg/L		1	HXC1	03/15/22	2117	2241660	1
Chloride		13.3	0.670	2.00	mg/L		10	HXC1	03/16/22	0257	2241660	2
Sulfate		96.9	1.33	4.00	mg/L		10					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		119	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	FLBK-WAT-CCR-LF-22101	Project:	DMNN00101
Sample ID:	573245009	Client ID:	DMNN001
Matrix:	AQ		
Collect Date:	14-MAR-22 14:45		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	U	ND	0.0670	0.200	mg/L		1	HXC1	03/15/22	2148	2241660	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-22-2022Q1	Project:	DMNN00101
Sample ID:	573245010	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	14-MAR-22 14:15		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride	U	ND	0.0330	0.100	mg/L		1	HXC1	03/15/22	2219	2241660	1
Sulfate		1.11	0.133	0.400	mg/L		1					
Chloride		10.3	0.134	0.400	mg/L		2	HXC1	03/16/22	0327	2241660	2
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	7.14	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	AS-LF-01-2022Q1	Project:	DMNN00101
Sample ID:	573245011	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	15-MAR-22 11:30		
Receive Date:	15-MAR-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.89	0.0670	0.200	mg/L		1	JLD1	03/15/22	2100	2241672	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.752	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		22.9	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: AS-LF-02-2022Q1
Sample ID: 573245012
Matrix: GW
Collect Date: 15-MAR-22 12:35
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		2.74	0.0670	0.200	mg/L		1	JLD1	03/15/22	2129	2241672	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		3.43	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	12.9	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: AS-LF-03-2022Q1
Sample ID: 573245013
Matrix: GW
Collect Date: 15-MAR-22 12:05
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.28	0.0670	0.200	mg/L		1	JLD1	03/15/22	2159	2241672	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.433	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC
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Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: MW-BG-73-2022Q1
Sample ID: 573245014
Matrix: GW
Collect Date: 15-MAR-22 13:05
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		2.27	0.0670	0.200	mg/L		1	JLD1	03/15/22	2229	2241672	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	J	0.377	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	4.29	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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

Certificate of Analysis

Report Date: March 25, 2022

Company : Dominion Energy Services, Inc.
Address : 120 Tredegar Street

Richmond, Virginia 23219
Contact: Kelly Hicks
Project: CCR Groundwater Monitoring - Level 1 Package

Client Sample ID: FBLK-WAT-CCR-LF-22102
Sample ID: 573245015
Matrix: AQ
Collect Date: 15-MAR-22 12:02
Receive Date: 15-MAR-22
Collector: Client

Project: DMNN00101
Client ID: DMNN001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	J	0.152	0.0670	0.200	mg/L		1	JLD1	03/15/22	2259	2241672	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	3.40	14.3	mg/L			KLP1	03/21/22	1248	2243637	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

Quality Control Summary

QC Summary

Report Date: March 25, 2022

Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia

Contact: **Kelly Hicks**

Workorder: **573245**

Parmname	NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Ion Chromatography												
Batch 2241660												
QC1205042139 573245007 DUP												
Chloride			5.89		5.83	mg/L	0.941			(0%-20%)	HXC1	03/16/22 01:24
Fluoride		U	ND	U	ND	mg/L	N/A					
Sulfate		J	0.285	J	0.281	mg/L	1.45	^		(+/-.8)		
QC1205042138 LCS												
Chloride	5.00				4.94	mg/L			98.9	(90%-110%)		03/16/22 00:53
Fluoride	2.50				2.47	mg/L			99	(90%-110%)		
Sulfate	10.0				10.3	mg/L			103	(90%-110%)		
QC1205042137 MB												
Chloride				U	ND	mg/L						03/16/22 00:22
Fluoride				U	ND	mg/L						
Sulfate				U	ND	mg/L						
QC1205042140 573245007 PS												
Chloride	5.00		5.89		11.5	mg/L			112	* (90%-110%)		03/16/22 01:55
Fluoride	2.50	U	ND		2.67	mg/L			107	(90%-110%)		
Sulfate	10.0	J	0.285		10.7	mg/L			104	(90%-110%)		

QC Summary

Workorder: **573245**

Parmname		NOM		Sample	Qual	QC	Units	RPD%		REC%	Range	Anlst	Date Time
Ion Chromatography													
Batch 2241672													
QC1205042167 573246002 DUP													
Chloride				9.63		9.61	mg/L	0.203			(0%-20%)	JLD1	03/16/22 00:29
Fluoride			J	0.0349	J	0.0378	mg/L	7.98	^		(+/-.2)		
Sulfate				0.416	J	0.389	mg/L	6.71	^		(+/-.8)		
QC1205042169 573246007 DUP													
Chloride				9.15		9.15	mg/L	0.104			(0%-20%)		03/16/22 05:27
Fluoride			J	0.0495	J	0.0429	mg/L	14.3	^		(+/-.2)		
Sulfate				3.80		3.83	mg/L	0.736			(0%-20%)		
QC1205042166 LCS													
Chloride		5.00				4.73	mg/L			94.7	(90%-110%)		03/16/22 07:57
Fluoride		2.50				2.31	mg/L			92.4	(90%-110%)		
Sulfate		10.0				9.71	mg/L			97.1	(90%-110%)		
QC1205042165 MB													
Chloride					U	ND	mg/L						03/16/22 07:27
Fluoride					U	ND	mg/L						
Sulfate					U	ND	mg/L						
QC1205042168 573246002 PS													
Chloride		5.00		9.63		15.5	mg/L			117*	(90%-110%)		03/16/22 00:59
Fluoride		2.50	J	0.0349		2.59	mg/L			102	(90%-110%)		

QC Summary

Workorder: **573245**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 2241672											
Sulfate	10.0		0.416		10.2	mg/L		98	(90%-110%)	JLD1	03/16/22 00:59
QC1205042170 573246007 PS											
Chloride	5.00		9.15		15.0	mg/L		117*	(90%-110%)		03/16/22 05:57
Fluoride	2.50	J	0.0495		2.48	mg/L		97.1	(90%-110%)		
Sulfate	10.0		3.80		13.3	mg/L		95.4	(90%-110%)		
Solids Analysis											
Batch 2243637											
QC1205046123 573129001 DUP											
Total Dissolved Solids		U	ND	U	ND	mg/L	N/A			KLP1	03/21/22 12:48
QC1205046124 573245007 DUP											
Total Dissolved Solids			18.6	J	14.3	mg/L	26.1 ^		(+/-28.6)		03/21/22 12:48
QC1205046125 573257001 DUP											
Total Dissolved Solids			156		137	mg/L	12.7*		(0%-5%)		03/21/22 12:48
QC1205046122 LCS											
Total Dissolved Solids	300				297	mg/L		99	(95%-105%)		03/21/22 12:48
QC1205046121 MB											
Total Dissolved Solids				U	ND	mg/L					03/21/22 12:48

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded

QC Summary

Workorder: **573245**

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

J	See case narrative for an explanation
J	Value is estimated
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	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
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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This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Wateree Power Station Groundwater Sampling
Samples Collected between: 3/14/2022 and 3/18/2022

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

573245

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
MW-LF-01-2022Q1	MW-01LF	N	EPA 300.0	Sulfate	N	0.301	J	RL	0.133	0.400		mg/L
MW-LF-01-2022Q1	MW-01LF	N	SM 2540C	Total Dissolved Solids	N	11.4	J	RL	3.40	14.3		mg/L
MW-LF-01-2022Q1	MW-01LF	N	SW-846 6020B	Boron	T	12.7	J	RL	5.20	15.0		ug/L
MW-LF-01-2022Q1	MW-01LF	N	SW-846 6020B	Calcium	T	126	J	RL	80.0	200		ug/L
MW-LF-06-2022Q1	MW-06LF	N	SM 2540C	Total Dissolved Solids	N	10.0	J	RL	3.40	14.3		mg/L
MW-LF-06-2022Q1	MW-06LF	N	SW-846 6020B	Boron	T	9.16	J	RL	5.20	15.0		ug/L
MW-LF-07-2022Q1	MW-LF-07	N	SM 2540C	Total Dissolved Solids	N	4.29	J	RL	3.40	14.3		mg/L
MW-LF-07-2022Q1	MW-LF-07	N	SW-846 6020B	Boron	T	8.97	J	RL	5.20	15.0		ug/L
MW-LF-08-2022Q1	MW-LF-08	N	SW-846 6020B	Boron	T	8.16	J	RL	5.20	15.0		ug/L
MW-LF-10A-2022Q1	MW-LF-10A	N	SW-846 6020B	Boron	T	10.2	J	RL	5.20	15.0		ug/L
MW-LF-11-2022Q1	MW-LF-11	N	EPA 300.0	Sulfate	N	0.285	J	RL	0.133	0.400		mg/L
MW-LF-11-2022Q1	MW-LF-11	N	SW-846 6020B	Boron	T	10.5	J	RL	5.20	15.0		ug/L
MW-LF-22-2022Q1	MW-22	N	SM 2540C	Total Dissolved Solids	N	7.14	J	RL	3.40	14.3		mg/L
AS-LF-01-2022Q1	AS-LF-01	N	SW-846 6020B	Boron	T	10.3	J	RL	5.20	15.0		ug/L
AS-LF-02-2022Q1	AS-LF-02	N	SM 2540C	Total Dissolved Solids	N	12.9	J	RL	3.40	14.3		mg/L
AS-LF-02-2022Q1	AS-LF-02	N	SW-846 6020B	Boron	T	11.3	J	RL	5.20	15.0		ug/L
AS-LF-03-2022Q1	AS-LF-03	N	SW-846 6020B	Boron	T	8.98	J	RL	5.20	15.0		ug/L
MW-BG-73-2022Q1	MW-BG-73	N	EPA 300.0	Sulfate	N	0.377	J	RL	0.133	0.400		mg/L
MW-BG-73-2022Q1	MW-BG-73	N	SM 2540C	Total Dissolved Solids	N	4.29	J	RL	3.40	14.3		mg/L
MW-BG-73-2022Q1	MW-BG-73	N	SW-846 6020B	Boron	T	9.18	J	RL	5.20	15.0		ug/L
FBLK-WAT-CCR-LF-22102	Field Blank	FB	EPA 300.0	Chloride	N	0.152	J	RL	0.0670	0.200		mg/L

Data Qualifiers	
U	The analyte was not detected above the level of the reported sample quantitation limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	This analyte was not detected, but the reporting limit may or may not be higher due to a bias identified during data validation.

R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Wateree Generating Station
SDG: 573245

Lab Sample ID	573245001
Sys Sample Code	MW-LF-01-2022Q1
Sample Name	MW-LF-01-2022Q1
Sample Date	3/14/2022 4:35:00 PM
Location	WAT-MW-01LF / MW-01LF
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	7.18				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.301	J	RL		0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	11.4	J	RL		3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	12.7	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	126	J	RL		80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245002
Sys Sample Code	MW-LF-06-2022Q1
Sample Name	MW-LF-06-2022Q1
Sample Date	3/14/2022 4:48:00 PM
Location	WAT-MW-06LF / MW-06LF
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	6.73				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.604				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	10.0	J	RL		3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	9.16	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	887				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245003
Sys Sample Code	MW-LF-07-2022Q1
Sample Name	MW-LF-07-2022Q1
Sample Date	3/14/2022 1:00:00 PM
Location	WAT-MW-LF-07 / MW-LF-07
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	8.91				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	1.18				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	4.29	J	RL		3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.97	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	981				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245004
Sys Sample Code	MW-LF-08-2022Q1
Sample Name	MW-LF-08-2022Q1
Sample Date	3/14/2022 12:54:00 PM
Location	WAT-MW-LF-08 / MW-LF-08
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.57				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.424				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	15.7				3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.16	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	897				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245005
Sys Sample Code	MW-LF-10-2022Q1
Sample Name	MW-LF-10-2022Q1
Sample Date	3/14/2022 2:12:00 PM
Location	WAT-MW-LF-10 / MW-LF-10
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Fluoride	16984-48-8	N	mg/L	0.351				0.0330	0.0330	0.100	Y	Yes	1	NA
EPA 300.0	Chloride	16887-00-6	N	mg/L	13.1				0.335	0.335	1.00	Y	Yes	5	NA
	Sulfate	14808-79-8	N	mg/L	93.8				1.33	1.33	4.00	Y	Yes	10	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	117				3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	21.7				5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	19800				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245006
Sys Sample Code	MW-LF-10A-2022Q1
Sample Name	MW-LF-10A-2022Q1
Sample Date	3/14/2022 3:24:00 PM
Location	WAT-MW-LF-10A / MW-LF-10A
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	4.14				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.742				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			3.40	3.40	14.3	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	10.2	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	395				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245007
Sys Sample Code	MW-LF-11-2022Q1
Sample Name	MW-LF-11-2022Q1
Sample Date	3/14/2022 3:30:00 PM
Location	WAT-MW-LF-11 / MW-LF-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.89				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.285	J	RL		0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	18.6				3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	10.5	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	378				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245008
Sys Sample Code	DU-WAT-CCR-LF-22101
Sample Name	DU-WAT-CCR-LF-22101
Sample Date	3/14/2022 12:00:00 PM
Location	WAT-MW-LF-10 / MW-LF-10
Sample Type	FD
Matrix	GW
Parent Sample	MW-LF-10-2022Q1

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Fluoride	16984-48-8	N	mg/L	0.346				0.0330	0.0330	0.100	Y	Yes	1	NA
EPA 300.0	Chloride	16887-00-6	N	mg/L	13.3				0.670	0.670	2.00	Y	Yes	10	NA
	Sulfate	14808-79-8	N	mg/L	96.9				1.33	1.33	4.00	Y	Yes	10	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	119				3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	23.2				5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	20000				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245009
Sys Sample Code	FLBK-WAT-CCR-LF-22101
Sample Name	FLBK-WAT-CCR-LF-22101
Sample Date	3/14/2022 2:45:00 PM
Location	WAT-CCRLF-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L		U			0.0670	0.0670	0.200	N	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.133	0.133	0.400	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			3.40	3.40	14.3	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L		U			5.20	5.20	15.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			80.0	80.0	200	N	Yes	1	NA

Facility: Wateree Generating Station
SDG: 573245

Lab Sample ID	573245010
Sys Sample Code	MW-LF-22-2022Q1
Sample Name	MW-LF-22-2022Q1
Sample Date	3/14/2022 2:15:00 PM
Location	WAT-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	1.11				0.133	0.133	0.400	Y	Yes	1	NA
EPA 300.0	Chloride	16887-00-6	N	mg/L	10.3				0.134	0.134	0.400	Y	Yes	2	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	7.14	J	RL		3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	15.8				5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	1950				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245011
Sys Sample Code	AS-LF-01-2022Q1
Sample Name	AS-LF-01-2022Q1
Sample Date	3/15/2022 11:30:00 AM
Location	WAT-AS-LF-01 / AS-LF-01
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	8.89				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.752				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	22.9				3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	10.3	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	772				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245012
Sys Sample Code	AS-LF-02-2022Q1
Sample Name	AS-LF-02-2022Q1
Sample Date	3/15/2022 12:35:00 PM
Location	WAT-AS-LF-02 / AS-LF-02
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	2.74				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	3.43				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	12.9	J	RL		3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	11.3	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	943				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245013
Sys Sample Code	AS-LF-03-2022Q1
Sample Name	AS-LF-03-2022Q1
Sample Date	3/15/2022 12:05:00 PM
Location	WAT-AS-LF-03 / AS-LF-03
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.28				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.433				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			3.40	3.40	14.3	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.98	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	606				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245014
Sys Sample Code	MW-BG-73-2022Q1
Sample Name	MW-BG-73-2022Q1
Sample Date	3/15/2022 1:05:00 PM
Location	WAT-MW-BG-73 / MW-BG-73
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	2.27				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.377	J	RL		0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	4.29	J	RL		3.40	3.40	14.3	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	9.18	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	304				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	573245015
Sys Sample Code	FBLK-WAT-CCR-LF-22102
Sample Name	FBLK-WAT-CCR-LF-22102
Sample Date	3/15/2022 12:02:00 PM
Location	WAT-CCRLF-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	0.152	J	RL		0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.133	0.133	0.400	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			3.40	3.40	14.3	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L		U			5.20	5.20	15.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			80.0	80.0	200	N	Yes	1	NA

Appendix D
Second Semiannual Detection Monitoring Program Event Field Data Sheets, Laboratory Reports, and Data Validation Forms

Wateree Station - Landfill - CCR Sampling Event

Date(s) Measured: 9-6-2022

Well ID	Well Diameter (inches)	Well Total Depth (ft BTOC)	Well Completion	Screen length (ft)	Depth to Water (ft below TOC)	Pump Type
MW-LF-01	2	~~33.55~~ 33.62	Stickup	15	24.30	Peristaltic
MW-LF-06	2	41.10 ✓	Stickup	15	30.44	Dedicated Bladder
MW-LF-07	2	31.73 ✓	Stickup	10	24.65	Peristaltic
MW-LF-08	2	~~36.05~~ 36.14	Stickup	10	25.16	Peristaltic
MW-LF-10	2	~~27.48~~ 27.43	Stickup	10	19.61	Peristaltic
MW-LF-10A	2	~~28.69~~ 28.73	Stickup	10	20.83	Peristaltic
MW-LF-11	2	30.25 ✓	Stickup	10	22.72	Peristaltic
MW-LF-22	2	~~34.45~~ 34.50	Stickup	15	22.82	Peristaltic
AS-LF-01	2	48.85	Stickup	10	32.10	Dedicated Bladder
AS-LF-02	2	55.66	Stickup	10	32.88	Dedicated Bladder
AS-LF-03	2	~~38.07~~ 38.10	Stickup	10	28.01	Peristaltic
MW-BG-73	2	23.38 ✓	Stickup	10	9.72	Peristaltic

Measure well TD below TOC once sample collected.

MW-FGD-01 2 30.15 Stickup 25.28 water level only

TRC

WATER SAMPLE LOG

PROJECT NAME:	Dominion - Wateree Station	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.3.2	BY: AGM	DATE: 9.9.22	BY: JAY	DATE: 9.13.22

SAMPLE ID: MW-01LF/MW-LF-01 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1348	DATE: 9.9.22	SAMPLE	TIME: 1420	DATE: 9.9.22
PURGE METHOD:	☑ PUMP PERISTALTIC PUMP ☐ BAILER		PH: 4.38 SU	CONDUCTIVITY: 54.71	umhos/cm
			ORP: 223.4 mV	DO: 5.62	mg/L
DEPTH TO WATER:	— T/ PVC		TURBIDITY: 1.80 NTU		
DEPTH TO BOTTOM: ~~33.05~~	T/ PVC 33.62		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	☐ LITERS ☑ GALLONS		TEMPERATURE: 21.37 °C	OTHER:	
VOLUME REMOVED: 1.2	☐ LITERS ☒ GALLONS		COLOR: clear	ODOR: none	
COLOR: clear	ODOR: none		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR:	FILTRATE ODOR:	
			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: Post turb: 1.71 FBLK-WAT-~~BLK~~-LF-223001@1415		

TIME	PURGE RATE (GPM or ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1350	150	4.40	50.95	218.1	5.37	12.8	24.41	24.33	INITIAL
1355		4.38	52.48	221.7	5.04	6.20	21.69		
1400		4.38	52.60	222.2	5.29	2.87	21.56		
1405		4.39	52.73	221.9	5.44	2.62	21.36		
1410		4.38	53.60	222.9	5.56	2.20	21.30		
1415		4.38	54.24	222.8	5.63	2.11	21.33		
1420		4.38	54.71	223.4	5.62	1.80	21.37		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC

WATER SAMPLE LOG

PROJECT NAME:	Dominion - Wateree Station	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.3.2	BY: AGM	DATE: 9.9.22	BY: JAY	DATE: 9.13.22

SAMPLE ID: MW-06LF/MW-LF-06 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1226	DATE: 9.9.22	SAMPLE	TIME: 1320	DATE: 9.9.22
PURGE METHOD: ☑ PUMP ☐ BAILER	BLADDER PUMP (DEDICATED) CPM 4 R10 D5 25 PSI		PH: 4.79 SU	CONDUCTIVITY: 49.80 umhos/cm	
			ORP: 217.5 mV	DO: 6.22 mg/L	
DEPTH TO WATER: 30.72 T/ PVC			TURBIDITY: 3.68 NTU		
DEPTH TO BOTTOM: ~~38.38~~ 41.10 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: ☐ LITERS ☑ GALLONS			TEMPERATURE: 19.44 °C	OTHER:	
VOLUME REMOVED: 2.3 ☐ LITERS ☒ GALLONS			COLOR: clear	ODOR: none	
COLOR: light brown ODOR: none			FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY			FILTRATE COLOR:	FILTRATE ODOR:	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD ☐ DUP-		
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: Post turb. 3.23		

TIME	PURGE RATE (GPM or ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1220	175	4.80	53.29	212.2	6.41	35.2	22.55	30.72	INITIAL
1235		4.65	43.00	223.6	7.82	22.8	20.07	30.76	
1240		4.64	49.44	228.4	7.82	15.01	19.40	30.78	
1245		4.67	40.97	231.3	7.60	12.5	19.33		
1310		4.74	49.80	215.8	6.27	11.3	19.43		
1315		4.74	49.90	214.0	6.20	6.83	19.42		
1320		4.79	49.80	217.5	6.22	3.68	19.44		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3 % ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 3 %

BOTTLES FILLED — PRESERVATIVE CODES: A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
3	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
3	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

REVISED 06/2011

TRC

WATER SAMPLE LOG

PROJECT NAME: Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER: 416559.0005.0000.2.2	BY: BJM	DATE: 9.9.22	BY: JAY	DATE: 9.13.22

SAMPLE ID: MW-LF-07 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1320	DATE: 9.9.22	SAMPLE	TIME: 1400	DATE: 9.9.22
PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER			PH: 3.97 SU	CONDUCTIVITY: 55.34 umhos/cm	
			ORP: 316.9 mV	DO: 6.64 mg/L	
DEPTH TO WATER: 24.65 T/ PVC			TURBIDITY: 5.90 NTU		
DEPTH TO BOTTOM: 31.73 T/ PVC			☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME: ☐ LITERS ☑ GALLONS			TEMPERATURE: 27.19 °C	OTHER:	
VOLUME REMOVED: 0.10 ☐ LITERS ☒ GALLONS			COLOR: clear	ODOR: none	
COLOR: clear ODOR: none			FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			FILTRATE COLOR:	FILTRATE ODOR:	
			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: Post turb: 3.63		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1325	80	3.94	52.08	296.5	6.01	8.39	28.05	24.81	INITIAL
1330	|	3.94	54.38	300.5	6.53	5.76	25.91	24.99	
1335	|	3.95	55.18	302.0	6.46	8.15	26.07	25.01	
1340	|	3.96	55.17	310.9	6.44	12.31	26.82	25.02	
1345	|	3.96	55.18	314.8	6.43	10.10	26.79	25.03	
1350	|	3.96	55.11	317.4	6.32	7.77	26.96	25.03	
1355	|	3.94	55.40	318.6	6.56	6.76	27.01	|	
1400	|	3.97	55.34	316.9	6.64	5.90	27.19	|	

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: AGM	DATE: 9.12.22	BY: JAY	DATE: 9/15/22

SAMPLE ID: MW-LF-08 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1208	DATE: 9.12.22	SAMPLE	TIME: 1250	DATE:
PURGE METHOD:	☒ PUMP ☐ BAILER		PH: 4.37 SU	CONDUCTIVITY: 41.91	umhos/cm
			ORP: 142.3 mV	DO: 6.85	mg/L
DEPTH TO WATER:	— T/ PVC		TURBIDITY: 2.41 NTU		
DEPTH TO BOTTOM:	36.14 T/ PVC 36.14		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	☐ LITERS ☐ GALLONS		TEMPERATURE: 24.65 °C	OTHER:	
VOLUME REMOVED:	1.3 ☐ LITERS ☒ GALLONS		COLOR: clear	ODOR: none	
COLOR:	clear ODOR: none		FILTRATE (0.45 um) ☐ YES	☑ NO	
TURBIDITY			FILTRATE COLOR:	FILTRATE ODOR:	
☐ NONE ☒ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: Post turb 2.23 @ 1310		

TIME	PURGE RATE (GPM or ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
1210	125	4.32	44.78	86.7	5.65	12.18	31.41	25.09	INITIAL
1215		4.30	44.97	89.5	6.43	8.04	26.08		
1220		4.32	44.91	100.1	6.59	7.99	25.68		
1225		4.32	42.72	106.7	6.81	5.06	25.51		
1230		4.34	41.29	117.5	6.82	2.92	25.78		
1235		4.33	40.79	128.3	6.81	2.67	25.17		
1240		4.36	41.01	135.0	6.80	2.74	25.24		
1245		4.34	41.06	140.2	6.82	2.78	25.24		
1250		4.37	41.91	142.3	6.85	2.41	24.65		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **10 %** COND.: +/- **10 %** ORP: +/- **10 %** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **0.5°C**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:		DATE SHIPPED:		AIRBILL NUMBER:	
COC NUMBER:		SIGNATURE:		DATE SIGNED:	

TRC WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: BJM	DATE: 9.12.22	BY: JAY	DATE: 9.15.22

SAMPLE ID: MW-LF-10 WELL DIAMETER: [X] 2" [ ] 4" [ ] 6" [ ] OTHER

WELL MATERIAL: [X] PVC [ ] SS [ ] IRON [ ] GALVANIZED STEEL [ ] OTHER

SAMPLE TYPE: [X] GW [ ] WW [ ] SW [ ] DI [ ] LEACHATE [ ] OTHER

PURGING	TIME: 1345	DATE: 9.12.22	SAMPLE	TIME: 1435	DATE: 9.12.22

PURGE METHOD: [✓] PUMP PERISTALTIC PUMP [ ] BAILER

DEPTH TO WATER: 19.61 T/ PVC

DEPTH TO BOTTOM: 27.43 T/ PVC

WELL VOLUME: [ ] LITERS [✓] GALLONS

VOLUME REMOVED: 1.5 [ ] LITERS [X] GALLONS

COLOR: clear ODOR: none

TURBIDITY [X] NONE [ ] SLIGHT [ ] MODERATE [ ] VERY

DISPOSAL METHOD: [ ] GROUND [ ] DRUM [✓] OTHER

PH: 4.10 SU CONDUCTIVITY: 74.37 umhos/cm

ORP: 342.7 mV DO: 6.01 mg/L

TURBIDITY: 4.48 NTU

[X] NONE [ ] SLIGHT [ ] MODERATE [ ] VERY

TEMPERATURE: 25.34 °C OTHER:

COLOR: clear ODOR: none

FILTRATE (0.45 um) [ ] YES [X] NO

FILTRATE COLOR: FILTRATE ODOR:

QC SAMPLE: [ ] MS/MSD [ ] DUP-

COMMENTS: Post turb: 1.06 @ 1455

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1350	130	4.19	70.24	227.6	4.93	10.50	38.29	19.59	INITIAL
1355	|	3.99	72.41	239.0	4.89	11.36	32.02	|	
1400	|	4.06	78.09	266.6	5.99	26.9	25.50	|	
1420	|	4.08	77.76	291.6	6.01	10.07	25.43	|	
1425	|	4.09	76.66	307.7	6.03	9.98	25.40	|	
1430	|	4.09	74.82	338.2	6.04	7.76	25.35	|	
1435	|	4.10	74.37	342.7	6.01	4.48	25.34	|	

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- 0.1 COND.: +/- 3 % ORP: +/- 10 D.O.: +/- 10 % TURB: +/- 10 % or </= 5 TEMP.: +/- 3 %

BOTTLES FILLED PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	[ ] Y [✓] N					[ ] Y [ ] N
2	250 mL	PLASTIC	A	[ ] Y [✓] N					[ ] Y [ ] N
1	125 mL	PLASTIC	A	[ ] Y [✓] N					[ ] Y [ ] N
				[ ] Y [ ] N					[ ] Y [ ] N
				[ ] Y [ ] N					[ ] Y [ ] N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: AGM	DATE: 9.12.22	BY: JAY	DATE: 9/15/22

SAMPLE ID: MW-LF-10A WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1357	DATE: 9.12.22	SAMPLE	TIME: 1430	DATE: 9.12.22
PURGE METHOD:	☒ PUMP PERISTALTIC PUMP ☐ BAILER		PH: 4.26 SU	CONDUCTIVITY: 33.79	umhos/cm
			ORP: 196.0 mV	DO: 4.88	mg/L
DEPTH TO WATER:	— T/ PVC		TURBIDITY: 2.53 NTU		
DEPTH TO BOTTOM:	~~28.09~~ T/ PVC 28.73		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	☐ LITERS ☑ GALLONS		TEMPERATURE: 26.09 °C	OTHER:	
VOLUME REMOVED:	0.7 ☐ LITERS ☒ GALLONS		COLOR: clear	ODOR: none	
COLOR:	clear ODOR: none		FILTRATE (0.45 um) ☐ YES ☒ NO		
TURBIDITY			FILTRATE COLOR:	FILTRATE ODOR:	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER			COMMENTS: FBLKWAT-CCR-LF-22302 Post turbid 2.26@		

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1400	85	4.20	33.65	176.0	4.48	5.19	33.07	20.80	INITIAL
1405		4.20	35.41	185.0	4.89	5.81	26.63		
1410		4.23	34.67	188.5	4.92	2.71	26.45		
1415		4.23	34.38	190.6	4.91	2.70	2606		
1420		4.24	34.12	193.6	4.95	3.71	25.68		
1425		4.25	33.87	194.0	4.86	2.40	25.93		
1430		4.26	33.79	196.0	4.88	2.53	26.09		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

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TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: BSM	DATE: 9.12.22	BY: JAV	DATE: 9.15.22

SAMPLE ID: **MW-LF-11** WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1205	DATE: 9.12.22	SAMPLE	TIME: 1240	DATE: 9.12.22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 22.72 T/ PVC

DEPTH TO BOTTOM: 30.25 T/ PVC

WELL VOLUME: ____ ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.1 ☐ LITERS ☒ GALLONS

COLOR: clear ODOR: none

TURBIDITY

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 4.14 SU CONDUCTIVITY: 41.41 umhos/cm

ORP: 194.4 mV DO: 6.06 mg/L

TURBIDITY: 1.64 NTU

☑ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 24.51 °C OTHER: ____

COLOR: clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☑ NO

FILTRATE COLOR: ____ FILTRATE ODOR: ____

QC SAMPLE: ☐ MS/MSD ☐ DUP- ____

COMMENTS: Post turb: @1305 0.97

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1210	140	4.63	44.48	132.2	4.83	11.28	30.82	22.85	INITIAL
1215		4.14	41.21	124.6	5.44	4.83	26.06		
1220		4.12	41.91	136.6	5.95	4.72	25.09		
1225		4.15	42.10	147.8	6.01	3.83	24.67		
1230		4.20	42.91	155.4	6.05	3.33	24.77		
1235		4.21	41.85	163.6	6.06	2.95	24.87		
1240		4.14	41.41	194.4	6.06	1.64	24.51		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
2	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

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TRC

WATER SAMPLE LOG

PROJECT NAME:	Dominion - Wateree Station	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.3.2	BY: AGM	DATE: 9.8.22	BY: JAY	DATE: 9.13.22

SAMPLE ID:	**MW-22/MW-LF-22**	WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6"	☐ OTHER	
WELL MATERIAL:	☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL		☐ OTHER	
SAMPLE TYPE:	☑ GW ☐ WW ☐ SW ☐ DI	☐ LEACHATE	☐ OTHER	

PURGING	TIME: 0933	DATE: 9.8.22	SAMPLE	TIME: 1005	DATE: 9.8.22
PURGE METHOD:	☑ PUMP PERISTALTIC PUMP ☐ BAILER		PH: 4.15 SU	CONDUCTIVITY: 81.80	umhos/cm
			ORP: 114.1 mV	DO: 3.60	mg/L
DEPTH TO WATER:	22.87 T/ PVC		TURBIDITY: 2.45 NTU		
DEPTH TO BOTTOM:	~~34.48~~ T/ PVC 34.50		☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY		
WELL VOLUME:	☐ LITERS ☐ GALLONS		TEMPERATURE: 22.19 °C	OTHER:	
VOLUME REMOVED:	1.2 ☐ LITERS ☑ GALLONS		COLOR: clear	ODOR: none	
COLOR:	clear ODOR: none		FILTRATE (0.45 um) ☐ YES	☒ NO	
TURBIDITY			FILTRATE COLOR:	FILTRATE ODOR:	
☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY			QC SAMPLE: ☐ MS/MSD	☐ DUP-	
DISPOSAL METHOD:	☐ GROUND ☐ DRUM ☑ OTHER		COMMENTS: Post turb: 3.13		

TIME	PURGE RATE (GPM or ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GAL OR L)
0935	150	4.07	86.92	106.9	3.85	6.55	23.66	22.87	INITIAL
0940		4.07	83.53	99.0	3.51	4.81	22.44	22.86	
0945		4.09	83.43	98.5	3.51	4.63	22.20		
0950		4.13	82.91	99.7	3.53	3.82	22.02		
0955		4.13	82.41	107.1	3.58	2.62	22.08		
1000		4.15	82.08	110.7	3.60	2.53	22.09		
1005		4.15	81.80	114.1	3.60	2.45	22.19		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
4	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
4	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
3	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	250 mL	AMBER	C	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

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TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: AGM	DATE: 9-9-22	BY: JAY	DATE: 9.13.22

SAMPLE ID: AS-LF-01 | WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1114	DATE: 9-9-22	SAMPLE	TIME: 1145	DATE: 9.9.22

PURGE METHOD: ☑ PUMP BLADDER PUMP (DEDICATED) ☐ BAILER CPM4 R10 D5 25PSI

DEPTH TO WATER: 32.23 T/ PVC

DEPTH TO BOTTOM: 48.85 T/ PVC

WELL VOLUME: ____ ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.7 ☐ LITERS ☒ GALLONS

COLOR: Clear ODOR: non

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

PH: 4.54 SU | CONDUCTIVITY: 58.65 umhos/cm

ORP: 218.2 mV | DO: 7.45 mg/L

TURBIDITY: 2.77 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 19.59 °C | OTHER: ____

COLOR: Clear | ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: ____ | FILTRATE ODOR: ____

QC SAMPLE: ☐ MS/MSD ☐ DUP- ____

COMMENTS:

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1115	225	4.33	56.55	210.1	6.30	8.45	23.57	32.23	INITIAL
1120		4.33	59.75	214.5	6.87	8.82	20.13		
1125		4.41	59.57	216.9	7.09	4.82	19.83		
1130		4.46	59.22	217.2	7.26	3.65	19.75		
1135		4.50	58.24	217.8	7.37	4.70	19.64		
1140		4.52	58.84	217.8	7.42	3.17	19.58		
1145		4.54	58.65	218.2	7.45	2.77	19.59		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED | PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: AGM	DATE: 9.9.22	BY: JAY	DATE: 9.9.22

SAMPLE ID: AS-LF-02 | WELL DIAMETER: [x] 2" [ ] 4" [ ] 6" [ ] OTHER

WELL MATERIAL: [x] PVC [ ] SS [ ] IRON [ ] GALVANIZED STEEL [ ] OTHER

SAMPLE TYPE: [x] GW [ ] WW [ ] SW [ ] DI [ ] LEACHATE [ ] OTHER

PURGING	TIME: 0941	DATE: 9.9.22	SAMPLE	TIME: 1025	DATE: 9.9.22

PURGE METHOD: [x] PUMP BLADDER PUMP (DEDICATED) [ ] BAILER CPM3 R13 D7 25PSI

DEPTH TO WATER: 33.40 T/ PVC

DEPTH TO BOTTOM: 55.66 T/ PVC

WELL VOLUME: ____ [ ] LITERS [x] GALLONS

VOLUME REMOVED: 1.3 [ ] LITERS [x] GALLONS

COLOR: light brown ODOR: none

TURBIDITY [ ] NONE [x] SLIGHT [ ] MODERATE [ ] VERY

DISPOSAL METHOD: [ ] GROUND [ ] DRUM [x] OTHER

PH: 4.94 SU CONDUCTIVITY: 34.01 umhos/cm

ORP: 197.0 mV DO: 3.15 mg/L

TURBIDITY: 41 NTU

[ ] NONE [x] SLIGHT [ ] MODERATE [ ] VERY

TEMPERATURE: 22.14 °C OTHER: ____

COLOR: light brown ODOR: none

FILTRATE (0.45 um) [ ] YES [x] NO

FILTRATE COLOR: ____ FILTRATE ODOR: ____

QC SAMPLE: [x] MS/MSD [ ] DUP- ____

COMMENTS: Post turb: 15.46 Turb would not decrease

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
0945	130	4.92	32.82	156.2	4.28	13.2	23.96	33.40	INITIAL
0950		4.85	33.36	169.4	2.64	41	21.44	34.28	
0955		4.96	34.19	172.2	2.83	42	21.37	34.42	
1015		4.95	34.14	194.2	3.08	41.5	22.08		
1020		4.92	33.97	196.1	3.10	39	22.01		
1025		4.94	34.01	197.0	3.15	41	22.14		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - ____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	[ ] Y [x] N					[ ] Y [ ] N
2	250 mL	PLASTIC	A	[ ] Y [x] N					[ ] Y [ ] N
1	125 mL	PLASTIC	A	[ ] Y [x] N					[ ] Y [ ] N
				[ ] Y [ ] N					[ ] Y [ ] N
				[ ] Y [ ] N					[ ] Y [ ] N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

WATER SAMPLE LOG

PROJECT NAME:	Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER:	416559.0005.0000.2.2	BY: BSM	DATE: 9.9.22	BY: JAY	DATE: 9.14.22

SAMPLE ID: AS-LF-03 — WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 0930	DATE: 9.9.22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 28.01 T/ PVC

DEPTH TO BOTTOM: ~~38.87~~ T/ PVC 38.10

WELL VOLUME: ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.3 ☐ LITERS ☒ GALLONS

COLOR: Clear ODOR: none

TURBIDITY: ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 1015	DATE: 9.9.22

PH: 3.93 SU — CONDUCTIVITY: 53.59 umhos/cm

ORP: 256.2 mV — DO: 6.78 mg/L

TURBIDITY: 1.01 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 21.75 °C — OTHER:

COLOR: clear — ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: — FILTRATE ODOR:

QC SAMPLE: ☐ MS/MSD ☒ DUP- 22301

COMMENTS: Post turb: 0.59 DU-WAT-CCR-LF-22301

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
0935	130	3.97	53.49	169.5	6.57	3.59	22.62	28.12	INITIAL
0940		3.93	53.93	176.3	6.70	3.13	22.13		
0945		3.91	54.01	197.3	6.69	2.76	21.97		
0950		3.90	54.11	219.1	6.68	2.26	21.90		
0955		3.91	53.93	230.5	6.75	2.22	21.79		
1000		3.90	53.68	233.1	6.75	1.98	21.72		
1005		3.90	53.76	244.2	6.78	1.77	21.68		
1010		3.91	53.61	251.3	6.75	1.21	21.71		
1015		3.93	53.59	256.2	6.78	1.01	21.75		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

TRC

WATER SAMPLE LOG

PROJECT NAME: Wateree Station LF-CCR	PREPARED		CHECKED	
PROJECT NUMBER: 416559.0005.0000.2.2	BY: BJM	DATE: 9.9.22	BY: JAY	DATE: 9.13.22

SAMPLE ID: MW-BG-73 WELL DIAMETER: ☑ 2" ☐ 4" ☐ 6" ☐ OTHER

WELL MATERIAL: ☑ PVC ☐ SS ☐ IRON ☐ GALVANIZED STEEL ☐ OTHER

SAMPLE TYPE: ☑ GW ☐ WW ☐ SW ☐ DI ☐ LEACHATE ☐ OTHER

PURGING	TIME: 1115	DATE: 9.9.22

PURGE METHOD: ☑ PUMP PERISTALTIC PUMP ☐ BAILER

DEPTH TO WATER: 9.72 T/ PVC

DEPTH TO BOTTOM: 23.38 T/ PVC

WELL VOLUME: ☐ LITERS ☑ GALLONS

VOLUME REMOVED: 1.2 ☐ LITERS ☒ GALLONS

COLOR: Clear ODOR: none

TURBIDITY ☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

DISPOSAL METHOD: ☐ GROUND ☐ DRUM ☑ OTHER

SAMPLE	TIME: 1150	DATE: 9.9.22

PH: 4.13 SU CONDUCTIVITY: 25.09 umhos/cm

ORP: 302.4 mV DO: 5.50 mg/L

TURBIDITY: 0.59 NTU

☒ NONE ☐ SLIGHT ☐ MODERATE ☐ VERY

TEMPERATURE: 23.07 °C OTHER:

COLOR: Clear ODOR: none

FILTRATE (0.45 um) ☐ YES ☒ NO

FILTRATE COLOR: FILTRATE ODOR:

QC SAMPLE: ☐ MS/MSD ☐ DUP-

COMMENTS: Post turb: 0.81

TIME	PURGE RATE (ML/MIN)	PH (SU)	CONDUCTIVITY (umhos/cm)	ORP (mV)	D.O. (mg/L)	TURBIDITY (NTU)	TEMPERATURE (°C)	WATER LEVEL (FEET)	CUMULATIVE PURGE VOLUME (GALLONS)
1120	160	4.13	24.57	294.1	4.32	1.27	25.20	10.30	INITIAL
1125		4.11	25.35	296.1	4.52	0.91	23.61	10.34	
1130		4.15	25.19	297.7	5.01	1.01	23.13	10.36	
1135		4.16	25.05	298.1	5.45	0.77	23.10		
1140		4.16	25.02	298.8	5.50	0.64	23.06		
1145		4.14	25.01	301.2	5.47	0.71	23.09		
1150		4.13	25.09	302.4	5.50	0.59	23.07		

NOTE: STABILIZATION TEST IS COMPLETE WHEN 3 SUCCESSIVE READINGS ARE WITHIN THE FOLLOWING LIMITS:

pH: +/- **0.1** COND.: +/- **3 %** ORP: +/- **10** D.O.: +/- **10 %** TURB: +/- **10 %** or </= **5** TEMP.: +/- **3 %**

BOTTLES FILLED — PRESERVATIVE CODES A - NONE B - HNO3 C - H2SO4 D - NaOH E - HCL F - _____

NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED	NUMBER	SIZE	TYPE	PRESERVATIVE	FILTERED
2	250 mL	PLASTIC	B	☐ Y ☑ N					☐ Y ☐ N
2	250 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
1	125 mL	PLASTIC	A	☐ Y ☑ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N
				☐ Y ☐ N					☐ Y ☐ N

SHIPPING METHOD:	DATE SHIPPED:	AIRBILL NUMBER:
COC NUMBER:	SIGNATURE:	DATE SIGNED:

REVISED 06/2011

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station Ash Pond-CCR	MODEL: Insite Aquatroll	SAMPLER: AM / BM
PROJECT NO.:	416559.0005.0000.5.2	SERIAL #: 909268	DATE: 9.8.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21380102 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 ~~7.0~~ AC (LOT #): 21470032 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
7.05 / 7.00	4.14 / 4.00	☐ WITHIN RANGE	
Post 6.98 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): A/C (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.44 / 4.49	24.30	☐ WITHIN RANGE	
4.48 / 4.49	24.23	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21470147 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
226 / 228	24.33	☐ WITHIN RANGE	
Post 228 / 228	24.38	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 755 mmHg Temp: 24.15 °C Calc: 8.3 mg/L Actual: 8.28 mg/L	☒ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
1.59 / 0	0 / 0	☒ WITHIN RANGE	
1.10 / 1	0.97 / 1	☒ WITHIN RANGE	
10.78 / 10	9.98 / 10	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):

☐ STANDARD SOLUTION (S) — LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS	CALIBRATION RANGES (1)	
☐ pH	pH:	+/- 0.2 S.U.
☐ COND	COND:	+/- 1% OF CAL. STANDARD
☐ ORP	ORP:	+/- 25 mV
☐ D.O.	D.O.:	VARIES
☐ TURB	TURB:	+/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐ _____		

NOTES

Lamotte 16034411

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

A. Misiunas — SIGNED — 9/8/2022 DATE

R. Mayer — CHECKED BY — 9/10/2022 DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station Ash Pond-CCR	MODEL:	Insitu Aquatroll	SAMPLER:	AM / BM
PROJECT NO.:	416559.0005.0000.5.2	SERIAL #:	851425	DATE:	9.8.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21380102 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 ~~10~~ A/C (LOT #): 21470035 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.95 / 7.00	4.15 / 4.00	☐ WITHIN RANGE	
Post 7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): A/C (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.23 / 4.49	24.38	☐ WITHIN RANGE	
4.48 / 4.49	24.28	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140147 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
226 / 228	24.33	☐ WITHIN RANGE	
Post 228 / 228	24.37	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 755 mmHg Temp: 24.15 °C Calc: 8.3 mg/L Actual: 8.31 mg/L	☒ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.51 / 0	0 / 0	☒ WITHIN RANGE	
2.73 / 1	0.83 / 1	☒ WITHIN RANGE	
9.78 / 10	9.75 / 10	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):

☐ STANDARD SOLUTION (S)

LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS	CALIBRATION RANGES (1)
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	(1) CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

Lamotte 14794011

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

B. Medlin — SIGNED — 9/8/2022 DATE

R. Mayer — CHECKED BY — 9/10/2022 DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station AP-NPDES	MODEL:	In Situ Aqua TROLL	SAMPLER:	BM / AM
PROJECT NO.:	416559.0005.0000.6.2	SERIAL #:	909268	DATE:	9.9.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21380102 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 / ~~10~~ AC (LOT #): 21470032 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.75 / 7.00	4.23 / 4.00	☐ WITHIN RANGE	
6.99 / 7.00	4.01 / 4.00	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): A/C (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.50 / 4.49	31.50	☐ WITHIN RANGE	
4.49 / 4.49	31.62	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140147 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
202 / 228	31.57	☐ WITHIN RANGE	
228 / 228	32.4	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 754.5 mmHg Temp: 32°C Calc: 7.5 mg/L Actual: 7.4 mg/L	☒ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
1.95 / 0	0 / 0	☒ WITHIN RANGE	
2.53 / 1	1.1 / 1	☑ WITHIN RANGE	
9.31 / 10	9.98 / 10	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):	☐ STANDARD SOLUTION (S) LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK
CALIBRATED PARAMETERS	CALIBRATION RANGES [1]
☐ pH	pH: +/- 0.2 S.U.
☐ COND	COND: +/- 1% OF CAL. STANDARD
☐ ORP	ORP: +/- 25 mV
☐ D.O.	D.O.: VARIES
☐ TURB	TURB: +/- 5% OF CAL. STANDARD
☐ _____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER
☐ _____	

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

A. Misiunas — SIGNED — 9/9/2022 — DATE

R. Mayer — CHECKED BY — 9/10/2022 — DATE

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station AP-NPDES	MODEL:	In Situ Aqua TrollA	SAMPLER:	BM / AM
PROJECT NO.:	416559.0005.0000.6.2	SERIAL #:	851425	DATE:	9.9.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21380102 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 / 10 (LOT #): 21470032 A/C (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.78 / 7.00	4.28 / 4.00	☐ WITHIN RANGE	
6.99 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): A/C (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.51 / 4.49	31.57	☐ WITHIN RANGE	
4.48 / 4.49	31.96	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140147 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
208 / 228	31.53	☐ WITHIN RANGE	
224 / 228	32.02	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 754.5 mmHg Temp: 32°C Calc: 7.5 mg/L Actual: 7.4 mg/L	☒ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.61 / 0	0 / 0	☒ WITHIN RANGE	
1.46 / 1	0.83 / 1	☒ WITHIN RANGE	
11.63 / 10	9.76 / 10	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION
(LOT #):
(EXP. DATE):

☐ STANDARD SOLUTION (S)
LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES [1]	
☐	pH	pH:	+/- 0.2 S.U.
☐	COND	COND:	+/- 1% OF CAL. STANDARD
☐	ORP	ORP:	+/- 25 mV
☐	D.O.	D.O.:	VARIES
☐	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

B. Medlin — SIGNED — 9/9/2022 — DATE

R. Mayer — CHECKED BY — 9/10/2022 — DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station LF-CCR	MODEL:	In Situ Aqua TROLL	SAMPLER:	BM / AM
PROJECT NO.:	416559.0005.0000.2.2	SERIAL #:	909268	DATE:	9.12.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21380102 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 / 10 AK (LOT #): 21470032 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.84 / 7.00	4.31 / 4.00	☐ WITHIN RANGE	
7.00 / 7.00	4.01 / 4.00	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): AK (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.46 / 4.49	27.95	☐ WITHIN RANGE	
4.49 / 4.49	27.76	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140147 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
248 / 228	27.51	☐ WITHIN RANGE	
228 / 228	27.6	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 757 mmHg Temp: 28 °C Calc: 7.7 mg/L Actual: 7.97 mg/L	☒ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
1.78 / 0	0 / 0	☒ WITHIN RANGE	
5.88 / 1	1.2 / 1	☒ WITHIN RANGE	
10.20 / 10	9.96 / 10	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):

☐ STANDARD SOLUTION (S) — LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES [1]	
☑	pH	pH:	+/- 0.2 S.U.
☑	COND	COND:	+/- 1% OF CAL. STANDARD
☑	ORP	ORP:	+/- 25 mV
☑	D.O.	D.O.:	VARIES
☑	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

Turbidity 1603441

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

A. Misiunas — SIGNED — 9/12/2022 — DATE

R. Mayer — CHECKED BY — 9/15/2022 — DATE

TRC

WATER QUALITY METER CALIBRATION LOG

PROJECT NAME:	Wateree Station LF-CCR	MODEL: Insite Aquatroll	SAMPLER: BM / AM
PROJECT NO.:	416559.0005.0000.2.2	SERIAL #: 851425	DATE: 9.12.22

PH CALIBRATION CHECK

pH 7 (LOT #): 21380102 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	pH 4 / 10 AK (LOT #): 21470032 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	CAL. RANGE	TIME
6.56 / 7.00	4.37 / 4.00	☐ WITHIN RANGE	
7.00 / 7.00	4.00 / 4.00	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

SPECIFIC CONDUCTIVITY CALIBRATION CHECK

CAL. READING (LOT #): A/C (EXP. DATE): PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
4.50 / 4.49	27.42	☐ WITHIN RANGE	
4.49 / 4.49	27.69	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

ORP CALIBRATION CHECK

CAL. READING (LOT #): 21140147 (EXP. DATE): 4/23 PRE-CAL. READING / STANDARD	TEMPERATURE (°CELSIUS)	CAL. RANGE	TIME
228 / 228	27.57	☐ WITHIN RANGE	
228 / 228	27.39	☒ WITHIN RANGE	
/		☐ WITHIN RANGE	
/		☐ WITHIN RANGE	

D.O. CALIBRATION CHECK

CALIBRATION READING (mg/L)	CAL. RANGE	TIME
Baro: 757 mmHg Temp: 28°C Calc: 7.7 mg/L Actual: 7.78 mg/L	☒ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	
	☐ WITHIN RANGE	

TURBIDITY CALIBRATION CHECK

CALIBRATION READING (NTU) (LOT #): (EXP. DATE): PRE-CAL. READING / STANDARD	(LOT #): (EXP. DATE): POST-CAL. READING / STANDARD	CAL. RANGE	TIME
0.54 / 0	0 / 0	☒ WITHIN RANGE	
1.30 / 1	0.9 / 1	☒ WITHIN RANGE	
10.62 / 10	9.34 / 10	☒ WITHIN RANGE	
/	/	☐ WITHIN RANGE	

COMMENTS

☐ AUTOCAL SOLUTION (LOT #): (EXP. DATE):

☐ STANDARD SOLUTION (S)

LIST LOT NUMBERS AND EXPIRATION DATES UNDER CALIBRATION CHECK

CALIBRATED PARAMETERS		CALIBRATION RANGES [1]	
☑	pH	pH:	+/- 0.2 S.U.
☑	COND	COND:	+/- 1% OF CAL. STANDARD
☑	ORP	ORP:	+/- 25 mV
☑	D.O.	D.O.:	VARIES
☑	TURB	TURB:	+/- 5% OF CAL. STANDARD
☐	_____	[1] CALIBRATION RANGES ARE SPECIFIC TO THE MODEL OF THE WATER QUALITY METER	
☐	_____		

NOTES

Turbidity 14794011

PROBLEMS ENCOUNTERED	CORRECTIVE ACTIONS

B. Medlin — SIGNED — 9/12/2022 — DATE

R. Mayer — CHECKED BY — 9/15/2022 — DATE

GEL Laboratories LLC
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

September 22, 2022

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia 23219

Re: CCR Groundwater Monitoring - Level 1 Package
Work Order: 592592

Dear Kelly Hicks:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 09, 2022. 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. 1648.

Sincerely,

Meredith Boddiford

Meredith Boddiford
Project Manager

Purchase Order: 50149867
Chain of Custody: 206945
Enclosures

Table of Contents

Case Narrative

Receipt Narrative
for
Dominion Energy (50149867)
SDG: 592592

September 22, 2022

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary:

Sample receipt: The sample arrived at GEL Laboratories LLC, Charleston, South Carolina on September 09, 2022 for analysis. The sample was delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Sample Identification: The laboratory received the following sample:

Laboratory ID	Client ID
592592001	MW-LF-22-2022Q3

Case Narrative:

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

Meredith Boddiford

Meredith Boddiford
Project Manager

Chain of Custody and Supporting Documentation

Page: 1 of 1
Project # 416559.0005.0000.2.2
GEL Quote #:
COC Number (1): 2021143
PO Number: PO 50149867

S92592

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

GEL Work Order Number: 206945 **GEL Project Manager: Meredith Boddiford**

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

C3

Page 4 of 37
SDG: 592592

Client Name: Dominion Energy Phone # 803-258-1528
Project/Site Name: Wateree Station Class 3 Landfill CCR 2022Q3 Fax #
Address: Wateree, South Carolina
Collected By: B. Medlin / A. Misiunas Send Results To: AReed@envstd.com

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	TDS - SM2540C	Cl, Fl, SO4 - 300.0	Total B, and Ca 6020B	NI	<-- Preservative Type (6)	Comments
MW-LF-01-2022Q3			N	N	GW	N								
MW-LF-06-2022Q3			N	N	GW	N								See attached work
MW-LF-07-2022Q3			N	N	GW	N								order for details
MW-LF-08-2022Q3			N	N	GW	N								
MW-LF-10-2022Q3			N	N	GW	N								
MW-LF-10A-2022Q3			N	N	GW	N								
MW-LF-11-2022Q3			N	N	GW	N								
DU-WAT-CCR-LF-22301			FD	N	GW	N								
FBLK-WAT-CCR-LF-22301			FB	N	AQ	N								
MW-LF-22-2022Q3	9.8.22	1005	N	N	GW	N		3	1	1	1			

Note: extra sample is required for sample specific QC

Comments

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1		9.9.22	1153		9.9.22	1153
2		9.9.22	1446		9/9/22	1446
3						

TAT Requested: Normal: X Rush: ____ Specify: ____

Fax Results: [ ] Yes [X] No

Select Deliverable: [ ] C of A [ ] QC Summary [X] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [ ] Yes [ ] No ***Cooler Temp:*** ____ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

3.) Field Filtered: For liquid matrices, indicate with a **- Y -** for yes the sample was field filtered or **- N -** for sample was not field filtered.

4.) Matrix Codes: **DW**=Drinking Water, **GW**=Groundwater, **SW**=Surface Water, **WW**=Waste Water, **W**=Water, **ML**=Misc Liquid, **SO**=Soil, **SD**=Sediment, **SL**=Sludge, **SS**=Solid Waste, **O**=Oil, **F**=Filter, **P**=Wipe, **U**=Urine, **F**=Fecal, **N**=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B, 6010B/7470A**) and number of containers provided for each (i.e. *8260B* **- 3**, *6010B/7470A* **- 1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals
As = Arsenic **Hg**= Mercury
Ba = Barium **Se**= Selenium
Cd = Cadmium **Ag**= Silver
Cr = Chromium **MR**= Misc. RCRA metals
Pb = Lead

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: DMNN	SDG/AR/COC/Work Order: 592592
Received By: MK	Date Received: 9/9/22
Enter one tracking number per line below. Enter courier if applicable and no tracking available.	IR temperature gun # IR422 — Daily Calibration performed (Y) N
	Uncorrected temperature readings are to the 0.1 degree with final recorded tepmeratures rounded to the 0.5 degree. Provide individual container details when a cooler requiring 0 </=6oC is identified as out of specification.
Cooler 1	Uncorrected Temp: 0.8 IR Correction Factor: + / - 0 Final Recorded Temp: 1.0 Within 0.0-6.0C? (Y) N
Cooler 2	Uncorrected Temp: 1.2 IR Correction Factor: + / - 0 Final Recorded Temp: 1.0 Within 0.0-6.0C? (Y) N
Cooler 3	Uncorrected Temp: 0.9 IR Correction Factor: + / - 0 Final Recorded Temp: 1.0 Within 0.0-6.0C? (Y) N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N
	Uncorrected Temp: IR Correction Factor: + / - Final Recorded Temp: Within 0.0-6.0C? Y / N

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

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
4	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
5	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:
6	Samples received within holding time?	✓			ID's and tests affected:
7	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
8	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
9	Number of containers received match number indicated on COC?				Circle Applicable: No container count on COC Other (describe)
10	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
11	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials AM Date 9/13/22 Page 1 of 1

GL-CHL-SR-001A
GL-CHL-SR-001A

Laboratory Certifications

List of current GEL Certifications as of 22 September 2022

State	Certification
Alabama	42200
Alaska	17−018
Alaska Drinking Water	SC00012
Arkansas	88−0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH−0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330−15−00283, P330−15−00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C−SC−01
Kansas NELAP	E−10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M−SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE−OS−26−13
Nevada	SC000122023−3
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	2022−137
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	T104704235−22−20
Utah NELAP	SC000122021−36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Metals Analysis

Case Narrative

Metals
Technical Case Narrative
Dominion Energy
SDG #: 592592

Product: Determination of Metals by ICP-MS
Analytical Method: SW846 3005A/6020B
Analytical Procedure: GL-MA-E-014 REV# 35
Analytical Batch: 2314755

Preparation Method: SW846 3005A
Preparation Procedure: GL-MA-E-006 REV# 14
Preparation Batch: 2314752

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

GEL Sample ID#	Client Sample Identification
592592001	MW-LF-22-2022Q3
1205187508	Method Blank (MB)**ICP-MS**
1205187509	Laboratory Control Sample (LCS)
1205187512	592592001(MW-LF-22-2022Q3L) Serial Dilution (SD)
1205187510	592592001(MW-LF-22-2022Q3D) Sample Duplicate (DUP)
1205187511	592592001(MW-LF-22-2022Q3S) Matrix Spike (MS)

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.

Calibration Information

ICSA/ICSAB Statement
For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

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.

GEL LABORATORIES LLC

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

Qualifier Definition Report
for

DMNN001 Dominion Energy (50149867)

Client SDG: 592592 GEL Work Order: 592592

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Alan Stanley**

Date: 21 SEP 2022 **Title: Team Leader**

Sample Data Summary

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 592592 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 592592001 **BASIS:** As Received **DATE COLLECTED** 08−SEP−22

CLIENT ID: MW−LF−22−2022Q3 **LEVEL:** Low **DATE RECEIVED** 09−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	15.1	ug/L		5.20	15.0	15.0	1	MS	SKJ	09/20/22 09:58	220920−2	2314755
7440−70−2	Calcium	2060	ug/L		80.0	200	200	1	MS	SKJ	09/17/22 20:03	220917−1	2314755

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2314755	2314752	SW846 3005A	50	mL	50	mL	09/12/22	CD3

***Analytical Methods:**

MS SW846 3005A/6020B

Quality Control Summary

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 592592

Contract: DMNN00101 **Lab Code:** GEL

Instrument ID: ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
ICV01										
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 − 110.0	MS	17−SEP−22 18:37	220917−1
	Boron	97.5	ug/L	100	ug/L	97.5	90.0 − 110.0	MS	20−SEP−22 09:38	220920−2
CCV01										
	Calcium	5160	ug/L	5000	ug/L	103.2	90.0 − 110.0	MS	17−SEP−22 18:55	220917−1
	Boron	96.1	ug/L	100	ug/L	96.1	90.0 − 110.0	MS	20−SEP−22 09:47	220920−2
CCV02										
	Calcium	5150	ug/L	5000	ug/L	103	90.0 − 110.0	MS	17−SEP−22 19:05	220917−1
	Boron	101	ug/L	100	ug/L	101.1	90.0 − 110.0	MS	20−SEP−22 10:12	220920−2
CCV03										
	Calcium	5220	ug/L	5000	ug/L	104.4	90.0 − 110.0	MS	17−SEP−22 19:48	220917−1
CCV04										
	Calcium	5260	ug/L	5000	ug/L	105.1	90.0 − 110.0	MS	17−SEP−22 20:32	220917−1

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−2b−
CRDL Standard for ICP & ICPMS

SDG No: 592592

Contract: DMNN00101 **Lab Code:** GEL

Instrument ID: ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M*	Analysis Date/Time	Run Number
CRDL01										
	Calcium	256	ug/L	200	ug/L	128.1	80.0 − 120.0 *	MS	17−SEP−22 18:44	220917−1
	Boron	16.7	ug/L	15	ug/L	111.4	80.0 − 120.0	MS	20−SEP−22 09:42	220920−2
CRDL02										
	Calcium	246	ug/L	200	ug/L	122.9	80.0 − 120.0 *	MS	17−SEP−22 19:38	220917−1
	Boron	18.1	ug/L	15	ug/L	120.9	80.0 − 120.0 *	MS	20−SEP−22 10:06	220920−2
CRDL03										
	Calcium	238	ug/L	200	ug/L	119.1	80.0 − 120.0	MS	17−SEP−22 20:21	220917−1

***Analytical Methods:**

MS **SW846 3005A/6020B**

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 592592

Contract: DMNN00101

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
ICB01										
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 18:40	220917−1
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	20−SEP−22 09:40	220920−2
CCB01										
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 18:58	220917−1
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	20−SEP−22 09:49	220920−2
CCB02										
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 19:09	220917−1
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	20−SEP−22 10:14	220920−2
CCB03										
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 19:52	220917−1
CCB04										
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 20:35	220917−1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−3b−
PREPARATION BLANK SUMMARY

SDG NO. 592592
Contract: DMNN00101
Matrix: GW

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M*	MDL	RDL
1205187508								
	Boron	5.20	ug/L	+/−7.5	U	MS	5.20	15.0
	Calcium	80.0	ug/L	+/−100	U	MS	80.0	200

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−4−
Interference Check Sample

SDG No: 592592

Contract: DMNN00101 **Lab Code:** GEL

Instrument: ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Calcium	107000	ug/L	100000	ug/L	107	80.0 − 120.0	17−SEP−22 18:47	220917−1
ICSAB01									
	Calcium	105000	ug/L	100000	ug/L	105	80.0 − 120.0	17−SEP−22 18:51	220917−1
ICSA02									
	Calcium	103000	ug/L	100000	ug/L	103	80.0 − 120.0	17−SEP−22 19:41	220917−1
ICSAB02									
	Calcium	107000	ug/L	100000	ug/L	107	80.0 − 120.0	17−SEP−22 19:45	220917−1
ICSA03									
	Calcium	107000	ug/L	100000	ug/L	107	80.0 − 120.0	17−SEP−22 20:24	220917−1
ICSAB03									
	Calcium	106000	ug/L	100000	ug/L	106	80.0 − 120.0	17−SEP−22 20:28	220917−1

METALS
−4−
Interference Check Sample

SDG No: 592592

Contract: DMNN00101 **Lab Code:** GEL

Instrument: ICPMS14

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Boron	5.01	ug/L					20−SEP−22 09:44	220920−2
ICSAB01									
	Boron	23.7	ug/L	20	ug/L	119	80.0 − 120.0	20−SEP−22 09:45	220920−2
ICSA02									
	Boron	4.7	ug/L					20−SEP−22 10:08	220920−2
ICSAB02									
	Boron	23.3	ug/L	20	ug/L	116	80.0 − 120.0	20−SEP−22 10:10	220920−2

METALS
−5a−

Matrix Spike Summary

SDG NO. 592592 **Client ID** MW−LF−22−2022Q3S

Contract: DMNN00101 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 592592001 **Spike ID:** 1205187511

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Boron	ug/L	75−125	129		15.1		100	114		MS
Calcium	ug/L	75−125	4320		2060		2000	113		MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

Metals
−6−
Duplicate Sample Summary

SDG No.: 592592 **Lab Code:** GEL

Contract: DMNN00101 **Client ID:** MW−LF−22−2022Q3D

Matrix: GROUND WATER **Level:** Low

Sample ID: 592592001 **Duplicate ID:** 1205187510 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Boron	ug/L	+/−30	15.1		14.7	B	2.36		MS
Calcium	ug/L	+/−20%	2060		2040		.942		MS

***Analytical Methods:**
MS SW846 3005A/6020B

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 592592

Contract: DMNN00101

Aqueous LCS Source: Enviromental Express **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205187509								
	Boron	ug/L	100	113		113	80−120	MS
	Calcium	ug/L	2000	2180		109	80−120	MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 592592 **Client ID** MW−LF−22−2022Q3L

Contract: DMNN00101

Matrix: LIQUID **Level:** Low

Sample ID: 592592001 **Serial Dilution ID:** 1205187512

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Boron	15.1		26	U	70.719			MS
Calcium	2060		2060		.049			MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 592592 **Method Type:** MS

Contract: DMNN00101 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 2314752							
1205187508	MB for batch 2314752	MB	G	12−SEP−22	50mL	50mL	
1205187509	LCS for batch 2314752	LCS	G	12−SEP−22	50mL	50mL	
1205187511	MW−LF−22−2022Q3S	MS	G	12−SEP−22	50mL	50mL	
1205187510	MW−LF−22−2022Q3D	DUP	G	12−SEP−22	50mL	50mL	
592592001	MW−LF−22−2022Q3	SAMPLE	G	12−SEP−22	50mL	50mL	

General Chem Analysis

Case Narrative

General Chemistry
Technical Case Narrative
Dominion Energy
SDG #: 592592

Product: **Ion Chromatography**
Analytical Method: EPA 300.0
Analytical Procedure: GL-GC-E-086 REV# 30
Analytical Batch: 2315794

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

GEL Sample ID#	Client Sample Identification
592592001	MW-LF-22-2022Q3
1205189764	Method Blank (MB)
1205189765	Laboratory Control Sample (LCS)
1205189766	592607004(MW-FGD-04-2022Q3) Sample Duplicate (DUP)
1205189767	592607004(MW-FGD-04-2022Q3) Post Spike (PS)
1205189768	592592001(MW-LF-22-2022Q3) Sample Duplicate (DUP)
1205189769	592592001(MW-LF-22-2022Q3) Post Spike (PS)

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

Data Summary:

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

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Chloride	1205189767 (MW-FGD-04-2022Q3PS)	114* (90%-110%)

Technical Information

Sample Dilutions
The following samples 1205189768 (MW-LF-22-2022Q3DUP), 1205189769 (MW-LF-22-2022Q3PS) and 592592001 (MW-LF-22-2022Q3) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	592592
	001
Chloride	2X

Sample Re-analysis
Samples 1205189764 (MB), 1205189765 (LCS), 1205189768 (MW-LF-22-2022Q3DUP), 1205189769 (MW-LF-22-2022Q3PS) and 592592001 (MW-LF-22-2022Q3) were re-analyzed due to CCB failure. The reanalysis data with passing instrument QC was reported. Sample 1205189764 (MB) was re-analyzed due to (its) proximity to an overrange sample. The results from the reanalysis are reported. Sample 1205189764 (MB) was re-analyzed to verify the result.

Miscellaneous Information

Manual Integrations
Sample 1205189766 (MW-FGD-04-2022Q3DUP) was manually integrated to correctly position the baseline as set in the calibration standards.

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

Product: **Solids, Total Dissolved**
Analytical Method: SM 2540C
Analytical Procedure: GL-GC-E-001 REV# 19
Analytical Batch: 2316241

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

GEL Sample ID#	Client Sample Identification
592592001	MW-LF-22-2022Q3
1205190598	Method Blank (MB)
1205190599	Laboratory Control Sample (LCS)
1205190600	592605003(MW-3-2022Q3) Sample Duplicate (DUP)
1205190601	592850001(NonSDG) Sample Duplicate (DUP)
1205190602	592885002(NonSDG) Sample Duplicate (DUP)

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

Duplicate Relative Percent Difference (RPD) Statement
The Relative Percent Difference (RPD) between the sample and duplicate falls outside of the established acceptance limits because of the heterogeneous matrix of the sample:

Analyte	Sample	Value
Total Dissolved Solids	1205190602 (Non SDG 592885002DUP)	5.18* (0%-5%)

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

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.

GEL LABORATORIES LLC

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

Qualifier Definition Report
for

DMNN001 Dominion Energy (50149867)

Client SDG: 592592 GEL Work Order: 592592

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Aubrey Kingsbury**

Date: 22 SEP 2022 **Title: Team Leader**

Sample Data Summary

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

Certificate of Analysis

Report Date: September 22, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-22-2022Q3	Project:	DMNN00101
Sample ID:	592592001	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	08-SEP-22 10:05		
Receive Date:	09-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Fluoride	J	0.0707	0.0330	0.100	mg/L		1	JLD1	09/15/22	2059	2315794	1
Sulfate		1.06	0.133	0.400	mg/L		1					
Chloride		9.99	0.134	0.400	mg/L		2	JLD1	09/14/22	0905	2315794	2
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		21.0	2.38	10.0	mg/L			CH6	09/14/22	1048	2316241	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 300.0	
3	SM 2540C	

Notes:

Column headers are defined as follows:

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

Quality Control Summary

QC Summary

Report Date: September 22, 2022

Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia

Contact: **Kelly Hicks**

Workorder: **592592**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 2315794										
QC1205189766 592607004 DUP										
Chloride		8.27		8.14	mg/L	1.56		(0%-20%)	JLD1	09/14/22 01:22
Fluoride	J	0.0556	J	0.0526	mg/L	5.55 ^		(+/-.2)		
Sulfate		3.27		3.31	mg/L	1.39		(0%-20%)		
QC1205189768 592592001 DUP										
Chloride		9.99		10.1	mg/L	0.752		(0%-20%)		09/14/22 09:36
Fluoride	J	0.0707	J	0.0660	mg/L	6.88 ^		(+/-.2)		09/15/22 21:30
Sulfate		1.06		1.05	mg/L	1.51 ^		(+/-.8)		
QC1205189765 LCS										
Chloride	5.00			4.78	mg/L		95.6	(90%-110%)		09/15/22 20:28
Fluoride	2.50			2.61	mg/L		104	(90%-110%)		
Sulfate	10.0			10.9	mg/L		109	(90%-110%)		
QC1205189764 MB										
Chloride			U	ND	mg/L					09/14/22 08:03
Fluoride			U	ND	mg/L					
Sulfate			J	0.202	mg/L					
QC1205189767 592607004 PS										
Chloride	5.00	8.27		14.0	mg/L		114*	(90%-110%)		09/14/22 01:53

QC Summary

Workorder: **592592**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 2315794											
Fluoride	2.50	J	0.0556		2.67	mg/L		105	(90%-110%)	JLD1	09/14/22 01:53
Sulfate	10.0		3.27		13.1	mg/L		98.3	(90%-110%)		
QC1205189769 592592001 PS											
Chloride	5.00		5.00		10.5	mg/L		110	(90%-110%)		09/14/22 10:07
Fluoride	2.50	J	0.0707		2.67	mg/L		104	(90%-110%)		09/15/22 22:00
Sulfate	10.0		1.06		10.5	mg/L		94.1	(90%-110%)		
Solids Analysis											
Batch 2316241											
QC1205190600 592605003 DUP											
Total Dissolved Solids			513		516	mg/L	0.583		(0%-5%)	CH6	09/14/22 10:48
QC1205190601 592850001 DUP											
Total Dissolved Solids			367		359	mg/L	2.2		(0%-5%)		09/14/22 10:48
QC1205190602 592885002 DUP											
Total Dissolved Solids			99.0		94.0	mg/L	5.18*		(0%-5%)		09/14/22 10:48
QC1205190599 LCS											
Total Dissolved Solids	300				301	mg/L		100	(95%-105%)		09/14/22 10:48
QC1205190598 MB											
Total Dissolved Solids				U	ND	mg/L					09/14/22 10:48

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.

QC Summary

Workorder: **592592**

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

E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
H	Analytical holding time was exceeded
J	See case narrative for an explanation
J	Value is estimated
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	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
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 the duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

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

GEL Laboratories LLC
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

September 27, 2022

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia 23219

Re: CCR Groundwater Monitoring - Level 1 Package
Work Order: 593105

Dear Kelly Hicks:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on September 14, 2022. 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. 1648.

Sincerely,

Meredith Boddiford

Meredith Boddiford
Project Manager

Purchase Order: 50149867
Chain of Custody: 20221143
Enclosures

Table of Contents

Case Narrative

Receipt Narrative
for
Dominion Energy (50149867)
SDG: 593105

September 27, 2022

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary:

Sample receipt: The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on September 14, 2022 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Sample Identification: The laboratory received the following samples:

Laboratory ID	Client ID
593105001	MW-LF-01-2022Q3
593105002	MW-LF-06-2022Q3
593105003	MW-LF-07-2022Q3
593105004	MW-LF-08-2022Q3
593105005	MW-LF-10-2022Q3
593105006	MW-LF-10A-2022Q3
593105007	MW-LF-11-2022Q3
593105008	DU-WAT-CCR-LF-22301
593105009	FBLK-WAT-CCR-LF-22301
593105010	AS-LF-01-2022Q3
593105011	AS-LF-02-2022Q3
593105012	AS-LF-03-2022Q3
593105013	MW-BG-73-2022Q3
593105014	FBLK-WAT-CCR-LF-22302

Case Narrative:

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: General Chemistry and Metals.

Meredith Boddiford

Meredith Boddiford
Project Manager

Chain of Custody and Supporting Documentation

Page 2 of 2
Project # 416559.0005.0000.2.2
GEL Quote #:
COC Number [1]: 2021143
PO Number: PO 50149867

693105

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

GEL Work Order Number: 206945 **GEL Project Manager: Meredith Boddiford**

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

C4

Client Name: Dominion Energy Phone # 803-258-1528

Project/Site Name: Wateree Station Class 3 Landfill CCR 2022Q3 Fax #

Address: Wateree, South Carolina

Collected By: B. Medlin / A. Misiunas Send Results To: AReed@envstd.com

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	TDS - SM2540C	Cl, Fl, SO4 - 300.0	NI Total B, and Ca 6020B	<-- Preservative Type (6)	Comments
AS-LF-01-2022Q3 | MS | MSD	9.9.22	1145	N	N	GW	N		6	2	2	2		
AS-LF-02-2022Q3	9.9.22	1025	N	N	GW	N		3	1	1	1		See attached work
AS-LF-03-2022Q3	9.9.22	1015	N	N	GW	N		3	1	1	1		order for details
MW-BG-73-2022Q3	9.9.22	1150	N	N	GW	N		3	1	1	1		
FBLK-WAT-CCR-LF-22302	9.12.22	1420	FB	N	AQ	N		3	1	1	1		

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1		9.14.22	1535		9/14/22	1535
2						
3						

TAT Requested: Normal: X Rush: ____ Specify: ____

Fax Results: [ ] Yes [X] No

Select Deliverable: [ ] C of A [ ] QC Summary [X] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [ ] Yes [ ] No ***Cooler Temp:*** ____ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

3.) Field Filtered: For liquid matrices, indicate with a **- Y -** for yes the sample was field filtered or **- N -** for sample was not field filtered.

4.) Matrix Codes: **DW**=Drinking Water, **GW**=Groundwater, **SW**=Surface Water, **WW**=Waste Water, **W**=Water, **ML**=Misc Liquid, **SO**=Soil, **SD**=Sediment, **SL**=Sludge, **SS**=Solid Waste, **O**=Oil, **F**=Filter, **P**=Wipe, **U**=Urine, **F**=Fecal, **N**=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B**, **6010B/7470A**) and number of containers provided for each (i.e. *8260B* - **3**, *6010B/7470A* - **1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals
As = Arsenic **Hg**= Mercury
Ba = Barium **Se**= Selenium
Cd = Cadmium **Ag**= Silver
Cr = Chromium **MR**= Misc. RCRA metals
Pb = Lead

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

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SDG: 593105

Page 1 of 2

Project # 416559.0005.0000.2.2
GEL Quote #:
COC Number [1]: 2021143
PO Number: PO 50149867

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

593105

Chain of Custody and Analytical Request

GEL Work Order Number: 206945 **GEL Project Manager: Meredith Boddiford**

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

C4

Client Name: Dominion Energy Phone # 803-258-1528

Project/Site Name: Wateree Station Class 3 Landfill CCR 2022Q3 Fax #

Address: Wateree, South Carolina

Collected By: B. Medlin / A. Misiunas Send Results To: AReed@envstd.com

Page 6 of 22 SDG: 593105

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (If yes, please supply isotopic info.)	Should this sample be considered: (7) Known or possible Hazards	Total number of containers	TDS - SM2540C	Cl, Fl, SO4 - 300.0	NI Total B, and Ca 6020B	<-- Preservative Type (6)	Comments
MW-LF-01-2022Q3	9.9.22	1420	N	N	GW	N		3	1	1	1		
MW-LF-06-2022Q3	9.9.22	1320	N	N	GW	N		3	1	1	1		See attached work
MW-LF-07-2022Q3	9.9.22	1400	N	N	GW	N		3	1	1	1		order for details
MW-LF-08-2022Q3	9.12.22	1250	N	N	GW	N		3	1	1	1		
MW-LF-10-2022Q3	9.12.22	1435	N	N	GW	N		3	1	1	1		
MW-LF-10A-2022Q3	9.12.22	1430	N	N	GW	N		3	1	1	1		
MW-LF-11-2022Q3	9.12.22	1240	N	N	GW	N		3	1	1	1		
DU-WAT-CCR-LF-22301	9.9.22	/	FD	N	GW	N		3	1	1	1		
FBLK-WAT-CCR-LF-22301	9.9.22	1020	FB	N	AQ	N		3	1	1	1		
MW-LF-22-2022Q3			N	N	GW	N							

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1		9.14.22	1535		9/14/22	1535
2						
3						

TAT Requested: Normal: X Rush: ____ Specify: ____

Fax Results: [ ] Yes [X] No

Select Deliverable: [ ] C of A [ ] QC Summary [X] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [ ] Yes [ ] No ***Cooler Temp:*** ____ °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

Sample Collection Time Zone: [X] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other:

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

3.) Field Filtered: For liquid matrices, indicate with a **- Y -** for yes the sample was field filtered or **- N -** for sample was not field filtered.

4.) Matrix Codes: **DW**=Drinking Water, **GW**=Groundwater, **SW**=Surface Water, **WW**=Waste Water, **W**=Water, **ML**=Misc Liquid, **SO**=Soil, **SD**=Sediment, **SL**=Sludge, **SS**=Solid Waste, **O**=Oil, **F**=Filter, **P**=Wipe, **U**=Urine, **F**=Fecal, **N**=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B**, **6010B/7470A**) and number of containers provided for each (i.e. *8260B* - **3**, *6010B/7470A* - **1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals
As = Arsenic **Hg**= Mercury
Ba = Barium **Se**= Selenium
Cd = Cadmium **Ag**= Silver
Cr = Chromium **MR**= Misc. RCRA metals
Pb = Lead

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

TSCA Regulated
PCB = Polychlorinated biphenyls

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: DMNN	SDG/AR/COC/Work Order: M-B
Received By: Twyasia Tatum	Date Received: 9-14-22
Enter one tracking number per line below.	IR temperature gun # IRT-20 Daily Calibration performed? (Y) / N
Enter courier if applicable and no tracking available.	Uncorrected temperature readings are to the 0.1 degree with final recorded tepmeratures rounded to the 0.5 degree. Provide individual container details when a cooler requiring 0 </=6oC is identified as out of specification.

Cooler 1	Uncorrected Temp: 3.1	IR Correction Factor: + / - 0	Final Recorded Temp: 3.0	Within 0.0-6.0C? (Y) / N	
Cooler 2	Uncorrected Temp: 3.3	IR Correction Factor: + / - 0	Final Recorded Temp: 3.0	Within 0.0-6.0C? (Y) / N	
Cooler 3	Uncorrected Temp: 3.2	IR Correction Factor: + / - 0	Final Recorded Temp: 3.0	Within 0.0-6.0C? (Y) / N	
Cooler 4	Uncorrected Temp: 4.2	IR Correction Factor: + / - 0	Final Recorded Temp: 4.0	Within 0.0-6.0C? (Y) / N	
Cooler 5	Uncorrected Temp: 4.0	IR Correction Factor: + / - 0	Final Recorded Temp: 4.0	Within 0.0-6.0C? (Y) / N	
Cooler 6	Uncorrected Temp: 4.2	IR Correction Factor: + / - 0	Final Recorded Temp: 4.0	Within 0.0-6.0C? (Y) / N	

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

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
4	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
5	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for soiids? 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:
6	Samples received within holding time?	✓			ID's and tests affected:
7	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
8	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
9	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
10	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
11	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials AE Date 9/15/22 Page ___ of ___

GL-CHL-SR-001A

Laboratory Certifications

List of current GEL Certifications as of 27 September 2022

State	Certification
Alabama	42200
Alaska	17−018
Alaska Drinking Water	SC00012
Arkansas	88−0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH−0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330−15−00283, P330−15−00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C−SC−01
Kansas NELAP	E−10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M−SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE−OS−26−13
Nevada	SC000122023−3
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	2022−137
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	T104704235−22−20
Utah NELAP	SC000122021−36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

Metals Analysis

Case Narrative

Metals
Technical Case Narrative
Dominion Energy
SDG #: 593105

Product: Determination of Metals by ICP-MS
Analytical Method: SW846 3005A/6020B
Analytical Procedure: GL-MA-E-014 REV# 35
Analytical Batch: 2316655

Preparation Method: SW846 3005A
Preparation Procedure: GL-MA-E-006 REV# 14
Preparation Batch: 2316654

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

GEL Sample ID#	Client Sample Identification
593105001	MW-LF-01-2022Q3
593105002	MW-LF-06-2022Q3
593105003	MW-LF-07-2022Q3
593105004	MW-LF-08-2022Q3
593105005	MW-LF-10-2022Q3
593105006	MW-LF-10A-2022Q3
593105007	MW-LF-11-2022Q3
593105008	DU-WAT-CCR-LF-22301
593105009	FBLK-WAT-CCR-LF-22301
593105010	AS-LF-01-2022Q3
593105011	AS-LF-02-2022Q3
593105012	AS-LF-03-2022Q3
593105013	MW-BG-73-2022Q3
593105014	FBLK-WAT-CCR-LF-22302
1205191446	Method Blank (MB)**ICP-MS**
1205191447	Laboratory Control Sample (LCS)
1205191450	593105011(AS-LF-02-2022Q3L) Serial Dilution (SD)
1205194414	593105013(MW-BG-73-2022Q3L) Serial Dilution (SD)
1205191448	593105011(AS-LF-02-2022Q3D) Sample Duplicate (DUP)
1205191451	593105013(MW-BG-73-2022Q3D) Sample Duplicate (DUP)
1205191449	593105011(AS-LF-02-2022Q3S) Matrix Spike (MS)
1205191452	593105013(MW-BG-73-2022Q3S) Matrix Spike (MS)

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.

Calibration Information

ICSA/ICSAB Statement
For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

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.

GEL LABORATORIES LLC

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

Qualifier Definition Report
for

DMNN001 Dominion Energy (50149867)

Client SDG: 593105 GEL Work Order: 593105

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Edmund Frampton**

Date: 19 SEP 2022 **Title: Group Leader**

Sample Data Summary

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105001 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: MW−LF−01−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	11.5	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:19	220917−1	2316655
7440−70−2	Calcium	125	ug/L	J	80.0	200	200	1	MS	PRB	09/17/22 18:19	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105002 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: MW−LF−06−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	7.41	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:22	220917−1	2316655
7440−70−2	Calcium	925	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:22	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105003 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: MW−LF−07−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.83	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:26	220917−1	2316655
7440−70−2	Calcium	1010	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:26	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105004 **BASIS:** As Received **DATE COLLECTED** 12−SEP−22

CLIENT ID: MW−LF−08−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	9.02	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:29	220917−1	2316655
7440−70−2	Calcium	850	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:29	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105005 **BASIS:** As Received **DATE COLLECTED** 12−SEP−22

CLIENT ID: MW−LF−10−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	11.3	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:33	220917−1	2316655
7440−70−2	Calcium	2890	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:33	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105006 **BASIS:** As Received **DATE COLLECTED** 12−SEP−22

CLIENT ID: MW−LF−10A−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.61	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:36	220917−1	2316655
7440−70−2	Calcium	332	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:36	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105007 **BASIS:** As Received **DATE COLLECTED** 12−SEP−22

CLIENT ID: MW−LF−11−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	9.57	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:46	220917−1	2316655
7440−70−2	Calcium	379	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:46	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105008 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: DU−WAT−CCR−LF−22301 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.56	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:50	220917−1	2316655
7440−70−2	Calcium	639	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:50	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105009 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: FBLK−WAT−CCR−LF−2230 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	5.20	ug/L	U	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:53	220917−1	2316655
7440−70−2	Calcium	80.0	ug/L	U	80.0	200	200	1	MS	PRB	09/17/22 18:53	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105010 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: AS−LF−01−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.99	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 18:57	220917−1	2316655
7440−70−2	Calcium	1200	ug/L		80.0	200	200	1	MS	PRB	09/17/22 18:57	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105011 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: AS−LF−02−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	8.97	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 19:00	220917−1	2316655
7440−70−2	Calcium	1220	ug/L		80.0	200	200	1	MS	PRB	09/17/22 19:00	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105012 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: AS−LF−03−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	9.14	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 19:24	220917−1	2316655
7440−70−2	Calcium	658	ug/L		80.0	200	200	1	MS	PRB	09/17/22 19:24	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105013 **BASIS:** As Received **DATE COLLECTED** 09−SEP−22

CLIENT ID: MW−BG−73−2022Q3 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	10.9	ug/L	J	5.20	15.0	15.0	1	MS	PRB	09/17/22 19:28	220917−1	2316655
7440−70−2	Calcium	280	ug/L		80.0	200	200	1	MS	PRB	09/17/22 19:28	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 593105 **CONTRACT:** DMNN00101 **METHOD TYPE:** SW846

SAMPLE ID: 593105014 **BASIS:** As Received **DATE COLLECTED** 12−SEP−22

CLIENT ID: FBLK−WAT−CCR−LF−2230 **LEVEL:** Low **DATE RECEIVED** 14−SEP−22

MATRIX: GW **%SOLIDS:** 0

CAS	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7440−42−8	Boron	5.20	ug/L	U	5.20	15.0	15.0	1	MS	PRB	09/17/22 19:45	220917−1	2316655
7440−70−2	Calcium	80.0	ug/L	U	80.0	200	200	1	MS	PRB	09/17/22 19:45	220917−1	2316655

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
2316655	2316654	SW846 3005A	50	mL	50	mL	09/15/22	LG2

***Analytical Methods:**

MS **SW846 3005A/6020B**

Quality Control Summary

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 593105

Contract: DMNN00101 **Lab Code:** GEL

Instrument ID: ICPMS15

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
ICV01										
	Boron	105	ug/L	100	ug/L	105.4	90.0 − 110.0	MS	17−SEP−22 16:22	220917−1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 − 110.0	MS	17−SEP−22 16:22	220917−1
CCV01										
	Boron	100	ug/L	100	ug/L	100.2	90.0 − 110.0	MS	17−SEP−22 16:39	220917−1
	Calcium	4930	ug/L	5000	ug/L	98.6	90.0 − 110.0	MS	17−SEP−22 16:39	220917−1
CCV02										
	Boron	103	ug/L	100	ug/L	103.5	90.0 − 110.0	MS	17−SEP−22 16:49	220917−1
	Calcium	4970	ug/L	5000	ug/L	99.4	90.0 − 110.0	MS	17−SEP−22 16:49	220917−1
CCV03										
	Boron	101	ug/L	100	ug/L	100.7	90.0 − 110.0	MS	17−SEP−22 18:02	220917−1
	Calcium	4910	ug/L	5000	ug/L	98.2	90.0 − 110.0	MS	17−SEP−22 18:02	220917−1
CCV04										
	Boron	97.4	ug/L	100	ug/L	97.4	90.0 − 110.0	MS	17−SEP−22 18:39	220917−1
	Calcium	4920	ug/L	5000	ug/L	98.5	90.0 − 110.0	MS	17−SEP−22 18:39	220917−1
CCV05										
	Boron	96.8	ug/L	100	ug/L	96.8	90.0 − 110.0	MS	17−SEP−22 19:17	220917−1
	Calcium	5010	ug/L	5000	ug/L	100.3	90.0 − 110.0	MS	17−SEP−22 19:17	220917−1
CCV06										
	Boron	101	ug/L	100	ug/L	101	90.0 − 110.0	MS	17−SEP−22 19:55	220917−1
	Calcium	5010	ug/L	5000	ug/L	100.3	90.0 − 110.0	MS	17−SEP−22 19:55	220917−1

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−2b−
CRDL Standard for ICP & ICPMS

SDG No: 593105

Contract: DMNN00101 **Lab Code:** GEL

Instrument ID: ICPMS15

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M*	Analysis Date/Time	Run Number
CRDL01										
	Boron	15.4	ug/L	15	ug/L	102.5	80.0 − 120.0	MS	17−SEP−22 16:29	220917−1
	Calcium	236	ug/L	200	ug/L	117.9	80.0 − 120.0	MS	17−SEP−22 16:29	220917−1
CRDL02										
	Boron	17.9	ug/L	15	ug/L	119	80.0 − 120.0	MS	17−SEP−22 18:05	220917−1
	Calcium	239	ug/L	200	ug/L	119.6	80.0 − 120.0	MS	17−SEP−22 18:05	220917−1
CRDL03										
	Boron	18.4	ug/L	15	ug/L	122.4	80.0 − 120.0 *	MS	17−SEP−22 19:59	220917−1
	Calcium	242	ug/L	200	ug/L	120.9	80.0 − 120.0 *	MS	17−SEP−22 19:59	220917−1

***Analytical Methods:**

MS **SW846 3005A/6020B**

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 593105

Contract: DMNN00101

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
ICB01										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 16:25	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 16:25	220917−1
CCB01										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 16:42	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 16:42	220917−1
CCB02										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 16:53	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 16:53	220917−1
CCB03										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 18:08	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 18:08	220917−1
CCB04										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 18:43	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 18:43	220917−1
CCB05										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 19:21	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 19:21	220917−1
CCB06										
	Boron	5.2	+/−7.5	U	5.2	15.0	LIQ	MS	17−SEP−22 20:02	220917−1
	Calcium	80.0	+/−100	U	80.0	200	LIQ	MS	17−SEP−22 20:02	220917−1

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−3b−
PREPARATION BLANK SUMMARY

SDG NO. 593105
Contract: DMNN00101
Matrix: GW

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M*	MDL	RDL
1205191446								
	Boron	5.20	ug/L	+/−7.5	U	MS	5.20	15.0
	Calcium	80.0	ug/L	+/−100	U	MS	80.0	200

***Analytical Methods:**

MS SW846 3005A/6020B

METALS
−4−
Interference Check Sample

SDG No: 593105

Contract: DMNN00101 **Lab Code:** GEL

Instrument: ICPMS15

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Boron	2.87	ug/L					17−SEP−22 16:32	220917−1
	Calcium	93700	ug/L	100000	ug/L	93.7	80.0 − 120.0	17−SEP−22 16:32	220917−1
ICSAB01									
	Boron	21.4	ug/L	20	ug/L	107	80.0 − 120.0	17−SEP−22 16:36	220917−1
	Calcium	94100	ug/L	100000	ug/L	94.1	80.0 − 120.0	17−SEP−22 16:36	220917−1
ICSA02									
	Boron	1.44	ug/L					17−SEP−22 17:55	220917−1
	Calcium	93900	ug/L	100000	ug/L	93.9	80.0 − 120.0	17−SEP−22 17:55	220917−1
ICSAB02									
	Boron	18.2	ug/L	20	ug/L	90.8	80.0 − 120.0	17−SEP−22 17:58	220917−1
	Calcium	94200	ug/L	100000	ug/L	94.2	80.0 − 120.0	17−SEP−22 17:58	220917−1
ICSA03									
	Boron	1.29	ug/L					17−SEP−22 19:48	220917−1
	Calcium	93900	ug/L	100000	ug/L	93.9	80.0 − 120.0	17−SEP−22 19:48	220917−1
ICSAB03									
	Boron	18.3	ug/L	20	ug/L	91.7	80.0 − 120.0	17−SEP−22 19:52	220917−1
	Calcium	92800	ug/L	100000	ug/L	92.8	80.0 − 120.0	17−SEP−22 19:52	220917−1

METALS
−5a−

Matrix Spike Summary

SDG NO. 593105 **Client ID** AS−LF−02−2022Q3S

Contract: DMNN00101 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 593105011 **Spike ID:** 1205191449

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Boron	ug/L	75−125	125		8.97	B	100	116		MS
Calcium	ug/L	75−125	3370		1220		2000	108		MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−5a−

Matrix Spike Summary

SDG NO. 593105 **Client ID** MW−BG−73−2022Q3S

Contract: DMNN00101 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 593105013 **Spike ID:** 1205191452

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Boron	ug/L	75−125	120		10.9	B	100	109		MS
Calcium	ug/L	75−125	2440		280		2000	108		MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

Metals
−6−
Duplicate Sample Summary

SDG No.: 593105 **Lab Code:** GEL

Contract: DMNN00101 **Client ID:** AS−LF−02−2022Q3D

Matrix: GROUND WATER **Level:** Low

Sample ID: 593105011 **Duplicate ID:** 1205191448 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Boron	ug/L	+/−30	8.97	B	10.8	B	18.6		MS
Calcium	ug/L	+/−20%	1220		1240		2.1		MS

***Analytical Methods:**
MS SW846 3005A/6020B

Metals
−6−
Duplicate Sample Summary

SDG No.: 593105 **Lab Code:** GEL

Contract: DMNN00101 **Client ID:** MW−BG−73−2022Q3D

Matrix: GROUND WATER **Level:** Low

Sample ID: 593105013 **Duplicate ID:** 1205191451 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Boron	ug/L	+/−30	10.9	B	10.5	B	3.81		MS
Calcium	ug/L	+/−400	280		269		4.25		MS

***Analytical Methods:**
MS SW846 3005A/6020B

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 593105

Contract: DMNN00101

Aqueous LCS Source: Enviromental Express **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1205191447								
	Boron	ug/L	100	108		108	80−120	MS
	Calcium	ug/L	2000	2090		105	80−120	MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 593105 **Client ID** AS−LF−02−2022Q3L

Contract: DMNN00101

Matrix: LIQUID **Level:** Low

Sample ID: 593105011 **Serial Dilution ID:** 1205191450

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Boron	8.97	B	26	U	159.779			MS
Calcium	1220		1230		1.189			MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 593105 **Client ID** MW−BG−73−2022Q3L

Contract: DMNN00101

Matrix: LIQUID **Level:** Low

Sample ID: 593105013 **Serial Dilution ID:** 1205194414

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Boron	10.9	B	620		5594.039			MS
Calcium	280		12100		4200.974			MS

***Analytical Methods:**

MS **SW846 3005A/6020B**

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 593105 **Method Type:** MS

Contract: DMNN00101 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 2316654							
1205191446	MB for batch 2316654	MB	G	15−SEP−22	50mL	50mL	
1205191447	LCS for batch 2316654	LCS	G	15−SEP−22	50mL	50mL	
1205191449	AS−LF−02−2022Q3S	MS	G	15−SEP−22	50mL	50mL	
1205191452	MW−BG−73−2022Q3S	MS	G	15−SEP−22	50mL	50mL	
1205191448	AS−LF−02−2022Q3D	DUP	G	15−SEP−22	50mL	50mL	
1205191451	MW−BG−73−2022Q3D	DUP	G	15−SEP−22	50mL	50mL	
593105001	MW−LF−01−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105002	MW−LF−06−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105003	MW−LF−07−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105004	MW−LF−08−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105005	MW−LF−10−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105006	MW−LF−10A−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105007	MW−LF−11−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105008	DU−WAT−CCR−LF−22301	SAMPLE	G	15−SEP−22	50mL	50mL	
593105009	FBLK−WAT−CCR−LF−22301	SAMPLE	G	15−SEP−22	50mL	50mL	
593105010	AS−LF−01−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105011	AS−LF−02−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105012	AS−LF−03−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	
593105013	MW−BG−73−2022Q3	SAMPLE	G	15−SEP−22	50mL	50mL	

SW846

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 593105 **Method Type:** MS

Contract: DMNN00101 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
593105014	FBLK−WAT−CCR−LF−22302	SAMPLE	G	15−SEP−22	50mL	50mL	

General Chem Analysis

Case Narrative

General Chemistry
Technical Case Narrative
Dominion Energy
SDG #: 593105

Product: **Ion Chromatography**
Analytical Method: EPA 300.0
Analytical Procedure: GL-GC-E-086 REV# 30
Analytical Batches: 2317683 and 2317984

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

GEL Sample ID#	Client Sample Identification
593105001	MW-LF-01-2022Q3
593105002	MW-LF-06-2022Q3
593105003	MW-LF-07-2022Q3
593105004	MW-LF-08-2022Q3
593105005	MW-LF-10-2022Q3
593105006	MW-LF-10A-2022Q3
593105007	MW-LF-11-2022Q3
593105008	DU-WAT-CCR-LF-22301
593105009	FBLK-WAT-CCR-LF-22301
593105010	AS-LF-01-2022Q3
593105011	AS-LF-02-2022Q3
593105012	AS-LF-03-2022Q3
593105013	MW-BG-73-2022Q3
593105014	FBLK-WAT-CCR-LF-22302
1205193505	Method Blank (MB)
1205193506	Laboratory Control Sample (LCS)
1205193507	592528001(NonSDG) Sample Duplicate (DUP)
1205193508	593105001(MW-LF-01-2022Q3) Sample Duplicate (DUP)
1205193509	592528001(NonSDG) Post Spike (PS)
1205193510	593105001(MW-LF-01-2022Q3) Post Spike (PS)
1205194183	Method Blank (MB)
1205194184	Laboratory Control Sample (LCS)
1205194185	593105011(AS-LF-02-2022Q3) Sample Duplicate (DUP)
1205194186	593105011(AS-LF-02-2022Q3) Post Spike (PS)
1205194188	593108007(MW-AP-08-2022Q3) Sample Duplicate (DUP)
1205194189	593108007(MW-AP-08-2022Q3) Post Spike (PS)

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

Data Summary:

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

Technical Information

Sample Dilutions

The following samples 1205193507 (Non SDG 592528001DUP), 1205193509 (Non SDG 592528001PS), 1205194188 (MW-AP-08-2022Q3DUP) and 1205194189 (MW-AP-08-2022Q3PS) were diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

Product: **Solids, Total Dissolved**
Analytical Method: SM 2540C
Analytical Procedure: GL-GC-E-001 REV# 19
Analytical Batches: 2316771 and 2316796

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

GEL Sample ID#	Client Sample Identification
593105001	MW-LF-01-2022Q3
593105002	MW-LF-06-2022Q3
593105003	MW-LF-07-2022Q3
593105004	MW-LF-08-2022Q3
593105005	MW-LF-10-2022Q3
593105006	MW-LF-10A-2022Q3
593105007	MW-LF-11-2022Q3
593105008	DU-WAT-CCR-LF-22301
593105009	FBLK-WAT-CCR-LF-22301
593105010	AS-LF-01-2022Q3
593105011	AS-LF-02-2022Q3
593105012	AS-LF-03-2022Q3
593105013	MW-BG-73-2022Q3
593105014	FBLK-WAT-CCR-LF-22302
1205191692	Method Blank (MB)
1205191693	Laboratory Control Sample (LCS)
1205191694	592720001(NonSDG) Sample Duplicate (DUP)
1205191695	592878002(NonSDG) Sample Duplicate (DUP)
1205191696	593105011(AS-LF-02-2022Q3) Sample Duplicate (DUP)
1205191743	Method Blank (MB)
1205191744	Laboratory Control Sample (LCS)
1205191745	592878006(NonSDG) Sample Duplicate (DUP)
1205191746	592969002(NonSDG) Sample Duplicate (DUP)
1205191747	592975005(NonSDG) Sample Duplicate (DUP)
1205191748	593103004(MW-04LF-2022Q3) Sample Duplicate (DUP)

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

Duplicate Relative Percent Difference (RPD) Statement
The Relative Percent Difference (RPD) between the sample and duplicate falls outside of the established acceptance limits because of the heterogeneous matrix of the sample:

Analyte	Sample	Value
Total Dissolved Solids	1205191695 (Non SDG 592878002DUP)	15.7* (0%-5%)
	1205191746 (Non SDG 592969002DUP)	12.4* (0%-5%)
	1205191748 (MW-04LF-2022Q3DUP)	abs(19 - 33)* (+/-10 mg/L)

Miscellaneous Information

Additional Comments
All method-driven specifications are followed for these analyses except where client-specific SOW requirements are required to be met.

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.

GEL LABORATORIES LLC

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

Qualifier Definition Report
for

DMNN001 Dominion Energy (50149867)

Client SDG: 593105 GEL Work Order: 593105

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria
J Value is estimated
U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Aubrey Kingsbury**

Date: 27 SEP 2022 **Title: Team Leader**

Sample Data Summary

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

Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-01-2022Q3	Project:	DMNN00101
Sample ID:	593105001	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 14:20		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		6.69	0.0670	0.200	mg/L		1	HXC1	09/16/22	1435	2317683	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	9.00	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-06-2022Q3	Project:	DMNN00101
Sample ID:	593105002	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 13:20		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		6.46	0.0670	0.200	mg/L		1	HXC1	09/16/22	1506	2317683	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.590	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		11.0	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-07-2022Q3	Project:	DMNN00101
Sample ID:	593105003	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 14:00		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		7.79	0.0670	0.200	mg/L		1	HXC1	09/16/22	1537	2317683	1
Fluoride	J	0.0448	0.0330	0.100	mg/L		1					
Sulfate		1.41	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	3.00	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-08-2022Q3	Project:	DMNN00101
Sample ID:	593105004	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	12-SEP-22 12:50		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.07	0.0670	0.200	mg/L		1	JLD1	09/16/22	1846	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.563	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	7.00	2.38	10.0	mg/L			CH6	09/15/22	1119	2316796	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-10-2022Q3	Project:	DMNN00101
Sample ID:	593105005	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	12-SEP-22 14:35		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		7.01	0.0670	0.200	mg/L		1	JLD1	09/16/22	1915	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		9.79	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		33.0	2.38	10.0	mg/L			CH6	09/15/22	1119	2316796	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-10A-2022Q3	Project:	DMNN00101
Sample ID:	593105006	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	12-SEP-22 14:30		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		4.17	0.0670	0.200	mg/L		1	JLD1	09/16/22	1945	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.791	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		10.0	2.38	10.0	mg/L			CH6	09/15/22	1119	2316796	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-LF-11-2022Q3	Project:	DMNN00101
Sample ID:	593105007	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	12-SEP-22 12:40		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.75	0.0670	0.200	mg/L		1	JLD1	09/16/22	2015	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.499	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		11.0	2.38	10.0	mg/L			CH6	09/15/22	1119	2316796	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	DU-WAT-CCR-LF-22301	Project:	DMNN00101
Sample ID:	593105008	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 12:00		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.50	0.0670	0.200	mg/L		1	JLD1	09/16/22	2045	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.870	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	8.00	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	FBLK-WAT-CCR-LF-22301	Project:	DMNN00101
Sample ID:	593105009	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 10:20		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride	J	0.171	0.0670	0.200	mg/L		1	JLD1	09/16/22	2115	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	AS-LF-01-2022Q3	Project:	DMNN00101
Sample ID:	593105010	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 11:45		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		8.91	0.0670	0.200	mg/L		1	JLD1	09/16/22	2145	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.891	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		17.0	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	AS-LF-02-2022Q3	Project:	DMNN00101
Sample ID:	593105011	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 10:25		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		2.82	0.0670	0.200	mg/L		1	JLD1	09/16/22	2215	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		3.25	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	J	7.00	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	AS-LF-03-2022Q3	Project:	DMNN00101
Sample ID:	593105012	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 10:15		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		5.48	0.0670	0.200	mg/L		1	JLD1	09/17/22	0214	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate		0.587	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids		10.0	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	MW-BG-73-2022Q3	Project:	DMNN00101
Sample ID:	593105013	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	09-SEP-22 11:50		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		2.52	0.0670	0.200	mg/L		1	JLD1	09/17/22	0244	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	J	0.398	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/15/22	1034	2316771	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: September 27, 2022

Company :	Dominion Energy Services, Inc.
Address :	120 Tredegar Street
	Richmond, Virginia 23219
Contact:	Kelly Hicks
Project:	CCR Groundwater Monitoring - Level 1 Package

Client Sample ID:	FBLK-WAT-CCR-LF-22302	Project:	DMNN00101
Sample ID:	593105014	Client ID:	DMNN001
Matrix:	GW		
Collect Date:	12-SEP-22 14:20		
Receive Date:	14-SEP-22		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions Liquid "As Received"												
Chloride		0.287	0.0670	0.200	mg/L		1	JLD1	09/17/22	0314	2317984	1
Fluoride	U	ND	0.0330	0.100	mg/L		1					
Sulfate	U	ND	0.133	0.400	mg/L		1					
Solids Analysis												
SM2540C TDS "As Received"												
Total Dissolved Solids	U	ND	2.38	10.0	mg/L			CH6	09/15/22	1119	2316796	2

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SM 2540C	

Notes:

Column headers are defined as follows:

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

Quality Control Summary

QC Summary

Report Date: September 27, 2022

Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia

Contact: **Kelly Hicks**

Workorder: **593105**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography										
Batch 2317683										
QC1205193507 592528001 DUP										
Chloride		1.45		1.40	mg/L	3.38		(0%-20%)	HXC1	09/16/22 21:47
Fluoride		0.173		0.180	mg/L	3.63 ^		(+/-.2)		
Sulfate		52.3		52.2	mg/L	0.107		(0%-20%)		09/17/22 01:53
QC1205193508 593105001 DUP										
Chloride		6.69		6.57	mg/L	1.79		(0%-20%)		09/16/22 22:48
Fluoride	U	ND	J	0.0353	mg/L	200 ^				
Sulfate	U	ND	J	0.360	mg/L	200 ^				
QC1205193506 LCS										
Chloride	5.00			4.64	mg/L		92.8	(90%-110%)		09/16/22 21:16
Fluoride	2.50			2.57	mg/L		103	(90%-110%)		
Sulfate	10.0			9.88	mg/L		98.8	(90%-110%)		
QC1205193505 MB										
Chloride			U	ND	mg/L					09/16/22 20:45
Fluoride			U	ND	mg/L					
Sulfate			U	ND	mg/L					
QC1205193509 592528001 PS										
Chloride	5.00	1.45		6.12	mg/L		93.4	(90%-110%)		09/16/22 22:18

QC Summary

Workorder: **593105**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 2317683											
Fluoride	2.50		0.173		2.64	mg/L		98.6	(90%-110%)	HXC1	09/16/22 22:18
Sulfate	10.0		10.5		20.7	mg/L		103	(90%-110%)		09/17/22 02:24
QC1205193510 593105001 PS											
Chloride	5.00		6.69		11.9	mg/L		104	(90%-110%)		09/16/22 23:19
Fluoride	2.50	U	ND		2.67	mg/L		107	(90%-110%)		
Sulfate	10.0	U	ND		9.96	mg/L		99.6	(90%-110%)		
Batch 2317984											
QC1205194185 593105011 DUP											
Chloride			2.82		2.81	mg/L	0.0462		(0%-20%)	JLD1	09/16/22 22:45
Fluoride		U	ND	U	ND	mg/L	N/A				
Sulfate			3.25		3.21	mg/L	1.18		(0%-20%)		
QC1205194188 593108007 DUP											
Chloride			17.3		17.3	mg/L	0.081 ^		(+/-8)		09/17/22 17:58
Fluoride			0.975		0.975	mg/L	0.0205		(0%-20%)		09/17/22 08:43
Sulfate			145		146	mg/L	0.364		(0%-20%)		09/17/22 17:58
QC1205194184 LCS											
Chloride	5.00				4.85	mg/L		97	(90%-110%)		09/17/22 01:44
Fluoride	2.50				2.38	mg/L		95.3	(90%-110%)		
Sulfate	10.0				10.0	mg/L		100	(90%-110%)		

QC Summary

Workorder: **593105**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Ion Chromatography											
Batch 2317984											
QC1205194183 MB											
Chloride				U	ND	mg/L				JLD1	09/17/22 01:14
Fluoride				U	ND	mg/L					
Sulfate				U	ND	mg/L					
QC1205194186 593105011 PS											
Chloride	5.00		2.82		8.11	mg/L		106	(90%-110%)		09/16/22 23:15
Fluoride	2.50	U	ND		2.46	mg/L		98.2	(90%-110%)		
Sulfate	10.0		3.25		13.3	mg/L		101	(90%-110%)		
QC1205194189 593108007 PS											
Chloride	5.00		0.864		5.83	mg/L		99.3	(90%-110%)		09/17/22 18:27
Fluoride	2.50		0.975		3.56	mg/L		103	(90%-110%)		09/17/22 09:13
Sulfate	10.0		7.27		17.7	mg/L		105	(90%-110%)		09/17/22 18:27
Solids Analysis											
Batch 2316771											
QC1205191694 592720001 DUP											
Total Dissolved Solids			443		437	mg/L	1.36		(0%-5%)	CH6	09/15/22 10:34
QC1205191695 592878002 DUP											
Total Dissolved Solids			110		94.0	mg/L	15.7*		(0%-5%)		09/15/22 10:34
QC1205191696 593105011 DUP											
Total Dissolved Solids		J	7.00	J	5.00	mg/L	33.3 ^		(+/-20)		09/15/22 10:34

QC Summary

Workorder: **593105**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Solids Analysis										
Batch 2316771										
QC1205191693 LCS										
Total Dissolved Solids	300			302	mg/L		101	(95%-105%)	CH6	09/15/22 10:34
QC1205191692 MB										
Total Dissolved Solids			U	ND	mg/L					09/15/22 10:34
Batch 2316796										
QC1205191745 592878006 DUP										
Total Dissolved Solids		107		111	mg/L	3.67		(0%-5%)	CH6	09/15/22 11:19
QC1205191746 592969002 DUP										
Total Dissolved Solids		68.0		77.0	mg/L	12.4*		(0%-5%)		09/15/22 11:19
QC1205191747 592975005 DUP										
Total Dissolved Solids		297		296	mg/L	0.337		(0%-5%)		09/15/22 11:19
QC1205191748 593103004 DUP										
Total Dissolved Solids		33.0		19.0	mg/L	53.8 ^		(+/-20)		09/15/22 11:19
QC1205191744 LCS										
Total Dissolved Solids	300			302	mg/L		101	(95%-105%)		09/15/22 11:19
QC1205191743 MB										
Total Dissolved Solids			U	ND	mg/L					09/15/22 11:19

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated

QC Summary

Workorder: **593105**

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

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 Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.

R Sample results are rejected

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

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

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 the 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.

ENVIRONMENTAL® STANDARDS
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This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Wateree Power Station Groundwater Sampling
Samples Collected between: 9/7/2022 and 9/14/2022

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

592592

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
MW-LF-22-2022Q3	MW-LF-22	N	EPA 300.0	Fluoride	N	0.0707	J	RL	0.0330	0.100		mg/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results

T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Wateree Generating Station
SDG: 592592

Lab Sample ID	592592001
Sys Sample Code	MW-LF-22-2022Q3
Sample Name	MW-LF-22-2022Q3
Sample Date	9/8/2022 10:05:00 AM
Location	WAT-MW-LF-22 / MW-LF-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	9.99				0.134	0.134	0.400	Y	Yes	2	NA
EPA 300.0	Fluoride	16984-48-8	N	mg/L	0.0707	J	RL		0.0330	0.0330	0.100	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	1.06				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	21.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	15.1				5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	2060				80.0	80.0	200	Y	Yes	1	NA

ENVIRONMENTAL® STANDARDS
www.envstd.com

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Wateree Power Station Groundwater Sampling
Samples Collected between: 9/7/2022 and 9/14/2022

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

593105

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
MW-LF-01-2022Q3	MW-01LF	N	SM 2540C	Total Dissolved Solids	N	9.00	J	RL	2.38	10.0		mg/L
MW-LF-01-2022Q3	MW-01LF	N	SW-846 6020B	Boron	T	11.5	J	RL	5.20	15.0		ug/L
MW-LF-01-2022Q3	MW-01LF	N	SW-846 6020B	Calcium	T	125	J	RL	80.0	200		ug/L
MW-LF-06-2022Q3	MW-06LF	N	SW-846 6020B	Boron	T	7.41	J	RL	5.20	15.0		ug/L
MW-LF-07-2022Q3	MW-LF-07	N	EPA 300.0	Fluoride	N	0.0448	J	RL	0.0330	0.100		mg/L
MW-LF-07-2022Q3	MW-LF-07	N	SM 2540C	Total Dissolved Solids	N	3.00	J	RL	2.38	10.0		mg/L
MW-LF-07-2022Q3	MW-LF-07	N	SW-846 6020B	Boron	T	8.83	J	RL	5.20	15.0		ug/L
MW-LF-08-2022Q3	MW-LF-08	N	SM 2540C	Total Dissolved Solids	N	7.00	J	RL	2.38	10.0		mg/L
MW-LF-08-2022Q3	MW-LF-08	N	SW-846 6020B	Boron	T	9.02	J	RL	5.20	15.0		ug/L
MW-LF-10-2022Q3	MW-LF-10	N	SW-846 6020B	Boron	T	11.3	J	RL	5.20	15.0		ug/L
MW-LF-10A-2022Q3	MW-LF-10A	N	SW-846 6020B	Boron	T	8.61	J	RL	5.20	15.0		ug/L
MW-LF-11-2022Q3	MW-LF-11	N	SW-846 6020B	Boron	T	9.57	J	RL	5.20	15.0		ug/L
DU-WAT-CCR-LF-22301	AS-LF-03	FD	SM 2540C	Total Dissolved Solids	N	8.00	J	RL	2.38	10.0		mg/L
DU-WAT-CCR-LF-22301	AS-LF-03	FD	SW-846 6020B	Boron	T	8.56	J	RL	5.20	15.0		ug/L
FBLK-WAT-CCR-LF-22301	Field Blank	FB	EPA 300.0	Chloride	N	0.171	J	RL	0.0670	0.200		mg/L
AS-LF-01-2022Q3	AS-LF-01	N	SW-846 6020B	Boron	T	8.99	J	RL	5.20	15.0		ug/L
AS-LF-02-2022Q3	AS-LF-02	N	SM 2540C	Total Dissolved Solids	N	7.00	J	RL	2.38	10.0		mg/L
AS-LF-02-2022Q3	AS-LF-02	N	SW-846 6020B	Boron	T	8.97	J	RL	5.20	15.0		ug/L
AS-LF-03-2022Q3	AS-LF-03	N	SW-846 6020B	Boron	T	9.14	J	RL	5.20	15.0		ug/L
MW-BG-73-2022Q3	MW-BG-73	N	EPA 300.0	Sulfate	N	0.398	J	RL	0.133	0.400		mg/L
MW-BG-73-2022Q3	MW-BG-73	N	SW-846 6020B	Boron	T	10.9	J	RL	5.20	15.0		ug/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.

R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Wateree Generating Station
SDG: 593105

Lab Sample ID	593105001
Sys Sample Code	MW-LF-01-2022Q3
Sample Name	MW-LF-01-2022Q3
Sample Date	9/9/2022 2:20:00 PM
Location	WAT-MW-01LF / MW-01LF
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	6.69				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.133	0.133	0.400	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	9.00	J	RL		2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	11.5	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	125	J	RL		80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105002
Sys Sample Code	MW-LF-06-2022Q3
Sample Name	MW-LF-06-2022Q3
Sample Date	9/9/2022 1:20:00 PM
Location	WAT-MW-06LF / MW-06LF
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	6.46				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.590				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	11.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	7.41	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	925				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105003
Sys Sample Code	MW-LF-07-2022Q3
Sample Name	MW-LF-07-2022Q3
Sample Date	9/9/2022 2:00:00 PM
Location	WAT-MW-LF-07 / MW-LF-07
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	7.79				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.0448	J	RL		0.0330	0.0330	0.100	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	1.41				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	3.00	J	RL		2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.83	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	1010				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105004
Sys Sample Code	MW-LF-08-2022Q3
Sample Name	MW-LF-08-2022Q3
Sample Date	9/12/2022 12:50:00 PM
Location	WAT-MW-LF-08 / MW-LF-08
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.07				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.563				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	7.00	J	RL		2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	9.02	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	850				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105005
Sys Sample Code	MW-LF-10-2022Q3
Sample Name	MW-LF-10-2022Q3
Sample Date	9/12/2022 2:35:00 PM
Location	WAT-MW-LF-10 / MW-LF-10
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	7.01				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	9.79				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	33.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	11.3	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	2890				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105006
Sys Sample Code	MW-LF-10A-2022Q3
Sample Name	MW-LF-10A-2022Q3
Sample Date	9/12/2022 2:30:00 PM
Location	WAT-MW-LF-10A / MW-LF-10A
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	4.17				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.791				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	10.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.61	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	332				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105007
Sys Sample Code	MW-LF-11-2022Q3
Sample Name	MW-LF-11-2022Q3
Sample Date	9/12/2022 12:40:00 PM
Location	WAT-MW-LF-11 / MW-LF-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.75				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.499				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	11.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	9.57	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	379				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105008
Sys Sample Code	DU-WAT-CCR-LF-22301
Sample Name	DU-WAT-CCR-LF-22301
Sample Date	9/9/2022 12:00:00 PM
Location	WAT-AS-LF-03 / AS-LF-03
Sample Type	FD
Matrix	GW
Parent Sample	AS-LF-03-2022Q3

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.50				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.870				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	8.00	J	RL		2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.56	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	639				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105009
Sys Sample Code	FBLK-WAT-CCR-LF-22301
Sample Name	FBLK-WAT-CCR-LF-22301
Sample Date	9/9/2022 10:20:00 AM
Location	WAT-CCRLF-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	0.171	J	RL		0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.133	0.133	0.400	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			2.38	2.38	10.0	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L		U			5.20	5.20	15.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			80.0	80.0	200	N	Yes	1	NA

Lab Sample ID	593105010
Sys Sample Code	AS-LF-01-2022Q3
Sample Name	AS-LF-01-2022Q3
Sample Date	9/9/2022 11:45:00 AM
Location	WAT-AS-LF-01 / AS-LF-01
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	8.91				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.891				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	17.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.99	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	1200				80.0	80.0	200	Y	Yes	1	NA

Facility: Wateree Generating Station
SDG: 593105

Lab Sample ID	593105011
Sys Sample Code	AS-LF-02-2022Q3
Sample Name	AS-LF-02-2022Q3
Sample Date	9/9/2022 10:25:00 AM
Location	WAT-AS-LF-02 / AS-LF-02
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	2.82				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	3.25				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	7.00	J	RL		2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	8.97	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	1220				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105012
Sys Sample Code	AS-LF-03-2022Q3
Sample Name	AS-LF-03-2022Q3
Sample Date	9/9/2022 10:15:00 AM
Location	WAT-AS-LF-03 / AS-LF-03
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	5.48				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.587				0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	10.0				2.38	2.38	10.0	Y	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	9.14	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	658				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105013
Sys Sample Code	MW-BG-73-2022Q3
Sample Name	MW-BG-73-2022Q3
Sample Date	9/9/2022 11:50:00 AM
Location	WAT-MW-BG-73 / MW-BG-73
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	2.52				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	0.398	J	RL		0.133	0.133	0.400	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			2.38	2.38	10.0	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L	10.9	J	RL		5.20	5.20	15.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	280				80.0	80.0	200	Y	Yes	1	NA

Lab Sample ID	593105014
Sys Sample Code	FBLK-WAT-CCR-LF-22302
Sample Name	FBLK-WAT-CCR-LF-22302
Sample Date	9/12/2022 2:20:00 PM
Location	WAT-CCRLF-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 300.0	Chloride	16887-00-6	N	mg/L	0.287				0.0670	0.0670	0.200	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.0330	0.0330	0.100	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.133	0.133	0.400	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			2.38	2.38	10.0	N	Yes	1	NA
SW-846 6020B	Boron	7440-42-8	T	ug/L		U			5.20	5.20	15.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			80.0	80.0	200	N	Yes	1	NA

Appendix E
First Semiannual Detection Monitoring Program Statistical Evaluation

DOMINION ENERGY SOUTH CAROLINA

WATEREE STATION CLASS III LANDFILL

SEMIANNUAL DETECTION MONITORING

RICHLAND COUNTY, SOUTH CAROLINA

CCR GROUNDWATER DETECTION MONITORING STATISTICAL ANALYSIS REPORT

For the

March 2022 Sampling Event

July 2022

Joyce Peterson, P.E.
Senior Environmental Engineer

Richard A. Mayer Jr., P.G.
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Statistical Analysis Report

Groundwater Sampling

TRC Environmental Corporation (TRC) is providing this Statistically Significant Increases (SSI) notification for the Wateree Station Class III Landfill for the tenth semiannual detection monitoring event. Samples were collected on March 13th and 14th, 2022. The final laboratory analytical data packages for the event were received on March 22nd, 2022, and the data validation reports were received on April 1st, 2022. A verification resampling event for MW-LF-10 (calcium, chloride, and sulfate) was conducted on June 2nd, 2022. The final laboratory analytical package for the verification sampling event was received on June 16th, 2022, and the data validation report was received on June 23rd, 2022. This report addresses results from Detection Monitoring wells MW-LF-07, MW-LF-08, MW-LF-10, MW-LF-10A, MW-LF-11, and MW-LF-22. Background wells for the Class III Landfill include MW-BG-73, MW-LF-01, AS-LF-01, AS-LF-02, AS-LF-03, and MW-LF-06.

Statistical Analysis

Statistically Significant Level (SSL) exceedances above background concentrations include the following:

- MW-LF-07: none.
- MW-LF-08: none.
- MW-LF-10: calcium, chloride, fluoride, sulfate, and total dissolved solids (TDS).
- MW-LF-10A: none.
- MW-LF-11: none.
- MW-LF-22: chloride.

As has been done since the initiation of detection monitoring at the Wateree Station, the evaluation of potential SSIs was conducted using prediction limits to compare data from the background set of monitoring wells to the most recent results from the downgradient monitoring wells. The statistical calculations to generate prediction limits were conducted using United States Environmental Protection Agency's (USEPA's) ProUCL (v.5.1) software. TRC is currently evaluating the existing monitoring well network and updates to the Site's Statistical Analysis Plan (StAP) will be forthcoming which will formally establish and describe the statistical methods being employed. The prediction limits used for the first monitoring event in 2021 were calculated to be used for four semiannual sampling events, of which this is the third.

Appendix A presents the background data used for the prediction limit calculations. **Table 1** presents the BTVs calculated based on the background data. **Table 2** presents the data set for the tenth detection monitoring event and highlights results that are potential SSIs. **Appendix B** includes ProUCL outputs for

the trend tests used to evaluate potential SSI for calcium and chloride because the background data set has a statistically significant upward trend. An Alternative Source Demonstration (ASD) should be prepared for these potential SSIs.

Table 1
Background Threshold Values for 2021 and 2022

Table 1
Background Threshold Values for 2021 and 2022
Dominion Energy South Carolina
Wateree Station Class III Landfill

CONSTITUENT	NUMBER of RESULTS	PERCENT DETECTED	DISTRIBUTION	TREND	BACKGROUND THRESHOLD VALUE	BASIS
Boron (µg/L)	55	16	Nonparametric	N/A	140	95% USL
Calcium (µg/L)	54[1]	96	Nonparametric	Increasing	1.063[2]	95% UCL of slope
Chloride (mg/L)	55	100	Nonparametric	Decreasing	-7.03E-5[2]	95% UCL of slope
Fluoride (mg/L)	55	15	Nonparametric	N/A	0.1	95% USL
pH (s.u.)	55	100	Nonparametric	None	2.5 – 6.2	95% USL
Sulfate (mg/L	55	25	Nonparametric	N/A	7.89	95% USL
TDS (mg/L)	54[1]	100	Gamma	None	111	95% HW UPL (k = 28)

[1] Outlier excluded from data set.

[2] BTV for calcium and chloride are the UCL of the trend slope.

N/A Not Applicable – trend test not conducted for data sets with fewer than 50 percent detections.

Table 2
March 2022 Downgradient Results and Potential SSIs

Table 2

March 2022 Downgradient Results and Potential SSIs

Dominion Energy South Carolina

Wateree Station Class III Landfill

WELL	CONSTITUENT / BTV / RESULT (mg/L except as noted)[1]						
	BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
	140	1.063[2] (6,670)	9.14	0.1	2.5 - 6.2	7.89	111
BACKGROUND WELLS							
MW-BG-73	9.18 J	304	2.27	0.0330 U	4.56	0.377 J	4.29 J
MW-LF-01	12.7 J	126 J	7.18	0.0330 U	4.41	0.301 J	11.4 J
AS-LF-01	10.3 J	772	8.89	0.0330 U	4.50	0.752	22.9
AS-LF-02	11.3 J	943	2.74	0.0330 U	5.00	3.43	12.9 J
AS-LF-03	8.98 J	606	5.28	0.0330 U	4.37	0.433	3.40 U
MW-LF-06	9.16 J	887	6.73	0.0330 U	4.91	0.604	10.0 J
DOWNGRADIENT WELLS							
MW-LF-07	8.97 J	-0.831 (981)	8.91	0.0330 U	4.41	1.18	4.29 J
MW-LF-08	8.16 J	-0.0748 (897)	5.57	0.0330 U	4.75	0.424	15.7
MW-LF-10	21.7	3.092 (10,400)[3]	9.22[3]	0.351	4.21	36.0[3]	117
MW-LF-10A	10.2 J	-7.441 (395)	4.14	0.0330 U	4.72	0.742	3.40 U
MW-LF-11	10.5 J	-0398 (378)	5.89	0.0330 U	4.62	0.285 J	18.6
MW-LF-22	15.8	-0.314 (1,950)	10.3	0.0330 U	4.34	1.11	7.14 J

Shaded cells indicate an SSI.

[1] Boron and calcium concentration expressed in µg/L; pH expressed in standard units (s.u.).

[2] BTV for calcium is the UCL of the trend. Downgradient values for calcium are the LCLs of the trend for the well with the March 2022 concentrations in parentheses.

[3] Verification resample conducted on 6/2/2022; result of verification resample data used.

U The analyte was not detected above the level of the sample reporting limit.

J Estimated concentration.

Appendix A
Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events

Appendix A

Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events

Dominion Energy South Carolina

Wateree Station Class III Landfill

EVENT	WELL	CONSTITUENT/RESULT (mg/L except as noted) [1]						
		BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
DM-2	MW-BG-73	44.2 U	266	2.14	0.025 U	4.82	0.129 U	25
DM-3	MW-BG-73	21.9 U	161	2.16	0.025 U	4.84	0.129 U	22
DM-4	MW-BG-73	21.9 U	338	2.54	0.008 U	4.41	0.129 U	20
DM-5	MW-BG-73	38.458 U	343	2.62	0.008 U	3.69	0.063 U	18
DM-6	MW-BG-73	38.458 U	335	2.39	0.008 U	4.51	0.063 U	10
DM-7	MW-BG-73	38.458 U	245	2.25	0.008 U	4.98	0.063 U	51
BL-1	MW-LF-01	55.7 U	93.7	5.33	0.033 U	3.64	0.129 U	19
BL-2	MW-LF-01	55.7 U	74	5.3	0.033 U	4.25	0.129 U	24
BL-3	MW-LF-01	55.7 U	79.4	5.83	0.044	3.56	0.129 U	35
BL-4	MW-LF-01	55.7 U	116	5.99	0.033 U	4.85	0.129 U	33
BL-5	MW-LF-01	44.2 U	90.8	6.05	0.033 U	4.74	0.129 U	22
BL-6	MW-LF-01	44.2 U	48.1	5.3	0.033 U	4.02	0.129 U	40
BL-7	MW-LF-01	44.2 U	60.2	5.16	0.041	4.37	0.129 U	34
BL-8	MW-LF-01	44.2 U	1,440	5.09	0.038	4.53	0.87	32
DM-1	MW-LF-01	63.7	52.8	5.85	0.033 U	4.53	0.129 U	33
DM-2	MW-LF-01	44.2 U	54.4 U	5.71	< 0.025	4.6	0.129 U	35
DM-3	MW-LF-01	21.9 U	59 U	5.49	0.025 U	2.48	0.129 U	65
DM-4	MW-LF-01	60.2	87.9	5.96	0.008 U	5.47	0.129 U	54
DM-5	MW-LF-01	38.458 U	74.1 [4]	5.85	0.008 U	4.44	0.063 U	33
DM-6	MW-LF-01	38.458 U	102	6.47	0.008 U	4.41	0.063 U	29
DM-7	MW-LF-01	75.9	372	6.31	0.008 U	4.38	0.063 U	56
BL-4	MW-LF-06	55.7 U	714	6.81	0.033 U	5.08	0.129 U	38
BL-5	MW-LF-06	44.2 U	739	6.9	0.033 U	4.8	0.129 U	28

[1] Boron and calcium concentrations expressed in µg/L; pH expressed in standard units (s.u.).

[2] Outlier with no verification resample – removed from data set.

[3] Missing data replaced by verification resample result (value shown on table).

[4] ND value replaced by verification resampling detection.

U The analyte was not detected above the level of the sample reporting limit.

Appendix A (Continued)
Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events
Dominion Energy South Carolina
Wateree Station Class III Landfill

EVENT	WELL	CONSTITUENT/RESULT (mg/L except as noted) [1]						
		BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
BL-6	MW-LF-06	44.2 U	997	6.31	0.033 U	4.27	0.129 U	39
BL-7	MW-LF-06	44.2 U	786	6.07	0.034	4.33	0.129 U	39
BL-8	MW-LF-06	44.2 U	2,100	6.67	0.039	4.58	0.129 U	36
DM-1	MW-LF-06	44.2 U	770	6.98	0.033 U	4.73	0.129 U	36
DM-2	MW-LF-06	44.2 U	777	6.18	0.025 U	4.71	0.129 U	35
DM-4	MW-LF-06	21.9 U	592	6.31	0.008 U	4.9	0.129 U	27
DM-6	MW-LF-06	38.458 U	866	6.3	0.008 U	4.54	0.063 U	31
DM-7	MW-LF-06	140	746	6.23	0.008 U	4.72	0.063 U	75
BL-8	AS-LF-01	44.2 U	898	7.2	0.04	4.47	1.79	18
DM-1	AS-LF-01	44.2 U	554	7.07 [3]	0.1 U	4.65	1.4 [3]	37 [3]
DM-2	AS-LF-01	44.2 U	539	8.07	0.025 U	4.58	1.22	43
DM-3	AS-LF-01	21.9 U	535	8.45	0.025 U	3.71	0.129 U	45
DM-4	AS-LF-01	38.458 U	926	8.7	0.008 U	4.58	0.129 U	373 [2]
DM-5	AS-LF-01	38.458 U	858	8.94	0.008 U	4.46	0.7	48
DM-6	AS-LF-01	38.458 U	1,330	9.14	0.008 U	4.58	0.58	38
DM-7	AS-LF-01	38.458 U	804	8.29	0.008 U	4.25	0.063 U	42
BL-8	AS-LF-02	44.2 U	1,660	2.67	0.045	5.74	7.89	39
DM-1	AS-LF-02	44.2 U	921	2.7 [3]	0.1 U [3]	5.16	2.9 [3]	28 [3]
DM-2	AS-LF-02	44.2 U	24,800 [2]	2.82	0.025 U	6.2	4.6	102
DM-3	AS-LF-02	21.9	1,180	2.73	0.025 U	5.12	2.29	43
DM-4	AS-LF-02	38.458 U	6,300	2.73	0.008 U	5.67	3.61	62
DM-5	AS-LF-02	38.7	738	2.78	0.008 U	4.94	2.17	47
DM-6	AS-LF-02	38.458 U	6,670	2.82	0.008 U	5.78	2.94	91

[1] Boron and calcium concentrations expressed in µg/L; pH expressed in standard units (s.u.).

[2] Outlier with no verification resample – removed from data set.

[3] Missing data replaced by verification resample result (value shown on table).

[4] ND value replaced by verification resampling detection.

U The analyte was not detected above the level of the sample reporting limit.

Appendix A (Continued)

Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events

Dominion Energy South Carolina

Wateree Station Class III Landfill

EVENT	WELL	CONSTITUENT/RESULT (mg/L except as noted) [1]						
		BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
DM-7	AS-LF-02	77.3	769	2.78	0.008 U	5.01	2.09	47
BL-8	AS-LF-03	44.2 U	777	5.44	0.041	4.68	0.129 U	22
DM-1	AS-LF-03	44.2 U	557	5.49 [3]	0.1 U [3]	4.47	0.129 U [3]	24 [3]
DM-2	AS-LF-03	44.2 U	520	5.73	0.025 U	4.5	0.129 U	32
DM-3	AS-LF-03	21.9 U	562	5.95	0.025 U	3.75	0.129 U	54
DM-4	AS-LF-03	25.7	519	6.08	0.008 U	4.13	0.129 U	39
DM-5	AS-LF-03	38.458 U	575	5.64	0.008 U	4.35	0.063 U	38
DM-6	AS-LF-03	38.458 U	689	5.77	0.008 U	4.27	0.063 U	19
DM-7	AS-LF-03	47.9	665	5.4	0.008 U	4.32	0.063 U	57

[1] Boron and calcium concentrations expressed in µg/L; pH expressed in standard units (s.u.).

[2] Outlier with no verification resample – removed from data set.

[3] Missing data replaced by verification resample result (value shown on table).

[4] ND value replaced by verification resampling detection.

U The analyte was not detected above the level of the sample reporting limit.

Appendix B
Trend Test Outputs

Theil-Sen Trend Test Analysis

User Selected Options	
Date/Time of Computation	ProUCL 5.15/10/2022 4:46:02 PM
From File	WorkSheet_a.xls
Full Precision	OFF
Average Replicates	Replicates at sampling events will be averaged!
Confidence Coefficient	0.95
Level of Significance	0.05

Calcium-mw-lf-07

General Statistics	
Number of Events	17
Number of Values Reported (n)	17
Number of Values After Averaging	17
Number of Replicates	0
Minimum	637
Maximum	2190
Mean	1377
Geometric Mean	1288
Median	1370
Standard Deviation	501.5
Coefficient of Variation	0.364

Mann-Kendall Statistics	
M-K Test Value (S)	-51
Tabulated p-value	0.021
Standard Deviation of S	24.26
Standardized Value of S	-2.061
Approximate p-value	0.0196

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	136
Theil-Sen Slope	-0.514
Theil-Sen Intercept	23464
M2'	87.95
One-sided 95% upper limit of Slope	-0.0653
95% LCL of Slope (0.025)	**-0.831**
95% UCL of Slope (0.975)	**-0.0346**

Statistically significant evidence of a decreasing trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	1110	1628	-518.2
2	42564	893	1597	-703.8
3	42634	1110	1561	-450.9
4	42691	1610	1532	78.43
5	42754	2190	1499	690.8
6	42816	1960	1467	492.6
7	42879	2040	1435	605
8	42941	2010	1403	606.9
9	43005	1830	1370	460
10	43354	1630	1191	439.3
11	43529	1380	1101	279.2
12	43706	1370	1010	360.1
13	43901	1070	909.7	160.3
14	44089	769	813.1	-44.1
15	44263	817	723.7	93.29
16	44454	637	625.7	11.25
17	44635	981	532.6	448.4

Calcium-mw-lf-08

General Statistics	
Number of Events	17
Number of Values Reported (n)	17
Number of Values After Averaging	17
Number of Replicates	0
Minimum	798
Maximum	1760
Mean	920.2
Geometric Mean	903
Median	849
Standard Deviation	222.7
Coefficient of Variation	0.242

Mann-Kendall Statistics	
M-K Test Value (S)	-4
Tabulated p-value	0.452
Standard Deviation of S	24.28
Standardized Value of S	-0.124
Approximate p-value	0.451

Approximate inference for Theil-Sen Trend Test

Number of Slopes	136
Theil-Sen Slope	-0.00775
Theil-Sen Intercept	1182
M1	44.21
M2	91.79
95% LCL of Slope (0.025)	**-0.0748**
95% UCL of Slope (0.975)	**0.0441**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	974	852.9	121.1
2	42564	950	852.4	97.58
3	42634	841	851.9	-10.88
4	42691	849	851.4	-2.439
5	42754	816	851	-34.95
6	42816	1760	850.5	909.5
7	42879	847	850	-2.981
8	42942	830	849.5	-19.49
9	43005	798	849	-51
10	43164	819	847.8	-28.77
11	43354	817	846.3	-29.29
12	43706	906	843.6	62.44
13	43901	867	842.1	24.95
14	44089	825	840.6	-15.59
15	44263	908	839.2	68.75
16	44454	939	837.8	101.2
17	44635	897	836.4	60.64

Calcium-mw-lf-10

General Statistics

Number of Events	18
Number of Values Reported (n)	18
Number of Values After Averaging	18
Number of Replicates	0
Minimum	255
Maximum	20000
Mean	4589
Geometric Mean	1917

Median	1765
Standard Deviation	5457
Coefficient of Variation	1.189

Mann-Kendall Statistics	
M-K Test Value (S)	107
Tabulated p-value	0
Standard Deviation of S	26.4
Standardized Value of S	4.015
Approximate p-value	2.97E-05

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	153
Theil-Sen Slope	5.323
Theil-Sen Intercept	-227595
M1'	54.79
One-sided 95% lower limit of Slope	3.408
95% LCL of Slope (0.025)	**3.092**
95% UCL of Slope (0.975)	**6.604**

Statistically significant evidence of an increasing trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	268	-1333	1601
2	42564	294	-1009	1303
3	42634	259	-635.9	894.9
4	42691	255	-332.5	587.5
5	42754	363	2.925	360.1
6	42815	1790	327.7	1462
7	42878	1320	663	657
8	42942	1000	1004	-3.741
9	43005	678	1342	-663.8
10	43164	4810	2188	2622
11	43354	12300	3200	9100
12	43528	5460	4126	1334
13	43706	1740	5074	-3334
14	43901	4860	6112	-1252
15	44088	9030	7107	1923
16	44263	9780	8039	1741

17	44454	8390	9054	-663.8
18	44635	20000	10019	9981

Calcium-mw-lf-10a

General Statistics	
Number of Events	8
Number of Values Reported (n)	8
Number of Values After Averaging	8
Number of Replicates	0
Minimum	395
Maximum	9770
Mean	3123
Geometric Mean	1782
Median	1745
Standard Deviation	3289
Coefficient of Variation	1.053

Mann-Kendall Statistics	
M-K Test Value (S)	-4
Tabulated p-value	0.36
Standard Deviation of S	8.083
Standardized Value of S	-0.371
Approximate p-value	0.355

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	28
Theil-Sen Slope	-1.049
Theil-Sen Intercept	47899
M1	6.079
M2	21.92
95% LCL of Slope (0.025)	**-7.441**
95% UCL of Slope (0.975)	**8.929**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	43445	5588	2321	3267
2	43528	935	2234	-1299
3	43706	403	2048	-1645

4	43901	2190	1843	346.9
5	44088	4400	1647	2753
6	44263	9770	1463	8307
7	44454	1300	1263	36.71
8	44635	395	1073	-678.1

Calcium-mw-lf-11

General Statistics	
Number of Events	20
Number Values Observations	20
Number Values Missing	2
Number of Values Reported (n)	18
Number of Values After Averaging	18
Number of Replicates	2
Minimum	182
Maximum	1180
Mean	387.1
Geometric Mean	316.6
Median	264.5
Standard Deviation	314.9
Coefficient of Variation	0.814

Mann-Kendall Statistics	
M-K Test Value (S)	24
Tabulated p-value	0.184
Standard Deviation of S	26.38
Standardized Value of S	0.872
Approximate p-value	0.192

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	153
Theil-Sen Slope	0.0448
Theil-Sen Intercept	-1666
M1	50.65
M2	102.4
95% LCL of Slope (0.025)	**-0.0398**
95% UCL of Slope (0.975)	**0.216**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	273	238.4	34.57
2	42564	242	241.2	0.84
3	42634	279	244.3	34.7
4	42691	239	246.8	-7.849
5	42753	278	249.6	28.37
6	42815	767	252.4	514.6
7	42878	198	255.2	-57.23
8	42942	195	258.1	-63.09
9	43005	200	260.9	-60.94
10	43164	279	268.1	10.94
11	43354	420	276.6	143.4
12	43528	218	284.4	-66.37
13	43705	256	292.3	-36.3
14	43901	245	301.1	-56.08
15	44089	182	309.5	-127.5
16	44263	352	317.3	34.7
19	44454	1180	325.8	854.2
20	44635	1164	334	830

Calcium-mw-lf-22

General Statistics	
Number of Events	16
Number of Values Reported (n)	16
Number of Values After Averaging	16
Number of Replicates	0
Minimum	979
Maximum	2240
Mean	1745
Geometric Mean	1689
Median	1820
Standard Deviation	431.6
Coefficient of Variation	0.247

Mann-Kendall Statistics	
M-K Test Value (S)	10
Tabulated p-value	0.345
Standard Deviation of S	22.21
Standardized Value of S	0.405
Approximate p-value	0.343

Approximate inference for Theil-Sen Trend Test

Number of Slopes	120
Theil-Sen Slope	0.0546
Theil-Sen Intercept	-524.9
M1	38.23
M2	81.77
95% LCL of Slope (0.025)	**-0.314**
95% UCL of Slope (0.975)	**0.634**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	2180	1794	385.7
2	42564	1420	1798	-377.7
3	42634	1580	1801	-221.5
4	42691	2190	1805	385.4
5	42754	979	1808	-829
6	42815	1760	1811	-51.36
7	42879	2240	1815	425.1
8	42942	1310	1818	-508.3
9	43004	2090	1822	268.3
10	43164	1320	1830	-510.4
11	43354	1040	1841	-800.8
12	43528	2230	1850	379.7
13	43706	1640	1860	-220
14	43901	1910	1871	39.35
15	44089	1880	1881	-0.911
16	44263	2150	1890	259.6

Theil-Sen Trend Test Analysis

User Selected Options	
Date/Time of Computation	ProUCL 5.15/10/2022 4:49:55 PM
From File	WorkSheet_a.xls
Full Precision	OFF
Average Replicates	Replicates at sampling events will be averaged!
Confidence Coefficient	0.95
Level of Significance	0.05

Chloride-mw-lf-07

General Statistics	
Number of Events	17
Number of Values Reported (n)	17
Number of Values After Averaging	17
Number of Replicates	0
Minimum	4.55
Maximum	11
Mean	9.331
Geometric Mean	9.197
Median	9.59
Standard Deviation	1.375
Coefficient of Variation	0.147

Mann-Kendall Statistics	
M-K Test Value (S)	16
Tabulated p-value	0.271
Standard Deviation of S	24.28
Standardized Value of S	0.618
Approximate p-value	0.268

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	136
Theil-Sen Slope	1.85E-04
Theil-Sen Intercept	1.631
M1	44.21
M2	91.79
95% LCL of Slope (0.025)	**-4.79E-04**
95% UCL of Slope (0.975)	**9.33E-04**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	9.11	9.497	-0.387
2	42564	9.3	9.508	-0.208
3	42634	9.9	9.521	0.379
4	42691	10.1	9.532	0.568
5	42754	10.06	9.543	0.517
6	42816	9.16	9.555	-0.395
7	42879	4.55	9.567	-5.017
8	42941	9.62	9.578	0.0419
9	43005	9.59	9.59	0
10	43354	8.9	9.655	-0.755
11	43529	9.14	9.687	-0.547
12	43706	8.78	9.72	-0.94
13	43901	10.2	9.756	0.444
14	44089	9.91	9.791	0.119
15	44263	11	9.823	1.177
16	44454	10.4	9.858	0.542
17	44635	8.91	9.892	-0.982

Chloride-mw-lf-08

General Statistics	
Number of Events	17
Number of Values Reported (n)	17
Number of Values After Averaging	17
Number of Replicates	0
Minimum	1
Maximum	16.7
Mean	5.502
Geometric Mean	4.927
Median	5.08
Standard Deviation	3.055
Coefficient of Variation	0.555

Mann-Kendall Statistics	
M-K Test Value (S)	43
Tabulated p-value	0.046
Standard Deviation of S	24.26
Standardized Value of S	1.732
Approximate p-value	0.0417

Approximate inference for Theil-Sen Trend Test

Number of Slopes	136
Theil-Sen Slope	1.65E-04
Theil-Sen Intercept	-2.006
M1	44.23
M2	91.77
95% LCL of Slope (0.025)	**-3.60E-05**
95% UCL of Slope (0.975)	**3.75E-04**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	5.07	4.997	0.0728
2	42564	1	5.007	-4.007
3	42634	5.05	5.019	0.0312
4	42691	16.7	5.028	11.67
5	42754	5.13	5.039	0.0914
6	42816	4.75	5.049	-0.299
7	42879	4.61	5.059	-0.449
8	42942	4.92	5.07	-0.15
9	43005	5.13	5.08	0.05
10	43164	5.19	5.106	0.0838
11	43354	4.88	5.138	-0.258
12	43706	5.2	5.196	0.00449
13	43901	4.96	5.228	-0.268
14	44089	5.09	5.259	-0.169
15	44263	5.08	5.287	-0.207
16	44454	5.21	5.319	-0.109
17	44635	5.57	5.349	0.221

Chloride-mw-lf-10

General Statistics

Number of Events	17
Number Values Observations	18
Number Values Missing	1
Number of Values Reported (n)	17
Number of Values After Averaging	17
Number of Replicates	0
Minimum	5.69
Maximum	13.3

Mean	7.587
Geometric Mean	7.331
Median	6.55
Standard Deviation	2.25
Coefficient of Variation	0.297

Mann-Kendall Statistics	
M-K Test Value (S)	36
Tabulated p-value	0.076
Standard Deviation of S	24.28
Standardized Value of S	1.442
Approximate p-value	0.0747

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	136
Theil-Sen Slope	0.00123
Theil-Sen Intercept	-46.41
M1	44.21
M2	91.79
95% LCL of Slope (0.025)	**-2.30E-04**
95% UCL of Slope (0.975)	**0.00249**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	6.13	5.738	0.392
2	42634	6.19	5.899	0.291
3	42691	6.63	5.969	0.661
4	42754	6.29	6.046	0.244
5	42815	6.9	6.121	0.779
6	42878	6.2	6.198	0.00153
7	42942	6.07	6.277	-0.207
8	43005	6.01	6.355	-0.345
9	43164	9.57	6.55	3.02
10	43354	12.1	6.783	5.317
11	43528	6.55	6.997	-0.447
12	43706	5.69	7.215	-1.525
13	43901	5.94	7.454	-1.514
14	44088	7.95	7.684	0.266

15	44263	8.9	7.898	1.002
16	44454	8.56	8.132	0.428
17	44635	13.3	8.355	4.945

Chloride-mw-lf-10a

General Statistics	
Number of Events	8
Number of Values Reported (n)	8
Number of Values After Averaging	8
Number of Replicates	0
Minimum	3.83
Maximum	10.4
Mean	6.579
Geometric Mean	6.143
Median	6.05
Standard Deviation	2.592
Coefficient of Variation	0.394

Mann-Kendall Statistics	
M-K Test Value (S)	-2
Tabulated p-value	0.452
Standard Deviation of S	8.083
Standardized Value of S	-0.124
Approximate p-value	0.451

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	28
Theil-Sen Slope	-4.80E-04
Theil-Sen Intercept	27.14
M1	6.079
M2	21.92
95% LCL of Slope (0.025)	**-0.00924**
95% UCL of Slope (0.975)	**0.00832**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	43445	4.88	6.313	-1.433
2	43528	7.22	6.274	0.946

3	43706	3.83	6.188	-2.358
4	43901	10.4	6.095	4.305
5	44088	7.94	6.005	1.935
6	44263	9.68	5.921	3.759
7	44454	4.54	5.83	-1.29
8	44635	4.14	5.743	-1.603

Chloride-mw-lf-11

General Statistics	
Number of Events	20
Number Values Observations	20
Number Values Missing	2
Number of Values Reported (n)	18
Number of Values After Averaging	18
Number of Replicates	2
Minimum	4.52
Maximum	10.9
Mean	5.731
Geometric Mean	5.545
Median	4.925
Standard Deviation	1.702
Coefficient of Variation	0.297

Mann-Kendall Statistics	
M-K Test Value (S)	94
Tabulated p-value	0
Standard Deviation of S	26.38
Standardized Value of S	3.525
Approximate p-value	2.12E-04

Approximate inference for Theil-Sen Trend Test	
Number of Slopes	153
Theil-Sen Slope	0.00122
Theil-Sen Intercept	-47.75
M1'	54.8
One-sided 95% lower limit of Slope	5.24E-04
95% LCL of Slope (0.025)	**4.62E-04**
95% UCL of Slope (0.975)	**0.002**

Statistically significant evidence of an increasing trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	4.67	4.213	0.457
2	42564	4.6	4.288	0.312
3	42634	4.74	4.374	0.366
4	42691	5.08	4.443	0.637
5	42753	5.02	4.519	0.501
6	42815	4.58	4.595	-0.0149
7	42878	4.52	4.672	-0.152
8	42942	4.8	4.75	0.0498
9	43005	4.71	4.828	-0.118
10	43164	4.83	5.022	-0.192
11	43354	4.83	5.255	-0.425
12	43528	6.94	5.467	1.473
13	43705	5.15	5.684	-0.534
14	43901	6.56	5.923	0.637
15	44089	5.47	6.153	-0.683
16	44263	10.9	6.366	4.534
19	44454	7.665	6.599	1.066
20	44635	8.095	6.821	1.274

Chloride-mw-lf-22

General Statistics	
Number of Events	16
Number of Values Reported (n)	16
Number of Values After Averaging	16
Number of Replicates	0
Minimum	8.34
Maximum	12
Mean	10.06
Geometric Mean	9.995
Median	10.05
Standard Deviation	1.181
Coefficient of Variation	0.117

Mann-Kendall Statistics	
M-K Test Value (S)	0
Tabulated p-value	0.518
Standard Deviation of S	22.21
Standardized Value of S	N/A

Approximate inference for Theil-Sen Trend Test

Number of Slopes	120
Theil-Sen Slope	5.52E-05
Theil-Sen Intercept	7.672
M1	38.23
M2	81.77
95% LCL of Slope (0.025)	**-0.00145**
95% UCL of Slope (0.975)	**0.00107**

Insufficient evidence to identify a significant trend at the specified level of significance.

Theil-Sen Trend Test Estimates and Residuals

#	Events	Values	Estimates	Residuals
1	42503	12	10.02	1.981
2	42564	9	10.02	-1.022
3	42634	10.31	10.03	0.284
4	42691	11.4	10.03	1.371
5	42754	8.34	10.03	-1.693
6	42815	9.42	10.04	-0.616
7	42879	10.39	10.04	0.35
8	42942	8.85	10.04	-1.193
9	43004	11.6	10.05	1.553
10	43164	9.41	10.06	-0.646
11	43354	8.41	10.07	-1.656
12	43528	11.9	10.08	1.824
13	43706	9.53	10.09	-0.555
14	43901	10.1	10.1	0.00375
15	44089	9.99	10.11	-0.117
16	44263	10.3	10.12	0.184

Appendix F
Second Semiannual Detection Monitoring Statistical Evaluation

DOMINION ENERGY SOUTH CAROLINA

WATEREE STATION CLASS III LANDFILL

SEMIANNUAL DETECTION MONITORING

RICHLAND COUNTY, SOUTH CAROLINA

CCR GROUNDWATER DETECTION MONITORING STATISTICAL ANALYSIS REPORT

For the

September 2022 Sampling Event

November 2022

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Statistical Analysis Report

Groundwater Sampling

TRC Environmental Corporation (TRC) is providing this Statistically Significant Increases (SSI) notification for the Wateree Station Class III Landfill for the eleventh semiannual detection monitoring event. Samples were collected on September 8th, 9th, and 12th, 2022. The final laboratory analytical data packages for the event were received on September 27th, 2022, and the data validation reports were received on September 30th, 2022. This report addresses results from Detection Monitoring wells MW-LF-07, MW-LF-08, MW-LF-10, MW-LF-10A, MW-LF-11, and MW-LF-22. Background wells for the Class III Landfill include MW-BG-73, MW-LF-01, AS-LF-01, AS-LF-02, AS-LF-03, and MW-LF-06.

Statistical Analysis

Statistically Significant Level (SSL) exceedances above background concentrations include the following:

- MW-LF-07: none.
- MW-LF-08: none.
- MW-LF-10: sulfate.
- MW-LF-10A: none.
- MW-LF-11: none.
- MW-LF-22: chloride.

As has been done since the initiation of detection monitoring at the Wateree Station, the evaluation of potential SSIs was conducted using prediction limits to compare data from the background set of monitoring wells to the most recent results from the downgradient monitoring wells. The statistical calculations to generate prediction limits were conducted using United States Environmental Protection Agency's (USEPA's) ProUCL (v.5.1) software. TRC is currently evaluating the existing monitoring well network and updates to the Site's Statistical Analysis Plan (StAP) will be forthcoming which will formally establish and describe the statistical methods being employed. The prediction limits used for the first monitoring event in 2021 were calculated to be used for four semiannual sampling events, of which this is the fourth. The prediction limits will be updated prior to the first semiannual event in 2023.

Appendix A presents the background data used for the prediction limit calculations. **Table 1** presents the BTVs calculated based on the background data. **Table 2** presents the data set for the eleventh detection monitoring event and highlights results that are potential SSIs. **Appendix B** includes ProUCL outputs for the trend test used to evaluate potential SSI for calcium because the initial background data set had a statistically significant upward trend. The background data set updated to the current sampling event

does not have a statistically significant trend for calcium, so the evaluation for potential SSIs was based on the UPL calculated for calcium during the first semiannual event in 2021.

DESC conducted a Well Network Evaluation in July 2022 to reevaluate the monitoring system for this CCR unit. The following recommendations were presented based on the Evaluation:

- Remove monitoring wells MW-LF-01, MW-LF-06, AS-LF-01, AS-LF-02, and MW-BG-73 from the background monitoring well network.
- Install two new background monitoring wells along the northwestern side of the landfill to replace wells MW-LF-01 and MW-BG-73 that appear to be screened in perched water.
- Add well AS-LF-02 to the downgradient monitoring well network.
- Install one new downgradient monitoring well between AS-LF-02 and MW-LF-07.
- Remove MW-LF-10 from the downgradient monitoring well network. This well was previously damaged and should be properly abandoned. MW-LF-10A has previously been installed to serve as the replacement well for MW-LF-10.

The new wells will be installed during December 2022. Meanwhile, an Alternative Source Demonstration (ASD) should be prepared for these potential SSIs.

Table 1
Background Threshold Values for 2021 and 2022

Table 1
Background Threshold Values for 2021 and 2022
Dominion Energy South Carolina
Wateree Station Class III Landfill

CONSTITUENT	NUMBER of RESULTS	PERCENT DETECTED	DISTRIBUTION	TREND	BACKGROUND THRESHOLD VALUE	BASIS
Boron (µg/L)	55	16	Nonparametric	N/A	140	95% USL
Calcium (µg/L)	54[1]	96	Nonparametric	Increasing	1.063[2]	95% UCL of slope
Chloride (mg/L)	55	100	Nonparametric	Decreasing	-7.03E-5[2]	95% UCL of slope
Fluoride (mg/L)	55	15	Nonparametric	N/A	0.1	95% USL
pH (s.u.)	55	100	Nonparametric	None	2.5 – 6.2	95% USL
Sulfate (mg/L	55	25	Nonparametric	N/A	7.89	95% USL
TDS (mg/L)	54[1]	100	Gamma	None	111	95% HW UPL (k = 28)

[1] Outlier excluded from data set.

[2] BTV for calcium and chloride are the UCL of the trend slope.

N/A Not Applicable – trend test not conducted for data sets with fewer than 50 percent detections.

Table 2
September 2022 Downgradient Results and Potential SSIs

Table 2
September 2022 Downgradient Results and Potential SSIs
Dominion Energy South Carolina
Wateree Station Class III Landfill

WELL	CONSTITUENT / BTV / RESULT (mg/L except as noted)[1]						
	BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
	140	6,670	9.14	0.1	2.5 - 6.2	7.89	111
BACKGROUND WELLS							
MW-BG-73	10.9 J	280	2.52	0.0330 U	4.13	0.398 J	2.38 U
MW-LF-01	11.5 J	125 J	6.69	0.0330 U	4.38	0.133 U	9.00 J
AS-LF-01	8.99 J	1,200	8.91	0.0330 U	4.54	0.891	17.0
AS-LF-02	8.97 J	1,220	2.82	0.0330 U	4.94	3.25	7.00 J
AS-LF-03	9.14 J	658	5.48	0.0330 U	3.93	0.587	10.0
MW-LF-06	7.41 J	925	6.46	0.0330 U	4.79	0.59	11.0
DOWNGRADIENT WELLS							
MW-LF-07	8.83 J	1,010	7.79	0.0448 J	3.97	1.41	3.00 J
MW-LF-08	9.02 J	850	5.07	0.0330 U	4.37	0.563	7.00 J
MW-LF-10	11.3 J	2,890	7.01	0.0330 U	4.10	9.79	33.0
MW-LF-10A	8.61 J	332	4.17	0.0330 U	4.26	0.791	10.0
MW-LF-11	9.57 J	379	5.75	0.0330 U	4.14	0.499	11.0
MW-LF-22	15.1	2,060	9.99	0.0707 J	4.15	1.06	21.0

Shaded cells indicate an SSI.

[1] Boron and calcium concentration expressed in µg/L; pH expressed in standard units (s.u.).

U The analyte was not detected above the level of the sample reporting limit.

J Estimated concentration.

Appendix A
Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events

Appendix A

Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events

Dominion Energy South Carolina

Wateree Station Class III Landfill

EVENT	WELL	CONSTITUENT/RESULT (mg/L except as noted) [1]						
		BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
DM-2	MW-BG-73	44.2 U	266	2.14	0.025 U	4.82	0.129 U	25
DM-3	MW-BG-73	21.9 U	161	2.16	0.025 U	4.84	0.129 U	22
DM-4	MW-BG-73	21.9 U	338	2.54	0.008 U	4.41	0.129 U	20
DM-5	MW-BG-73	38.458 U	343	2.62	0.008 U	3.69	0.063 U	18
DM-6	MW-BG-73	38.458 U	335	2.39	0.008 U	4.51	0.063 U	10
DM-7	MW-BG-73	38.458 U	245	2.25	0.008 U	4.98	0.063 U	51
BL-1	MW-LF-01	55.7 U	93.7	5.33	0.033 U	3.64	0.129 U	19
BL-2	MW-LF-01	55.7 U	74	5.3	0.033 U	4.25	0.129 U	24
BL-3	MW-LF-01	55.7 U	79.4	5.83	0.044	3.56	0.129 U	35
BL-4	MW-LF-01	55.7 U	116	5.99	0.033 U	4.85	0.129 U	33
BL-5	MW-LF-01	44.2 U	90.8	6.05	0.033 U	4.74	0.129 U	22
BL-6	MW-LF-01	44.2 U	48.1	5.3	0.033 U	4.02	0.129 U	40
BL-7	MW-LF-01	44.2 U	60.2	5.16	0.041	4.37	0.129 U	34
BL-8	MW-LF-01	44.2 U	1,440	5.09	0.038	4.53	0.87	32
DM-1	MW-LF-01	63.7	52.8	5.85	0.033 U	4.53	0.129 U	33
DM-2	MW-LF-01	44.2 U	54.4 U	5.71	< 0.025	4.6	0.129 U	35
DM-3	MW-LF-01	21.9 U	59 U	5.49	0.025 U	2.48	0.129 U	65
DM-4	MW-LF-01	60.2	87.9	5.96	0.008 U	5.47	0.129 U	54
DM-5	MW-LF-01	38.458 U	74.1 [4]	5.85	0.008 U	4.44	0.063 U	33
DM-6	MW-LF-01	38.458 U	102	6.47	0.008 U	4.41	0.063 U	29
DM-7	MW-LF-01	75.9	372	6.31	0.008 U	4.38	0.063 U	56
BL-4	MW-LF-06	55.7 U	714	6.81	0.033 U	5.08	0.129 U	38
BL-5	MW-LF-06	44.2 U	739	6.9	0.033 U	4.8	0.129 U	28

[1] Boron and calcium concentrations expressed in µg/L; pH expressed in standard units (s.u.).

[2] Outlier with no verification resample – removed from data set.

[3] Missing data replaced by verification resample result (value shown on table).

[4] ND value replaced by verification resampling detection.

U The analyte was not detected above the level of the sample reporting limit.

Appendix A (Continued)
Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events
Dominion Energy South Carolina
Wateree Station Class III Landfill

EVENT	WELL	CONSTITUENT/RESULT (mg/L except as noted) [1]						
		BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
BL-6	MW-LF-06	44.2 U	997	6.31	0.033 U	4.27	0.129 U	39
BL-7	MW-LF-06	44.2 U	786	6.07	0.034	4.33	0.129 U	39
BL-8	MW-LF-06	44.2 U	2,100	6.67	0.039	4.58	0.129 U	36
DM-1	MW-LF-06	44.2 U	770	6.98	0.033 U	4.73	0.129 U	36
DM-2	MW-LF-06	44.2 U	777	6.18	0.025 U	4.71	0.129 U	35
DM-4	MW-LF-06	21.9 U	592	6.31	0.008 U	4.9	0.129 U	27
DM-6	MW-LF-06	38.458 U	866	6.3	0.008 U	4.54	0.063 U	31
DM-7	MW-LF-06	140	746	6.23	0.008 U	4.72	0.063 U	75
BL-8	AS-LF-01	44.2 U	898	7.2	0.04	4.47	1.79	18
DM-1	AS-LF-01	44.2 U	554	7.07 [3]	0.1 U	4.65	1.4 [3]	37 [3]
DM-2	AS-LF-01	44.2 U	539	8.07	0.025 U	4.58	1.22	43
DM-3	AS-LF-01	21.9 U	535	8.45	0.025 U	3.71	0.129 U	45
DM-4	AS-LF-01	38.458 U	926	8.7	0.008 U	4.58	0.129 U	373 [2]
DM-5	AS-LF-01	38.458 U	858	8.94	0.008 U	4.46	0.7	48
DM-6	AS-LF-01	38.458 U	1,330	9.14	0.008 U	4.58	0.58	38
DM-7	AS-LF-01	38.458 U	804	8.29	0.008 U	4.25	0.063 U	42
BL-8	AS-LF-02	44.2 U	1,660	2.67	0.045	5.74	7.89	39
DM-1	AS-LF-02	44.2 U	921	2.7 [3]	0.1 U [3]	5.16	2.9 [3]	28 [3]
DM-2	AS-LF-02	44.2 U	24,800 [2]	2.82	0.025 U	6.2	4.6	102
DM-3	AS-LF-02	21.9	1,180	2.73	0.025 U	5.12	2.29	43
DM-4	AS-LF-02	38.458 U	6,300	2.73	0.008 U	5.67	3.61	62
DM-5	AS-LF-02	38.7	738	2.78	0.008 U	4.94	2.17	47
DM-6	AS-LF-02	38.458 U	6,670	2.82	0.008 U	5.78	2.94	91

[1] Boron and calcium concentrations expressed in µg/L; pH expressed in standard units (s.u.).

[2] Outlier with no verification resample – removed from data set.

[3] Missing data replaced by verification resample result (value shown on table).

[4] ND value replaced by verification resampling detection.

U The analyte was not detected above the level of the sample reporting limit.

Appendix A (Continued)

Background Data Set for 2021 and 2022 Semiannual Detection Monitoring Events

Dominion Energy South Carolina

Wateree Station Class III Landfill

EVENT	WELL	CONSTITUENT/RESULT (mg/L except as noted) [1]						
		BORON	CALCIUM	CHLORIDE	FLUORIDE	pH	SULFATE	TDS
DM-7	AS-LF-02	77.3	769	2.78	0.008 U	5.01	2.09	47
BL-8	AS-LF-03	44.2 U	777	5.44	0.041	4.68	0.129 U	22
DM-1	AS-LF-03	44.2 U	557	5.49 [3]	0.1 U [3]	4.47	0.129 U [3]	24 [3]
DM-2	AS-LF-03	44.2 U	520	5.73	0.025 U	4.5	0.129 U	32
DM-3	AS-LF-03	21.9 U	562	5.95	0.025 U	3.75	0.129 U	54
DM-4	AS-LF-03	25.7	519	6.08	0.008 U	4.13	0.129 U	39
DM-5	AS-LF-03	38.458 U	575	5.64	0.008 U	4.35	0.063 U	38
DM-6	AS-LF-03	38.458 U	689	5.77	0.008 U	4.27	0.063 U	19
DM-7	AS-LF-03	47.9	665	5.4	0.008 U	4.32	0.063 U	57

[1] Boron and calcium concentrations expressed in µg/L; pH expressed in standard units (s.u.).

[2] Outlier with no verification resample – removed from data set.

[3] Missing data replaced by verification resample result (value shown on table).

[4] ND value replaced by verification resampling detection.

U The analyte was not detected above the level of the sample reporting limit.

Appendix B
Trend Test Outputs

1				**Theil-Sen Trend Test Analysis**				
2			User Selected Options					
3			Date/Time of Computation	ProUCL 5.2 11/3/2022 4:43:44 PM				
4			From File	WorkSheet.xls				
5			Full Precision	OFF				
6			Average Replicates	Replicates at sampling events will be averaged!				
7			Confidence Coefficient	0.95				
8			Level of Significance	0.05				
9								
10			**Calcium OL Rem**					
11								
12			**General Statistics**					
13			Number of Events	11				
14			Number of Values Reported (n)	11				
15			Number of Values After Averaging	11				
16			Number of Replicates	0				
17			Minimum	431.3				
18			Maximum	1665				
19			Mean	943.2				
20			Geometric Mean	838.1				
21			Median	734.7				
22			Standard Deviation	473.4				
23			Coefficient of Variation	0.502				
24								
25			**Mann-Kendall Statistics**					
26			M-K Test Value (S)	13				
27			Tabulated p-value	0.179				
28			Standard Deviation of S	12.85				
29			Standardized Value of S	0.934				
30			Approximate p-value	0.175				
31								
32			**Approximate inference for Theil-Sen Trend Test**					
33			Number of Slopes	55				
34			Theil-Sen Slope	0.145				
35			Theil-Sen Intercept	-5614				
36			M1	14.91				
37			M2	40.09				
38			95% LCL of Slope (0.025)	-0.575				
39			95% UCL of Slope (0.975)	0.469				
40								
41	**Insufficient evidence to identify a significant**							
42	**trend at the specified level of significance.**							
43								
44			**Theil-Sen Trend Test Estimates and Residuals**					
45		#	Events	Values	Estimates	Residuals		
46		1	42941	1375	623.6	751.4		
47		2	43005	571	633	-62.03		

	A	B	C	D	E	F	G	H
48	3	43165	431.3	656.2	-224.9			
49	4	43353	499.4	683.5	-184.1			
50	5	43529	1460	709.1	751.4			
51	6	43705	519.6	734.7	-215.1			
52	7	43901	1665	763.1	902.2			
53	8	44089	600.2	790.4	-190.3			
54	9	44265	1512	816	695.9			
55	10	44454	1007	843.4	163.1			
56	11	44813	734.7	895.7	-161			