



SKB Environmental Cloquet Landfill, Inc.

2025 Coal Combustion Residuals Annual Monitoring Report

SKB Environmental Cloquet Landfill
761 Minnesota State Highway 45
Cloquet, Minnesota
Permit SW-399-001

January 29, 2026



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Date: 01/30/2026 License Number: 25086



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Acronyms

BTV	Background Threshold Values
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
COC	Chemicals of Concern
Eurofins TA	Eurofins TestAmerica, Inc.
GES	Groundwater & Environmental Services, Inc.
GPS	Groundwater Protection Standard
MCL	Maximum Contaminant Level
MPCA	Minnesota Pollution Control Agency
NGVD	National Geodetic Vertical Datum
ORP	Oxidation-Reduction Potential
QA/QC	Quality Assurance/Quality Control
Report	Coal Combustion Residuals Annual Monitoring Report
SKB Cloquet Landfill	SKB Environmental Cloquet Landfill
SSI	Statistically Significant Increase
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
USL	Upper Simultaneous Limit

1 Introduction

The *Coal Combustion Residuals Annual Monitoring Report* (Report) was prepared by Groundwater and Environmental Services, Inc. (GES) to summarize the results of the 2025 groundwater monitoring events and associated analysis for Appendix III, per 40 Code of Federal Regulations (CFR) §§ 257.90 – 257.98, at the SKB Environmental Cloquet Landfill (SKB Cloquet Landfill). The SKB Cloquet Landfill initiated operations under Minnesota Pollution Control Agency (MPCA) Site Permit Number SW-399-001 in 2011. The SKB Cloquet Landfill is in Cloquet, Carlton County, Minnesota (facility) (**Figure 1**).

Two groundwater monitoring events were conducted at the SKB Cloquet Landfill in the spring and fall of 2025. Analytical results from the groundwater monitoring events are compared and evaluated to Background Threshold Values (BTVs) established for the SKB Cloquet Landfill.

1.1 Scope of Work

The following scope of work was conducted for the 2025 Coal Combustion Residuals (CCR) groundwater monitoring events.

- Conduct two gauging and sampling events at the site's seven monitoring wells.
- Measure static water elevations for each monitoring well to the nearest 0.01 feet from surveyed reference point.
- Record the volume of water removed from each monitoring well (in gallons) and total well volumes removed before sampling.
- Record field parameter stabilization results from each monitoring well.
- Conduct a statistical evaluation of groundwater sampling analytical data using ProUCL 5.0.00 (Singh, 2013) to determine BTVs for each analyte.
- Select tolerance or prediction interval procedure for future statistical analysis of groundwater monitoring data.
- Prepare a *CCR Annual Monitoring Report* summarizing the groundwater sampling and statistical evaluation.

2 Site Background

2.1 Site Location and Description

The facility is located on a 59-acre parcel of land in Section 25, Township 49 North, Range 17 West, city of Cloquet, Carlton County, Minnesota. With reference to roadways, the facility is located south of Interstate 35 and west of Minnesota State Highway 45. The facility entrance is off Minnesota State Highway 45. The site location is depicted on **Figure 1** and **Figure 2** presents a Site Map.

The nearest body of water is the St. Louis River, which is approximately 0.25 miles east of the facility. The facility's current maximum elevation is approximately 1,234 feet above the National Geodetic Vertical Datum of 1929 (NGVD 29) on top of the existing legacy demolition landfill. The

lowest elevation is the old sand pit floor (Ulland Brothers sand pit) in the southwest corner of the property, which is approximately 1,143 feet (NGVD 29). Stormwater flows either to depressions around the site or to a temporary stormwater basin on the east side of Phase 1. The site is sandy, and stormwater is allowed to infiltrate the ground at each of the stormwater ponding locations.

3 Monitoring Network Systems and Sampling Schedule

The CCR sampling groundwater monitoring network at SKB Cloquet Landfill was designed based on the local and regional hydrologic conditions. Currently the groundwater monitoring network system consists of seven monitoring wells (**Figure 2**). The monitoring wells used as data collection points have been divided into two groups for the purpose of this report:

- Upgradient Monitoring Point: The upgradient monitoring point consists of monitoring well P-1.
- Downgradient Monitoring Points: The downgradient monitoring points consist of monitoring wells downgradient of the compliance boundary. The downgradient monitoring wells are P-2, P-5R, P-6, P-7, P-8, and P-9.

For the CCR evaluation, a total of two groundwater monitoring events were conducted in 2025 on the following dates:

- April 15 and 16, 2025
- October 13 and 14, 2025

4 Groundwater Sampling Methodology

During the SKB Cloquet Landfill CCR sampling events, static groundwater elevations were measured to the nearest 0.01 feet in each monitoring well with a water interface probe prior to groundwater sample collection. Using a location dedicated, pneumatic low-flow bladder pump, each well was purged, and field stabilization parameters including Temperature, pH, Specific Conductance, Turbidity, Dissolved Oxygen, and Oxidation-Reduction Potential (ORP) were recorded.

Groundwater samples were placed in laboratory-prepared containers and labeled with the following information:

- Unique sample number
- Site name
- Name of sampler
- Time and date

Immediately following collection, samples were placed on ice in a field cooler and shipped with a chain of custody form to a Eurofins TestAmerica, Inc. (Eurofins TA) of Amherst, New York.

Groundwater samples obtained during the two sampling events in 2025 were analyzed for parameters specified in Appendix III per 40 CFR §§ 257.93 – 257.94 and are noted below:

Appendix III

General Chemistry

- Chloride (Method 9056A)
- Fluoride (Method 9056A)
- Sulfate as SO₄ (Method 9056A)
- pH (Method 4500 H+ B)
- Total Dissolved Solids (TDS) (Method 2540C)

Metals (Total)

- Boron (Method 6020B)
- Calcium (Method 6020B)

Quality assurance/quality control (QA/QC) samples including duplicate, field, and equipment samples were collected during each sampling event.

5 Groundwater Monitoring Results

5.1 Groundwater Elevation Data

Groundwater elevations recorded during the monitoring events are presented in **Table 1**. Groundwater contours maps were generated for the April 15 and October 13, 2025 gauging events. Groundwater flow direction is to the southeast (**Figures 3 and 4**).

5.2 Groundwater Analytical Data

Groundwater analytical results for the CCR monitoring events are presented in **Table 2**. QA/QC duplicate samples were collected for precision evaluation but were not included in **Table 2**. A summary of the stabilization parameter tests performed for each well prior to sampling are provided in **Table 3** and copies of field sampling data sheets are in **Appendix A**. Laboratory analytical reports are included in **Appendix B**.

Calculated BTVs for the SKB Cloquet Landfill are provided in **Table 4**. Comparing the 2025 spring and fall sampling groundwater analytical results to the BTVs (**Table 2**) is summarized below.

Appendix III Analytes - Result Summary of BTV Exceedances

- *No Appendix III Analyte exceedances were reported in 2025.*
- Due to insufficient water volume, groundwater samples were not collected at monitoring well P-2 during the spring and fall 2025 sampling events.
- QA/QC samples including duplicate, field, and equipment samples were collected during each sampling event.

6 Statistical Evaluation of Data

This groundwater statistical evaluation for landfill monitoring is conducted in accordance with 40 CFR § 257.93(f)(3). Specifically, current concentrations were compared to the interwell upper simultaneous limits (USLs) to determine if a potential statistically significant increase (SSI) exists at downgradient wells.

The background dataset was determined for each well using analytical results ranging from spring 2017 through 2023.

Statistical evaluation of the CCR groundwater monitoring data determined background concentrations and included:

- 1) Establishing final background datasets for each chemical of concern (COC) including outlier testing.
- 2) Deriving statistical, upper bound estimates of the background population for each COC using the final background datasets.

To establish final background datasets for each COC, descriptive statistics, outlier analysis and removal, and comparative statistical analysis performed on the background datasets confirmed the data in the background dataset for a given COC as representative of the 'true' background population. Descriptive statistics include the number of samples, the number of detections, the detection frequency, the maximum and minimum detected concentrations, the mean, and the standard deviation of the background data, all of which provide a preliminary examination of data.

Outlier analyses identified potential outliers not representative of the true background population. Including real outliers in a dataset can potentially lead to Type I or Type II errors (USEPA, 2009). Rosner's Outlier Test was performed on background datasets containing four (4) detected values or more (USEPA, 2009). Based on an alpha of 0.05, statistically significant outliers were removed from the background dataset to improve the power of the prediction limit (USEPA, 2009). The resulting background dataset for each well and COC is tabulated in **Attachment C**.

For the final background datasets after outlier analyses, summary statistics were calculated including the number of samples, number of detections, detection frequency, maximum and minimum detected concentrations, mean concentration, and the standard deviation. The final datasets calculations of the underlying distributions employing Shapiro-Wilks (e.g., normal, lognormal, gamma) using ProUCL 5.0.00 (Singh, 2013) before statistical limits were estimated allowed determination of the appropriate estimates that best describe the background datasets.

The following statistical limits for potential use as a background level BTVs were calculated using ProUCL 5.0.00 (Singh, 2013) for each COC when five or more detections were present:

- 95% USL

The 95% USL was selected as the proposed BTVs as:

- 1) Many of the background datasets contain limited sample sizes and, therefore, are unlikely to represent the full range of natural ambient concentrations in the vicinity of the site.
- 2) This statistic should result in lower Type I error rates (i.e., false positives) and can be used to compare many observations.

If there were no detected results, the highest detection limit was proposed as the BTV. The calculated BTVs are included in **Table 4**. The statistical evaluation data is included in **Appendix C**.

6.1 SSI Determination

The detected concentrations for the 2025 sampling events with the respective BTV are listed in **Section 5.2**. Compliance is determined by comparing the current concentration to the calculated BTV. No BTV exceedances were reported in 2025.

7 Groundwater Protection Standards

Per 40 CFR § 257.95(d)(2), Groundwater Protection Standards (GPS) were established for each Appendix III constituent detected in groundwater. GPS were established using United States Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs) for detected Appendix III constituents. For constituents for which the background level is higher than the MCL, the background value will be the GPS. GPS levels are provided in **Table 5**.

Groundwater was statistically evaluated as noted in **Section 6** to form a background data set. Interwell USLs were developed for Boron, Calcium, Chloride, Fluoride, Sulfate as SO₄, and Total Dissolved Solids in site monitoring wells (P-1, P-2, P-6, P-7, P-5R, P-8, and P-9) and were utilized as background well concentrations. Note available data between 2017 and 2023 for P-3, P-5, and P-6 (wells now sealed) was also used in the assessment. Upper and lower threshold values were developed for pH using box plot statistics (**Appendix C**).

For the sampling events conducted in 2025, no concentrations were reported above the BTVs for any wells.

8 Report Summary

Per the 40 CFR §§ 40.257.93 – 257.94, two monitoring events were conducted at the SKB Cloquet Landfill in 2025. Groundwater samples were analyzed for parameters indicated in Appendix III per 40 CFR § 257.94. Groundwater samples were collected from the monitoring network's seven monitoring wells during the two monitoring events. Monitoring well P-2 had an insufficient volume of water; therefore, was not sampled in 2025. Groundwater elevation information from the monitoring data indicates a southeast groundwater flow beneath the landfill.

No concentrations were detected above the calculated BTVs at any wells during the April or October 2025 sampling events.

9 Recommendations

CCR groundwater monitoring events will be conducted in the spring and fall of 2026. Groundwater samples will be analyzed for detection monitoring parameters specified in Appendix III per 40 CFR § 257.94. An evaluation of groundwater analytical results after each monitoring event will be completed to determine if a significant increase over BTVs (**Table 4**) for one or more parameters listed in Appendix III has occurred at any monitoring well. The evaluation will be performed using a tolerance or prediction interval procedure (40 CFR §§ 257.93(f)(3)). The level of each constituent in the monitoring well will be compared to an established BTV. Any single constituent that exceeds the BTV is an exceedance. Confirmation sampling will determine whether the BTV exceedance is statistically significant.

A 2026 *CCR Annual Monitoring Report* will be prepared and include sampling results from the 2026 CCR groundwater monitoring events and an evaluation of the analytical results as they pertained to BTVs.

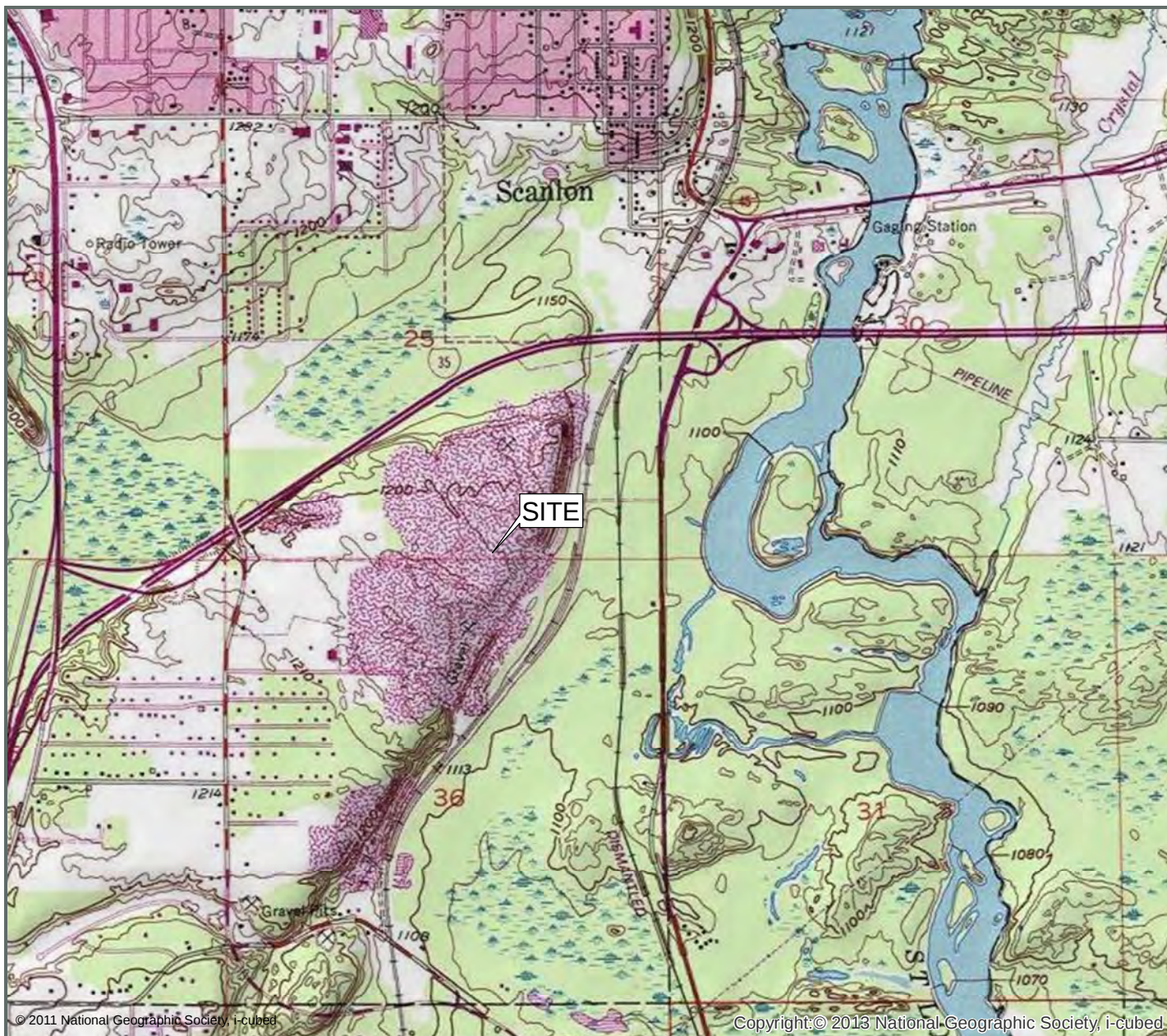
References

Singh and Singh, 2013. *ProUCL Version 5.0.00 Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations*, United States Environmental Protection Agency

United States Environmental Protection Agency, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery Program Implementation and Information Division, EPA 530/R-09-007, March 2009.



Figures



Sources:
USGS 7.5 Minute Series
Topographic Quadrangle, 1993
Cloquet, Minnesota
Contour Interval = 10'



Site Location Map

**SKB Environmental
Cloquet Landfill
761 Minnesota State Highway 45
Cloquet, Minnesota**

Drawn
R.S.
Designed
N.S.
Approved
N.S.

Date
05/30/25
Figure
1

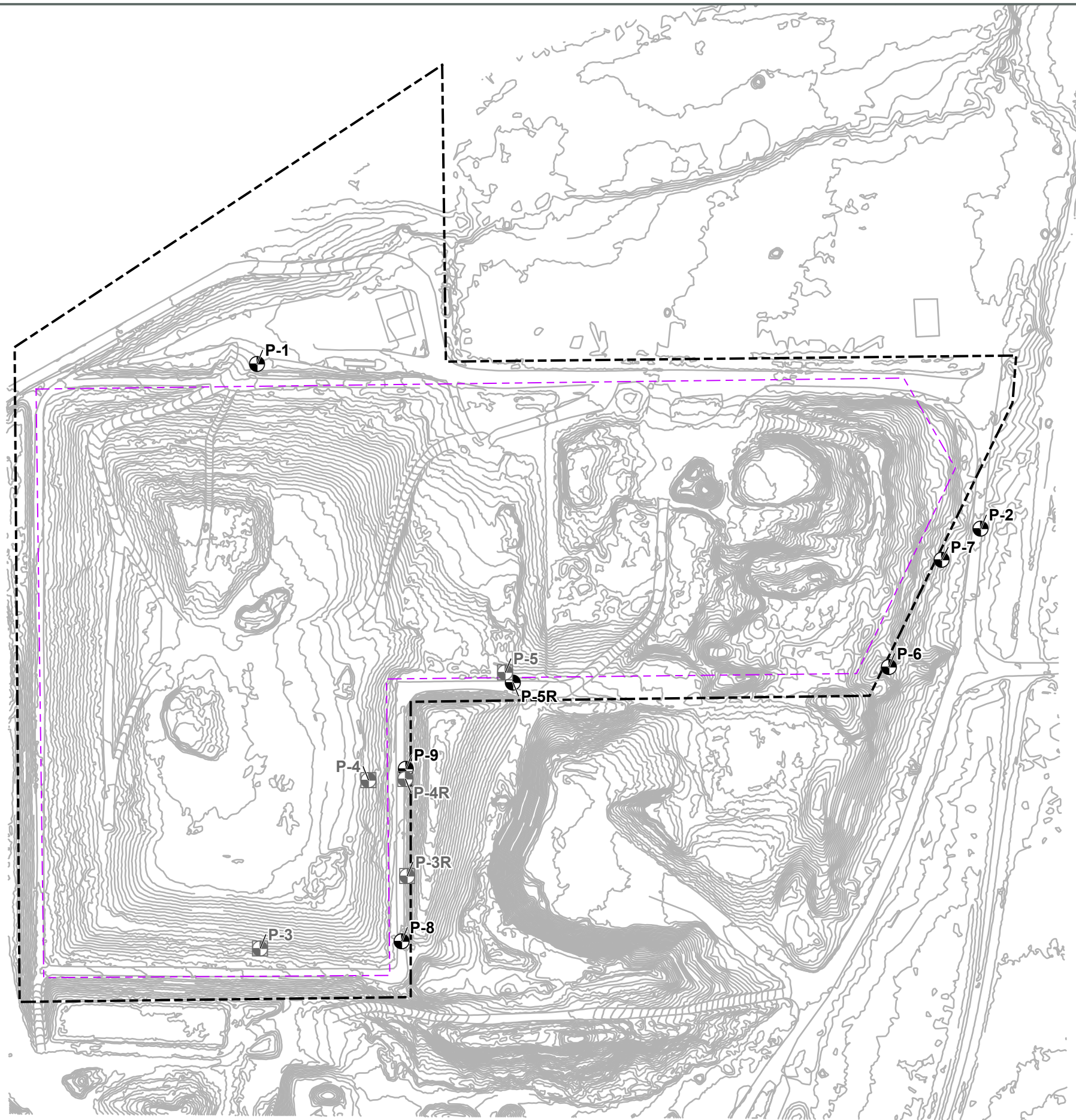


Scale In Feet (Approximate)

0 1,600

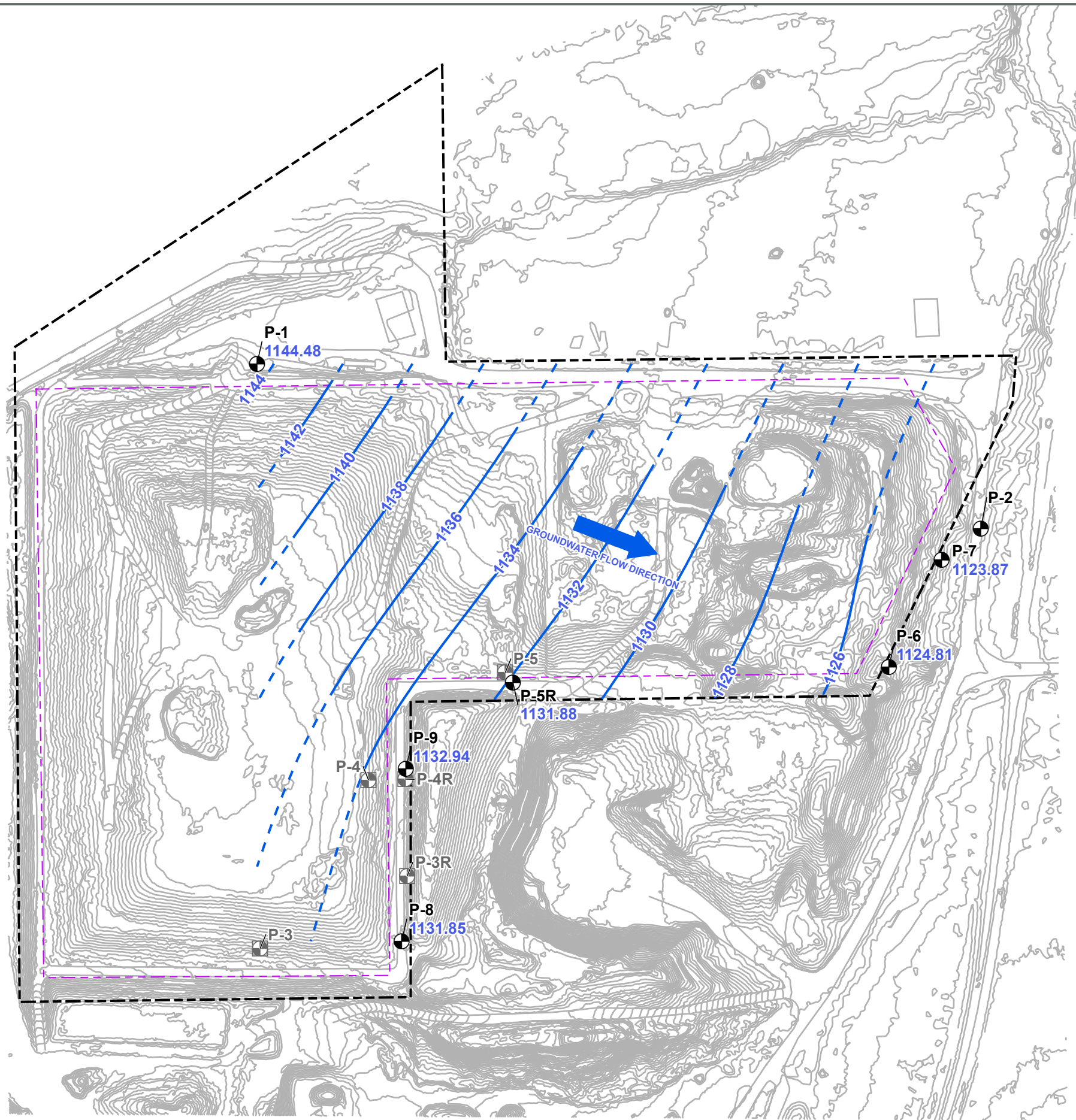


Groundwater & Environmental Services, Inc.



- Legend**
- PROPOSED WASTE LIMITS
 - PROPERTY BOUNDARY
 - MONITORING WELL
 - SEALED MONITORING WELL

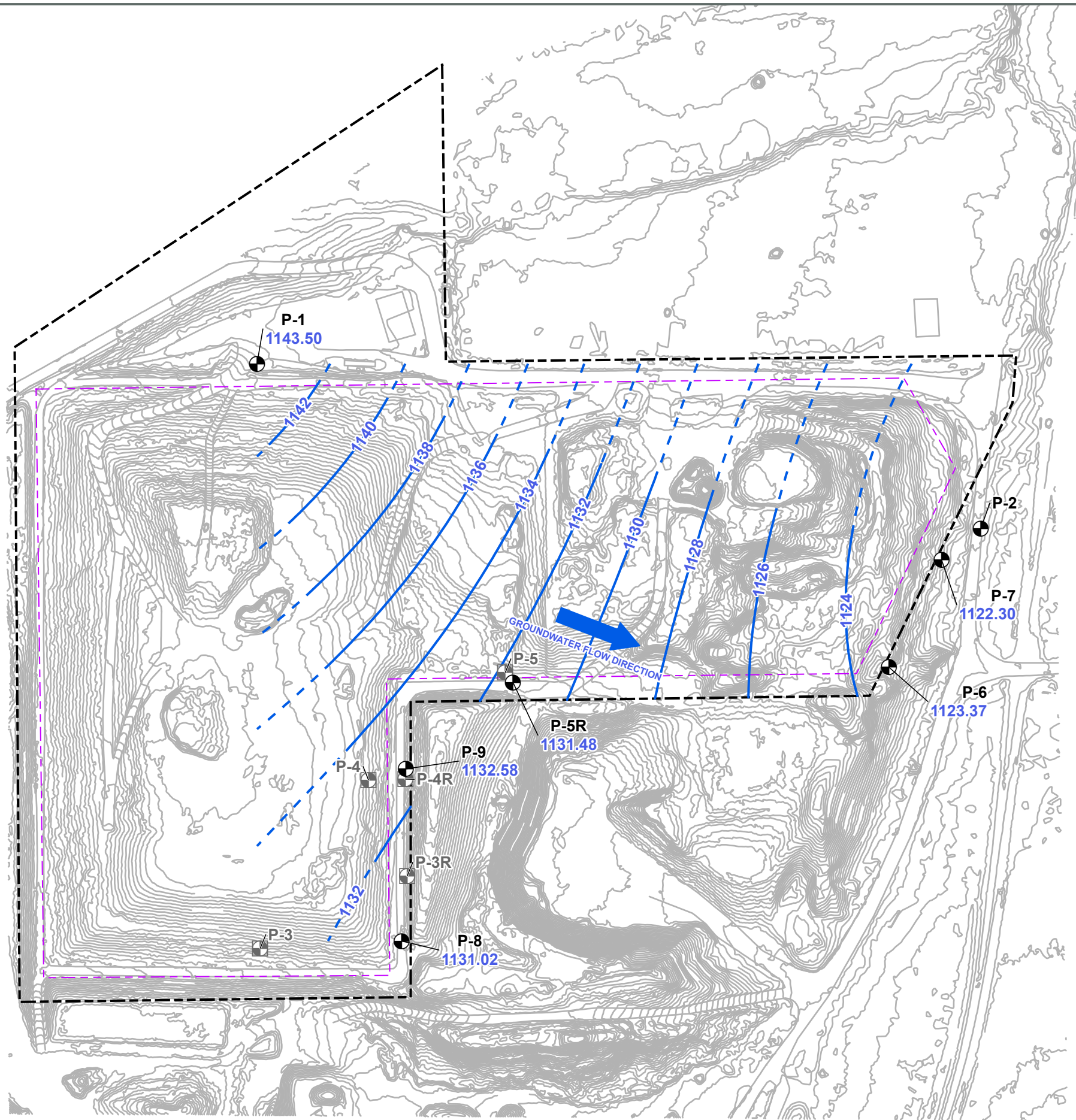
Site Map		
SKB Environmental Cloquet Landfill 761 Minnesota State Highway 45 Cloquet, Minnesota		
Drawn R.S. Designed N.S. Approved N.S.	 Scale In Feet (Approximate)   Groundwater & Environmental Services, Inc.	Date 1/29/26 Figure 2



Legend

- MONITORING WELL
- SEALED MONITORING WELL
- GROUNDWATER ELEVATION ISOCONTOUR (ft MSL)
- - - INFERRED GROUNDWATER ELEVATION ISOCONTOUR (ft MSL)
- - - PROPERTY BOUNDARY
- - - PROPOSED WASTE LIMITS
- 1125.78 MEASURED GROUNDWATER ELEVATION (ft MSL)

Groundwater Elevation Map April 15, 2025	
SKB Environmental Cloquet Landfill 761 Minnesota State Highway 45 Cloquet, Minnesota	
Drawn R.S. Designed N.S. Approved N.S.	Date 1/29/26 Figure 3
 Scale In Feet (Approximate) 0 80  Groundwater & Environmental Services, Inc.	



Legend

-  MONITORING WELL
-  SEALED MONITORING WELL
-  GROUNDWATER ELEVATION ISOCONTOUR (ft MSL)
-  INFERRED GROUNDWATER ELEVATION ISOCONTOUR (ft MSL)
-  PROPERTY BOUNDARY
-  PROPOSED WASTE LIMITS
-  1125.78 MEASURED GROUNDWATER ELEVATION (ft MSL)

Groundwater Elevation Map
October 13, 2025

SKB Environmental
Cloquet Landfill
761 Minnesota State Highway 45
Cloquet, Minnesota

Drawn
R.S.
Designed
N.S.
Approved
N.S.



Date
1/29/26
Figure
4

Scale In Feet (Approximate)





Tables

Table 1
Groundwater Elevations



Date	P-1	P-2	P-5R	P-6	P-7	P-8	P-9
04/15/2025	1144.48	DRY	1131.88	1124.81	1123.87	1131.85	1132.94
10/13/2025	1143.5	DRY	1131.48	1123.37	1122.3	1131.02	1132.58

*Groundwater elevations reported in feet above Mean Sea Level.

Table 2
Groundwater Analytical Data
Appendix III



Location	Date	Parameter	Result	Background Threshold Value (BTV)	Units	CAS #
P-1	04/15/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-1	10/13/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-5R	04/16/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-5R	10/13/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-6	04/16/2025	Boron	0.263	0.41	mg/l	7440-42-8
P-6	10/14/2025	Boron	0.243	0.41	mg/l	7440-42-8
P-7	04/16/2025	Boron	0.100	0.41	mg/l	7440-42-8
P-7	10/14/2025	Boron	0.130	0.41	mg/l	7440-42-8
P-8	04/15/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-8	10/13/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-9	04/15/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-9	10/13/2025	Boron	< 0.100	0.41	mg/l	7440-42-8
P-1	04/15/2025	Calcium	167	248.6	mg/l	7440-70-2
P-1	10/13/2025	Calcium	143	248.6	mg/l	7440-70-2
P-5R	04/16/2025	Calcium	140	248.6	mg/l	7440-70-2
P-5R	10/13/2025	Calcium	139	248.6	mg/l	7440-70-2
P-6	04/16/2025	Calcium	201	248.6	mg/l	7440-70-2
P-6	10/14/2025	Calcium	198	248.6	mg/l	7440-70-2
P-7	04/16/2025	Calcium	117	248.6	mg/l	7440-70-2
P-7	10/14/2025	Calcium	165	248.6	mg/l	7440-70-2
P-8	04/15/2025	Calcium	107	248.6	mg/l	7440-70-2
P-8	10/13/2025	Calcium	106	248.6	mg/l	7440-70-2
P-9	04/15/2025	Calcium	93.9	248.6	mg/l	7440-70-2
P-9	10/13/2025	Calcium	106	248.6	mg/l	7440-70-2
P-1	04/15/2025	Chloride	270	440.2	mg/l	16887-00-6
P-1	10/13/2025	Chloride	191	440.2	mg/l	16887-00-6
P-5R	04/16/2025	Chloride	232	440.2	mg/l	16887-00-6
P-5R	10/13/2025	Chloride	243	440.2	mg/l	16887-00-6
P-6	04/16/2025	Chloride	65.0	440.2	mg/l	16887-00-6
P-6	10/14/2025	Chloride	58.6	440.2	mg/l	16887-00-6
P-7	04/16/2025	Chloride	77.3	440.2	mg/l	16887-00-6
P-7	10/14/2025	Chloride	89.1	440.2	mg/l	16887-00-6
P-8	04/15/2025	Chloride	103	440.2	mg/l	16887-00-6
P-8	10/13/2025	Chloride	96.1	440.2	mg/l	16887-00-6
P-9	04/15/2025	Chloride	137	440.2	mg/l	16887-00-6
P-9	10/13/2025	Chloride	151	440.2	mg/l	16887-00-6
P-1	04/15/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-1	10/13/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-5R	04/16/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-5R	10/13/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-6	04/16/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-6	10/14/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-7	04/16/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-7	10/14/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-8	04/15/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-8	10/13/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-9	04/15/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-9	10/13/2025	Fluoride	< 1.00	1.00	mg/l	16984-48-8
P-1	04/15/2025	pH	6.7	6.5 < 8.1	pH UNITS	PH
P-1	10/13/2025	pH	6.7	6.5 < 8.1	pH UNITS	PH
P-5R	04/16/2025	pH	6.8	6.5 < 8.1	pH UNITS	PH
P-5R	10/13/2025	pH	6.9	6.5 < 8.1	pH UNITS	PH
P-6	04/16/2025	pH	6.8	6.5 < 8.1	pH UNITS	PH
P-6	10/14/2025	pH	6.9	6.5 < 8.1	pH UNITS	PH
P-7	04/16/2025	pH	7.0	6.5 < 8.1	pH UNITS	PH
P-7	10/14/2025	pH	6.9	6.5 < 8.1	pH UNITS	PH
P-8	04/15/2025	pH	7.9	6.5 < 8.1	pH UNITS	PH
P-8	10/13/2025	pH	8.0	6.5 < 8.1	pH UNITS	PH

Table 2
Groundwater Analytical Data
Appendix III



Location	Date	Parameter	Result	Background Threshold Value (BTV)	Units	CAS #
P-9	04/15/2025	pH	7.6	6.5 < 8.1	pH UNITS	PH
P-9	10/13/2025	pH	7.8	6.5 < 8.1	pH UNITS	PH
P-1	04/15/2025	Sulfate as SO4	25.3	368	mg/l	14808-79-8
P-1	10/13/2025	Sulfate as SO4	26.6	368	mg/l	14808-79-8
P-5R	04/16/2025	Sulfate as SO4	19.3	368	mg/l	14808-79-8
P-5R	10/13/2025	Sulfate as SO4	22.5	368	mg/l	14808-79-8
P-6	04/16/2025	Sulfate as SO4	270	368	mg/l	14808-79-8
P-6	10/14/2025	Sulfate as SO4	272	368	mg/l	14808-79-8
P-7	04/16/2025	Sulfate as SO4	35.8	368	mg/l	14808-79-8
P-7	10/14/2025	Sulfate as SO4	58.9	368	mg/l	14808-79-8
P-8	04/15/2025	Sulfate as SO4	34.5	368	mg/l	14808-79-8
P-8	10/13/2025	Sulfate as SO4	33.7	368	mg/l	14808-79-8
P-9	04/15/2025	Sulfate as SO4	25.9	368	mg/l	14808-79-8
P-9	10/13/2025	Sulfate as SO4	27.2	368	mg/l	14808-79-8
P-1	04/15/2025	Total Dissolved Solids	756	1234	mg/l	TDS
P-1	10/13/2025	Total Dissolved Solids	618	1234	mg/l	TDS
P-5R	04/16/2025	Total Dissolved Solids	758	1234	mg/l	TDS
P-5R	10/13/2025	Total Dissolved Solids	796	1234	mg/l	TDS
P-6	04/16/2025	Total Dissolved Solids	994	1234	mg/l	TDS
P-6	10/14/2025	Total Dissolved Solids	900	1234	mg/l	TDS
P-7	04/16/2025	Total Dissolved Solids	520	1234	mg/l	TDS
P-7	10/14/2025	Total Dissolved Solids	640	1234	mg/l	TDS
P-8	04/15/2025	Total Dissolved Solids	452	1234	mg/l	TDS
P-8	10/13/2025	Total Dissolved Solids	462	1234	mg/l	TDS
P-9	04/15/2025	Total Dissolved Solids	500	1234	mg/l	TDS
P-9	10/13/2025	Total Dissolved Solids	562	1234	mg/l	TDS

Results in milligrams per liter (mg/l)

Bold = Indicates concentration above Background Threshold Value

Table 3
Well Stabilization Data



Well ID	Sample Date	Purge Rate (ml/min)	Purge Volume (gallons)	Field pH (pH)	Field Specific Conductivity (umhos/cm)	Field Temp (°C)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	ORP (mV)
P-1	4/15/2025	1000	0.1	7.47	1420	7.90	2.90	0.0	21
P-1	4/15/2025	1000	1	6.91	1410	7.30	0.47	0.0	129
P-1	4/15/2025	1000	2	6.87	1430	7.27	0.45	0.0	150
P-1	4/15/2025	1000	3.5	6.88	1440	7.55	0.00	0.0	164
P-1	4/15/2025			6.88	1440	7.54	0.00	0.0	164
P-1	10/13/2025	1000	0.1	9.47	1240	10.73	2.52	36.4	-77
P-1	10/13/2025	1000	1	8.90	1260	10.77	2.51	13.6	-42
P-1	10/13/2025	1000	2	8.42	1230	10.73	2.32	11.7	-11
P-1	10/13/2025	1000	3	8.05	1250	10.72	2.31	11.3	26
P-1	10/13/2025			8.02	1250	10.72	2.30	11.1	30
P-5R	4/15/2025	1000	0.1	7.13	1610	9.76	6.31	0.0	-15
P-5R	4/15/2025	1000	2	7.14	1510	10.19	0.59	0.0	-26
P-5R	4/15/2025	1000	4	7.14	1470	10.23	0.00	0.0	-25
P-5R	4/15/2025	1000	6	7.12	1460	10.26	0.00	0.0	-23
P-5R	4/15/2025			7.11	1460	10.27	0.00	0.0	-23
P-5R	10/13/2025	1000	0.1	7.72	1540	12.26	0.03	13.0	-91
P-5R	10/13/2025	1000	2	7.63	1540	11.98	0.00	12.6	-98
P-5R	10/13/2025	1000	4	7.54	1520	11.94	0.00	12.1	-106
P-5R	10/13/2025	1000	6	7.52	1510	11.94	0.00	11.5	-108
P-5R	10/13/2025			7.53	1510	11.93	0.00	11.8	-108
P-6	4/16/2025	1000	0.1	7.47	1660	8.26	6.07	0.0	158
P-6	4/16/2025	1000	1	7.03	1430	8.00	1.55	0.0	174
P-6	4/16/2025	1000	2	7.03	1440	7.97	1.50	0.0	174
P-6	4/16/2025	1000	3	7.03	1440	7.96	1.49	0.0	174
P-6	4/16/2025			7.03	1440	7.95	1.46	0.0	174
P-6	10/14/2025	1000	0.1	8.51	1490	8.83	3.78	19.1	80
P-6	10/14/2025	1000	1	8.20	1400	8.74	2.93	13.4	11
P-6	10/14/2025	1000	1.5	8.03	1420	8.74	2.67	10.5	127
P-6	10/14/2025	1000	2	7.92	1430	8.76	2.57	10.3	132
P-6	10/14/2025			7.90	1440	8.75	2.50	10.1	133
P-7	4/16/2025	1000	0.1	7.51	1086	6.27	14.40	0.0	166
P-7	4/16/2025	1000	0.5	7.17	941	6.62	8.26	0.0	141
P-7	4/16/2025	1000	1	7.13	957	6.69	7.45	0.0	140
P-7	4/16/2025	1000	1.25	7.13	959	6.69	7.42	0.0	140
P-7	4/16/2025			7.13	963	6.70	7.32	0.0	139
P-7	10/14/2025	1000	0.1	7.98	1230	9.12	7.92	25.8	75
P-7	10/14/2025	1000	0.5	7.94	1240	9.14	7.69	25.9	69
P-7	10/14/2025	1000	0.75	7.94	1240	9.14	7.69	25.9	69
P-7	10/14/2025	1000	1	7.90	1260	9.14	7.32	27.1	58
P-7	10/14/2025			7.85	1280	9.14	6.99	25.2	44
P-8	4/15/2025	1000	0.1	8.11	799	7.83	5.92	172.0	109
P-8	4/15/2025	1000	5	8.23	846	8.73	1.74	0.0	-76
P-8	4/15/2025	1000	10	8.14	851	8.89	2.27	0.0	-77
P-8	4/15/2025	1000	15.5	8.03	862	8.93	2.29	0.0	-76
P-8	4/15/2025			8.07	861	8.94	2.21	0.0	-76
P-8	10/13/2025	1000	0.1	8.76	798	10.70	0.53	12.4	-116
P-8	10/13/2025	1000	5	8.81	862	10.45	2.04	14.1	-153
P-8	10/13/2025	1000	10	8.79	873	10.44	0.51	13.5	-157
P-8	10/13/2025	1000	15	8.77	892	10.45	0.01	13.3	-157
P-8	10/13/2025			8.77	891	10.45	0.04	13.5	-157
P-9	4/15/2025	1000	0.1	8.35	942	8.83	4.57	166.0	18

Table 3
Well Stabilization Data



Well ID	Sample Date	Purge Rate (ml/min)	Purge Volume (gallons)	Field pH (pH)	Field Specific Conductivity (umhos/cm)	Field Temp (°C)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	ORP (mV)
P-9	4/15/2025	1000	1.5	8.05	969	9.99	2.46	0.0	-103
P-9	4/15/2025	1000	3	7.91	981	10.05	2.84	0.0	-86
P-9	4/15/2025	1000	5	7.82	987	10.09	3.63	0.0	-81
P-9	4/15/2025			7.82	987	10.10	3.69	0.0	-80
P-9	10/13/2025	1000	0.1	8.48	1020	12.06	1.85	38.9	-105
P-9	10/13/2025	1000	1.5	8.44	1060	11.79	7.87	15.3	-154
P-9	10/13/2025	1000	3	8.44	1070	11.77	7.18	13.0	-154
P-9	10/13/2025	1000	4.5	8.38	1090	11.76	5.77	11.4	-152
P-9	10/13/2025			8.37	1090	11.74	5.47	11.3	-152

Notes:

ml/min milliliters per minute
 umhos/cm micromhos per centimeter
 °C degrees Celsius
 mg/L milligrams per Liter

NTU Nephelometric Turbidity Units
 ORP oxidation-reduction potential
 mV millivolts

Table 4
Background Threshold Values



Appendix III to Part 257

Parameter	Background Threshold Value (BTV)	Units	CAS #
Boron	0.41	mg/l	7440-42-8
Calcium	248.6	mg/l	7440-70-2
Chloride	440.2	mg/l	16887-00-6
Fluoride	1	mg/l	15984-48-8
pH	lower 6.5 upper 8.1	pH UNITS	PH
Sulfate as SO ₄	368	mg/l	14808-79-8
Total Dissolved Solids	1234	mg/l	TDS

Results in milligrams per liter (mg/l)

Table 5

2025 Groundwater Protection Standards



Appendix III to Part 257

Parameter	Background Threshold Value (BTV)	EPA Maximum Contaminate Level (MCL)	Groundwater Protection Standard (GPS)	Units	CAS #
Boron	0.41	--	--	mg/l	7440-36-0
Calcium	248.6	--	--	mg/l	7440-38-2
Chloride	440.2	--	--	mg/l	7440-39-3
Fluoride	1	0.004	0.004	mg/l	7440-41-7
pH	lower 6.5 upper 8.1	--	--	pH	7440-43-9
Sulfate as SO ₄	368	--	--	mg/l	7440-47-3
Total Dissolved Solids	1234	--	--	mg/l	7440-48-4

Results in milligrams per liter (mg/l)



Appendix A – Field Data Sheets

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-1

Location: Cloquet, MN

Duplicate Collected: 10

Field Blank Collected: NA

Sample Matrix: Groundwater

Equipment Blank Collected:

PURGE INFORMATION

MS/MSD Collected: No Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Sch. Ege 1

Casing Length (ft)	17.7
--------------------	------

Date/Time Initiated: 7/10/03 7:03

Dedicated Equipment: Yes

Initial Water Level (feet): 11.13

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1,144.48 1,14

One Casing Volume (gal): 1.07

Top of Casing (ft, msl)	<u>1155.61</u>
-------------------------	----------------

Total Volume Purged (gal): 3.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 11.15'

PURGE DATA

Date/Time Completed: 4/15/25 9:25

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-1

Water Level @ Sampling (ft): 11-15

Well Collection Sequence 1 of 7

Parameters: Annual _____ Semiannual: _____

Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>9:25</u> <u>4/18/15</u>	VOCs: <u>100</u>	<u>7.54</u>	<u>6.88</u>	<u>1,440</u>	<u>0.0</u>	<u>0.00</u>	<u>164</u>
	Other: <u>1000</u>						

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 34°F, cloudy, 10-15 mph NW

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 13/4

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 72 8520

Date: 4/18/15 By: N. Schlegel

Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-8

Location: Cloquet, MN

Duplicate Collected: Yes

Field Blank Collected: 1/2

Sample Matrix: Groundwater

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: Yes

Sampler(s): M. Schmitt

Casing Length (ft)	89.05
--------------------	-------

Method of Well Purge: Dedicated Bladder Pump

Date/Time Initiated: 4/15/25 9:55

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 57.34'

Casing Diameter (inches): 2

Ground Water Elevation (ft. msl): 1,132.05

One Casing Volume (gal): 5.17

Top of Casing (ft, msl)	1189.39
-------------------------	---------

Total Volume Purged (gal): 15.8

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace)	0.0	(PPM)
1	0.0	
2	0.0	
3	0.0	
4	0.0	
5	0.0	
6	0.0	
7	0.0	
8	0.0	
9	0.0	
10	0.0	
11	0.0	
12	0.0	
13	0.0	
14	0.0	
15	0.0	
16	0.0	
17	0.0	
18	0.0	
19	0.0	
20	0.0	
21	0.0	
22	0.0	
23	0.0	
24	0.0	
25	0.0	
26	0.0	
27	0.0	
28	0.0	
29	0.0	
30	0.0	
31	0.0	
32	0.0	
33	0.0	
34	0.0	
35	0.0	
36	0.0	
37	0.0	
38	0.0	
39	0.0	
40	0.0	
41	0.0	
42	0.0	
43	0.0	
44	0.0	
45	0.0	
46	0.0	
47	0.0	
48	0.0	
49	0.0	
50	0.0	
51	0.0	
52	0.0	
53	0.0	
54	0.0	
55	0.0	
56	0.0	
57	0.0	
58	0.0	
59	0.0	
60	0.0	
61	0.0	
62	0.0	
63	0.0	
64	0.0	
65	0.0	
66	0.0	
67	0.0	
68	0.0	
69	0.0	
70	0.0	
71	0.0	
72	0.0	
73	0.0	
74	0.0	
75	0.0	
76	0.0	
77	0.0	
78	0.0	
79	0.0	
80	0.0	
81	0.0	
82	0.0	
83	0.0	
84	0.0	
85	0.0	
86	0.0	
87	0.0	
88	0.0	
89	0.0	
90	0.0	
91	0.0	
92	0.0	
93	0.0	
94	0.0	
95	0.0	
96	0.0	
97	0.0	
98	0.0	
99	0.0	
100	0.0	

Water Level After Purge (ft): 57.58

PURGE DATA

Date/Time Completed: 4/5/25 11:50

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-8

Water Level @ Sampling (ft): 57.56'

Well Collection Sequence 2 of 7

Parameters: Annual _____ Semiannual: _____

Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>11-15</u> <u>4/15/25</u>	VOCs: <u>100</u> Other: <u>1600</u>	<u>8.94</u>	<u>9.5</u>	<u>861</u>	<u>0.0</u>	<u>2.21</u>	<u>-76</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 34°F, cloudy, 15-20 mph NW

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 13/4

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 856321

Date: 4/15/25 By: M. Schlegel Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-9

Location: Cloquet, MN

Duplicate Collected: No

Field Blank Collected: ✓

Sample Matrix: Groundwater

Equipment Blank Collected: no

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: 161

Sampler(s): N. Schlegel

Casing Length (ft)	59.15
--------------------	-------

Date/Time Initiated: 4/13/25 12:00

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 49.79'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1152.97'

One Casing Volume (gal): 135

Top of Casing (ft, msl)	1182.73
-------------------------	---------

Total Volume Purged (gal): 5.0

PID (Background)	0.0	(PPM)
1	0.0	0.0
2	0.0	0.0
3	0.0	0.0
4	0.0	0.0
5	0.0	0.0
6	0.0	0.0
7	0.0	0.0
8	0.0	0.0
9	0.0	0.0
10	0.0	0.0
11	0.0	0.0
12	0.0	0.0
13	0.0	0.0
14	0.0	0.0
15	0.0	0.0
16	0.0	0.0
17	0.0	0.0
18	0.0	0.0
19	0.0	0.0
20	0.0	0.0
21	0.0	0.0
22	0.0	0.0
23	0.0	0.0
24	0.0	0.0
25	0.0	0.0
26	0.0	0.0
27	0.0	0.0
28	0.0	0.0
29	0.0	0.0
30	0.0	0.0
31	0.0	0.0
32	0.0	0.0
33	0.0	0.0
34	0.0	0.0
35	0.0	0.0
36	0.0	0.0
37	0.0	0.0
38	0.0	0.0
39	0.0	0.0
40	0.0	0.0
41	0.0	0.0
42	0.0	0.0
43	0.0	0.0
44	0.0	0.0
45	0.0	0.0
46	0.0	0.0
47	0.0	0.0
48	0.0	0.0
49	0.0	0.0
50	0.0	0.0
51	0.0	0.0
52	0.0	0.0
53	0.0	0.0
54	0.0	0.0
55	0.0	0.0
56	0.0	0.0
57	0.0	0.0
58	0.0	0.0
59	0.0	0.0
60	0.0	0.0
61	0.0	0.0
62	0.0	0.0
63	0.0	0.0
64	0.0	0.0
65	0.0	0.0
66	0.0	0.0
67	0.0	0.0
68	0.0	0.0
69	0.0	0.0
70	0.0	0.0
71	0.0	0.0
72	0.0	0.0
73	0.0	0.0
74	0.0	0.0
75	0.0	0.0
76	0.0	0.0
77	0.0	0.0
78	0.0	0.0
79	0.0	0.0
80	0.0	0.0
81	0.0	0.0
82	0.0	0.0
83	0.0	0.0
84	0.0	0.0
85	0.0	0.0
86	0.0	0.0
87	0.0	0.0
88	0.0	0.0
89	0.0	0.0
90	0.0	0.0
91	0.0	0.0
92	0.0	0.0
93	0.0	0.0
94	0.0	0.0
95	0.0	0.0
96	0.0	0.0
97	0.0	0.0
98	0.0	0.0
99	0.0	0.0
100	0.0	0.0

Purged Dry?: Yes No (circle)

PID (Headspace)	0.0	0.0	(PPM)
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	0.0	0.0	0.0
15	0.0	0.0	0.0
16	0.0	0.0	0.0
17	0.0	0.0	0.0
18	0.0	0.0	0.0
19	0.0	0.0	0.0
20	0.0	0.0	0.0
21	0.0	0.0	0.0
22	0.0	0.0	0.0
23	0.0	0.0	0.0
24	0.0	0.0	0.0
25	0.0	0.0	0.0
26	0.0	0.0	0.0
27	0.0	0.0	0.0
28	0.0	0.0	0.0
29	0.0	0.0	0.0
30	0.0	0.0	0.0
31	0.0	0.0	0.0
32	0.0	0.0	0.0
33	0.0	0.0	0.0
34	0.0	0.0	0.0
35	0.0	0.0	0.0
36	0.0	0.0	0.0
37	0.0	0.0	0.0
38	0.0	0.0	0.0
39	0.0	0.0	0.0
40	0.0	0.0	0.0
41	0.0	0.0	0.0
42	0.0	0.0	0.0
43	0.0	0.0	0.0
44	0.0	0.0	0.0
45	0.0	0.0	0.0
46	0.0	0.0	0.0
47	0.0	0.0	0.0
48	0.0	0.0	0.0
49	0.0	0.0	0.0
50	0.0	0.0	0.0
51	0.0	0.0	0.0
52	0.0	0.0	0.0
53	0.0	0.0	0.0
54	0.0	0.0	0.0
55	0.0	0.0	0.0
56	0.0	0.0	0.0
57	0.0	0.0	0.0
58	0.0	0.0	0.0
59	0.0	0.0	0.0
60	0.0	0.0	0.0
61	0.0	0.0	0.0
62	0.0	0.0	0.0
63	0.0	0.0	0.0
64	0.0	0.0	0.0
65	0.0	0.0	0.0
66	0.0	0.0	0.0
67	0.0	0.0	0.0
68	0.0	0.0	0.0
69	0.0	0.0	0.0
70	0.0	0.0	0.0
71	0.0	0.0	0.0
72	0.0	0.0	0.0
73	0.0	0.0	0.0
74	0.0	0.0	0.0
75	0.0	0.0	0.0
76	0.0	0.0	0.0
77	0.0	0.0	0.0
78	0.0	0.0	0.0
79	0.0	0.0	0.0
80	0.0	0.0	0.0
81	0.0	0.0	0.0
82	0.0	0.0	0.0
83	0.0	0.0	0.0
84	0.0	0.0	0.0
85	0.0	0.0	0.0
86	0.0	0.0	0.0
87	0.0	0.0	0.0
88	0.0	0.0	0.0
89	0.0	0.0	0.0
90	0.0	0.0	0.0
91	0.0	0.0	0.0
92	0.0	0.0	0.0
93	0.0	0.0	0.0
94	0.0	0.0	0.0
95	0.0	0.0	0.0
96	0.0	0.0	0.0
97			

Water Level After Purge (ft): 49.80

PURGE DATA

Date/Time Completed: 9/15/25 12-25

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-9

Water Level @ Sampling (ft): 49.80'

Well Collection Sequence 3 of 7

Parameters: Annual _____ Semiannual: _____

Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>12:20</u> <u>4/15/28</u>	VOCs: <u>100</u> Other: <u>1000</u>	<u>10.10</u>	<u>7.82</u>	<u>987</u>	<u>0.0</u>	<u>3.69</u>	<u>-80</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 35°F, cloudy, 18-20 mph NW

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 13/4

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 762047

Date: 4/15/28 By: N-Jen log 01

Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-5R

Location: Cloquet, MN

Duplicate Collected: No

Field Blank Collected: No

Sample Matrix: Groundwater

Equipment Blank Collected: NO

MS/MSD Collected: no

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schlegel

Casing Length (ft)	73.2
--------------------	------

Date/Time Initiated: 4/5/25 13:00

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 61.10'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1,131.00

One Casing Volume (gal): 1.97

Top of Casing (ft, msl)	1192.98
-------------------------	---------

Total Volume Purged (gal): 6.6

PID (Background) (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 01.12

PURGE DATA

Date/Time Completed: 4/15/28 13-35

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft):

61.12'

Sample Point ID:

P-5R

Well Collection Sequence

4 of 7

Parameters:

Annual

Semiannual:

Quarterly:

Monthly:

Other:

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
13:35 4/18/28	VOCs: 100 Other: 100	10.27	7.11	1,460	0.0	0.00	-23

YSI Serial Number:

YSI Sonde Serial Number:

GENERAL INFORMATION:

Weather Conditions @ sampling:

30°F, cloudy, 15-20 mph NW

Sampling Characteristics:

Clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: ☒ Yes ☐ No (circle)

of Bottles Collected:

13/4

Well Closed and Locked: ☒ Yes ☐ No (circle)

Notes:

Minnesota Unique Well ID:

856322

Date:

4/18/28

By:

M-Schlager

Title:

Staff env scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-6

Location: Cloquet, MN

Duplicate Collected: NO

Field Blank Collected: NO

Sample Matrix: Groundwater

Equipment Blank Collected: NO

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): *N-Ju 1041*

Casing Length (ft)	36.2
--------------------	------

Date/Time Initiated: 4/16/4 9:25

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 30.62'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 124.81'

One Casing Volume (gal): 0.90

Top of Casing (ft, msl)	1155.43
-------------------------	---------

Total Volume Purged (gal): 3.0

PID (Background) *0.6* (PPM)

Purged Dry?: Yes ☐ No ☒ (circle)

PID (Headspace)	0.0	(PPM)
1	0.0	
2	0.0	
3	0.0	
4	0.0	
5	0.0	
6	0.0	
7	0.0	
8	0.0	
9	0.0	
10	0.0	
11	0.0	
12	0.0	
13	0.0	
14	0.0	
15	0.0	
16	0.0	
17	0.0	
18	0.0	
19	0.0	
20	0.0	
21	0.0	
22	0.0	
23	0.0	
24	0.0	
25	0.0	
26	0.0	
27	0.0	
28	0.0	
29	0.0	
30	0.0	
31	0.0	
32	0.0	
33	0.0	
34	0.0	
35	0.0	
36	0.0	
37	0.0	
38	0.0	
39	0.0	
40	0.0	
41	0.0	
42	0.0	
43	0.0	
44	0.0	
45	0.0	
46	0.0	
47	0.0	
48	0.0	
49	0.0	
50	0.0	
51	0.0	
52	0.0	
53	0.0	
54	0.0	
55	0.0	
56	0.0	
57	0.0	
58	0.0	
59	0.0	
60	0.0	
61	0.0	
62	0.0	
63	0.0	
64	0.0	
65	0.0	
66	0.0	
67	0.0	
68	0.0	
69	0.0	
70	0.0	
71	0.0	
72	0.0	
73	0.0	
74	0.0	
75	0.0	
76	0.0	
77	0.0	
78	0.0	
79	0.0	
80	0.0	
81	0.0	
82	0.0	
83	0.0	
84	0.0	
85	0.0	
86	0.0	
87	0.0	
88	0.0	
89	0.0	
90	0.0	
91	0.0	
92	0.0	
93	0.0	
94	0.0	
95	0.0	
96	0.0	
97	0.0	
98	0.0	
99	0.0	
100	0.0	

Water Level After Purge (ft): 50.65'

PURGE DATA

Date/Time Completed: 4/10/25 1200

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-6

Water Level @ Sampling (ft): 30.65'

Well Collection Sequence 5 of 7

Parameters: Annual _____ Semiannual: _____ Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>10:00</u> <u>4/16/25</u>	VOCs: <u>100</u> Other: <u>1000</u>	<u>7.95</u>	<u>7.03</u>	<u>1,440</u>	<u>0.0</u>	<u>1.48</u>	<u>174</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 38°F, sunn, 0-5 mph SE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 13/14

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 772808

Date: 4/16/25 By: M. Schlager Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-7

Location: Cloquet, MN

Duplicate Collected: No

Field Blank Collected: Yes

Sample Matrix: Groundwater

Equipment Blank Collected: Yes

MS/MSD Collected: no

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. J. Schilder

Casing Length (ft) 19.6

Date/Time Initiated: 4/16/23 10:05

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 15.52'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1,123.67

One Casing Volume (gal): 0.67

Top of Casing (ft, msl)	1139.39
-------------------------	---------

Total Volume Purged (gal): 1.23

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 17.6

PURGE DATA

Date/Time Completed: 4/16/25 10:40

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-7

Water Level @ Sampling (ft): 17.6'

Well Collection Sequence 6 of 7

Parameters: Annual _____ Semiannual: _____ Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>4/16/25</u> <u>12:40</u>	VOCs: <u>100</u> Other: <u>1000</u>	<u>6.70</u>	<u>7.13</u>	<u>963</u>	<u>0.0</u>	<u>7.32</u>	<u>139</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 40°F, sunny, 0-5 mph SE

Sampling Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes / No (circle) _____ # of Bottles Collected: 13/4

Well Closed and Locked: Yes / No (circle) _____

Notes: _____

Minnesota Unique Well ID: 772807

Date: 4/16/25 By: N. Smith Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-2

Location: Cloquet, MN

Duplicate Collected: NO

Field Blank Collected: NO

Sample Matrix: Groundwater

Equipment Blank Collected: 10

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder PumpMS/MSD Collected: 1/2/20

Sampler(s): M. Schloffer

Casing Length (ft)	16.4
--------------------	------

Date/Time Initiated: 4/16/28

Dedicated Equipment: Yes

Initial Water Level (feet): 0.4

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 10.1

One Casing Volume (gal): _____

Top of Casing (ft, msl)	1131.79
-------------------------	---------

Total Volume Purged (gal): 0.0

PID (Background)	0-0	(PPM)
1	0.00	0.00
2	0.00	0.00
3	0.00	0.00
4	0.00	0.00
5	0.00	0.00
6	0.00	0.00
7	0.00	0.00
8	0.00	0.00
9	0.00	0.00
10	0.00	0.00
11	0.00	0.00
12	0.00	0.00
13	0.00	0.00
14	0.00	0.00
15	0.00	0.00
16	0.00	0.00
17	0.00	0.00
18	0.00	0.00
19	0.00	0.00
20	0.00	0.00
21	0.00	0.00
22	0.00	0.00
23	0.00	0.00
24	0.00	0.00
25	0.00	0.00
26	0.00	0.00
27	0.00	0.00
28	0.00	0.00
29	0.00	0.00
30	0.00	0.00
31	0.00	0.00
32	0.00	0.00
33	0.00	0.00
34	0.00	0.00
35	0.00	0.00
36	0.00	0.00
37	0.00	0.00
38	0.00	0.00
39	0.00	0.00
40	0.00	0.00
41	0.00	0.00
42	0.00	0.00
43	0.00	0.00
44	0.00	0.00
45	0.00	0.00
46	0.00	0.00
47	0.00	0.00
48	0.00	0.00
49	0.00	0.00
50	0.00	0.00
51	0.00	0.00
52	0.00	0.00
53	0.00	0.00
54	0.00	0.00
55	0.00	0.00
56	0.00	0.00
57	0.00	0.00
58	0.00	0.00
59	0.00	0.00
60	0.00	0.00
61	0.00	0.00
62	0.00	0.00
63	0.00	0.00
64	0.00	0.00
65	0.00	0.00
66	0.00	0.00
67	0.00	0.00
68	0.00	0.00
69	0.00	0.00
70	0.00	0.00
71	0.00	0.00
72	0.00	0.00
73	0.00	0.00
74	0.00	0.00
75	0.00	0.00
76	0.00	0.00
77	0.00	0.00
78	0.00	0.00
79	0.00	0.00
80	0.00	0.00
81	0.00	0.00
82	0.00	0.00
83	0.00	0.00
84	0.00	0.00
85	0.00	0.00
86	0.00	0.00
87	0.00	0.00
88	0.00	0.00
89	0.00	0.00
90	0.00	0.00
91	0.00	0.00
92	0.00	0.00
93	0.00	0.00
94	0.00	0.00
95	0.00	0.00
96	0.00	0.00
97	0.00	0.00
98	0.00	0.00
99	0.00	0.00
100	0.00	0.00

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 10.5

PURGE DATA

Date/Time Completed: 9/16/20

Time	Purge Rate (mL/min)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Disolved Oxygen (mg/L)	ORP (mV)
NO SAMPLE								
WELL WAS DRY								

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): _____

Parameters: Annual _____ Semiannual: _____

Sample Point ID: _____ P-2

Well Collection Sequence _____ 7 of 7

Quarterly: ☒ Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
	VOCs: _____						
	Other: _____						

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: _____

Sampling Characteristics: _____

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____

of Bottles Collected: _____ 0

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: _____

Date: 4/16/25 By: W. Schlafel Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

Start of day: (Date/Time)	4/15/25 8:00
End of day: (Date/Time)	4/16/25 11:00
YSI Model Number	U-5000
YSI Serial Number	U126730X
Sonde Model Number	U-52
Sonde Serial Number	U126731X

Sampling Event		
Time:	Value:	
8:00	0	NTU std = DI Water
↓	100	NTU std = 100
	1409	uS std = 1409
	4.00	pH std = 4
	7.00	pH std = 7
	10.00	pH std = 10

[illegible]

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-1

Location: Cloquet, MN

Duplicate Collected: 16

Field Blank Collected: NO

Sample Matrix: Groundwater

Equipment Blank Collected: No

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: 14

Sampler(s): N-Exaloge

Casing Length (ft) 17.7

Date/Time Initiated: 10/13/25 9:35

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 7.11'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 143.50'

One Casing Volume (gal): 0.91

Top of Casing (ft, msl)	1155.61
-------------------------	---------

Total Volume Purged (gal): 3.00

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.6 (PPM)

Water Level After Purge (ft): 12.12

PURGE DATA

Date/Time Completed: 12/13/25 4:55

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-1

Water Level @ Sampling (ft): 12.72'

Well Collection Sequence 1 of 1

Parameters: Annual _____ Semiannual: _____ Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
9:55 10/13/28	VOCs: <u>106</u>	10.72	8.02	1,250	11.1	2.30	30
	Other: <u>1000</u>						

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 46°F sunny, 5-10 mph NW

Sampling Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____

of Bottles Collected: 15

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 728520

Date: 10/13/28 By: M. Schuyler

Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-8

Location: Cloquet, MN

Duplicate Collected: Yes

Field Blank Collected: No

Sample Matrix: Groundwater

Equipment Blank Collected: No

MS/MSD Collected: Yes

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schlegel

Casing Length (ft) 89.05

Date/Time Initiated: 10/13/25 10:25

Dedicated Equipment: Yes

Initial Water Level (feet): 58.37'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1,131.02'

One Casing Volume (gal): 5.0

Top of Casing (ft, msl) 1189.39

Total Volume Purged (gal): 15.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes ☐ No ☒ (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 58.38'

PURGE DATA

Date/Time Completed: 10/13/25 11:45

Well/Purge Time	Purge Rate (mL/min)	Cumulative Volume (gal)	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Disolved Oxygen (mg/L)	ORP (mV)
10:25	1000	0.1	10.70	8.76	798	124	0.53	-116
10:50	1000	5.0	10.45	8.91	862	141	2.04	-153
11:15	1000	10.0	10.44	8.79	873	13.5	0.81	-157
11:40	1000	15.0	10.48	8.77	892	13.3	0.01	-157

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-8

Water Level @ Sampling (ft): 58.38'

Well Collection Sequence 2 of 7

Parameters: Annual _____ Semiannual: _____

Quarterly: ☒ Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>11-45</u> <u>10/13/25</u>	VOCs: <u>100</u> Other: <u>1000</u>	<u>10.45</u>	<u>8.77</u>	<u>891</u>	<u>13.5</u>	<u>0.04</u>	<u>-157</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 48°F, sunny, 5-10 mph W

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: ☒ Yes ☐ No (circle) _____

of Bottles Collected: 15

Well Closed and Locked: ☒ Yes ☐ No (circle) _____

Notes: _____

Minnesota Unique Well ID: 856321

Date: 10/13/25 By: N-Schlager Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-9

Location: Cloquet, MN

Duplicate Collected: No

Field Blank Collected: NC

Sample Matrix: Groundwater

Equipment Blank Collected: No

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: No

Sampler(s): N. Sen lae

Casing Length (ft)	59.15
--------------------	-------

Date/Time Initiated: 10/15/23 12:30

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 50.15

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1,124.50

One Casing Volume (gal): 1.5

Top of Casing (ft, msl)	1182.73
-------------------------	---------

Total Volume Purged (gal): 4.3

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 50.16'

PURGE DATA

Date/Time Completed: 10/13/25 12:50

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft):

50.16'

Sample Point ID:

P-9

Well Collection Sequence

3 of 7

Parameters:

Annual

Semiannual

Quarterly: ☒

Monthly: ☐

Other: ☐

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
12:50 10/13/08	VOCs: 100 Other: 1000	11.74	8.37	1,090	11.3	5.47	-152

YSI Serial Number:

YSI Sonde Serial Number:

GENERAL INFORMATION:

Weather Conditions @ sampling:

52°F, sunny 10-15 mph W

Sampling Characteristics:

Clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: ☒ Yes ☐ No (circle)

of Bottles Collected:

15

Well Closed and Locked: ☒ Yes ☐ No (circle)

Notes:

Minnesota Unique Well ID:

762047

Date:

10/13/08

By:

N. Schepel

Title:

Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-5R

Location: Cloquet, MN

Duplicate Collected:

Field Blank Collected: no

Sample Matrix: Groundwater

Equipment Blank Collected: NO

PURGE INFORMATION

MS/MSD Collected: ME

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): W. Schlegel

Casing Length (ft)	73.2
--------------------	------

Date/Time Initiated: 10/13/28 13:10

Dedicated Equipment: Yes

Initial Water Level (feet): 61.50

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1,131.48

One Casing Volume (gal): 1.91

Top of Casing (ft, msl)	1192.98
-------------------------	---------

Total Volume Purged (gal): 6.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 61.57

PURGE DATA

Date/Time Completed: 10/13/28 13:45

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-5R

Water Level @ Sampling (ft): 61.51'

Well Collection Sequence 4 of 7

Parameters: Annual _____ Semiannual: _____

Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>12:45</u> <u>10/13/25</u>	VOCs: <u>100</u> Other: <u>1000</u>	<u>11.93</u>	<u>7.53</u>	<u>1,510</u>	<u>11.0</u>	<u>0.00</u>	<u>-108</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 57°F, sunny, 10-15 mph W

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 15

Well Closed and Locked: Yes No (circle)

Notes:

Minnesota Unique Well ID: 856322

Date: 10/13/25 By: M. Schlager Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-6

Location: Cloquet, MN

Duplicate Collected: No

Field Blank Collected: No

Sample Matrix: Groundwater

Equipment Blank Collected: No

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: No

Sampler(s): *N. Schloer*

Casing Length (ft)	36.2
--------------------	------

Date/Time Initiated: 10/14/25 9:50

Dedicated Equipment: Yes

Initial Water Level (feet): 32.06'

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1125.57

One Casing Volume (gal): 0.67

Top of Casing (ft, msl)	1155.43
-------------------------	---------

Total Volume Purged (gal): 7.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 32.06

PURGE DATA

Date/Time Completed: 10/14/25 9:50

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 32.06'

Parameters: Annual _____ Semiannual: _____

Sample Point ID: P-6

Well Collection Sequence 5 of 7

Quarterly: X Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>9:50</u> <u>10/14/20</u>	VOCs: <u>10%</u> Other: <u>100%</u>	<u>8.75</u>	<u>7.90</u>	<u>1,440</u>	<u>10.1</u>	<u>2.50</u>	<u>133</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 40°F, mostly cloudy, 0-5 N

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 15

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 772809

Date: 10/14/20 By: M. Schlegel Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-7

Location: Cloquet, MN

Duplicate Collected: Two

Field Blank Collected: yes

Sample Matrix: Groundwater

Equipment Blank Collected: Yes

PURGE INFORMATION

MS/MSD Collected: 126

Sampler(s): 10-502174 (1)

Casing Length (ft)	19.6
--------------------	------

Method of Well Purge: Dedicated Bladder Pump

Date/Time Initiated: 10/14/25

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): 17.09

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 1122.30

One Casing Volume (gal): 0.47

Top of Casing (ft, msl)	1139.39
-------------------------	---------

Total Volume Purged (gal): 1.0 *1.0*

PID (Background) *0-0* (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 18.56

PURGE DATA

Date/Time Completed: 10/14/25 10:45

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-7

Water Level @ Sampling (ft): 18.56

Well Collection Sequence 6 of 7

Parameters: Annual _____ Semiannual: _____

Quarterly: ✓ Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
<u>10:45</u> <u>10/14/05</u>	VOCs: <u>100</u> Other: <u>1000</u>	<u>9.14</u>	<u>7.85</u>	<u>1,200</u>	<u>25.2</u>	<u>6.99</u>	<u>44</u>

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 42°F, mostly cloudy, 0-5 mph N

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 15

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 772907

Date: 10/14/05 By: M. Schlogel

Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: Cloquet Landfill

Sample Location: P-2

Location: Cloquet, MN

Duplicate Collected:

Field Blank Collected: _____

Sample Matrix: Groundwater

Equipment Blank Collected:

PURGE INFORMATION

MS/MSD Collected: _____

Sampler(s): D. J. H. J. J.

Casing Length (ft)	10.4
--------------------	------

Method of Well Purge: Dedicated Bladder Pump

Date/Time Initiated: 10/14/23

Dedicated Equipment: ☒ Yes

Initial Water Level (feet): DRY

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): N/A

One Casing Volume (gal): _____

Top of Casing (ft, msl)	1131.79
-------------------------	---------

Total Volume Purged (gal): _____

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft):

PURGE DATA

Date/Time Completed: _____

[illegible]

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: P-2

Water Level @ Sampling (ft): _____

Well Collection Sequence _____ of _____

Parameters: Annual _____ Semiannual: _____

Quarterly: _____ Monthly: _____ Other: _____

SAMPLE DATA:

Time & Date	Sample Rate	Temp (°C)	pH (std units)	Specific Conductance (uS - umhos/cm)	Turbidity (NTU)	Dissolved O ₂ (mg/L)	O ₂ Reduction Potential (mV)
	VOCs: _____						
	Other: _____						

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: _____

Sampling Characteristics: _____

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____

of Bottles Collected: _____

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: _____

Date: _____ By: _____ Title: _____

Company: Groundwater and Environmental Services, Inc.

Start of day: (Date/Time)	16/13/25 8:00
End of day: (Date/Time)	16/14/25 12:00
YSI Model Number	U-5000
YSI Serial Number	103107
Sonde Model Number	U-52
Sonde Serial Number	091194X

Sampling Event		
Time:	Value:	
9:00	-	NTU std = <u>DI Water</u>
	100	NTU std = <u>100</u>
	1409	uS std = <u>1409</u>
	4.00	pH std = <u>4</u>
	7.00	pH std = <u>7</u>
	10.00	pH std = <u>10</u>

Calibration Notes:

[illegible]

Site: SKB Clingwater
Personnel: M. Seis, 10/11

Personnel:

Page 1 of 1



Appendix B – Laboratory Analytical Reports



ANALYTICAL REPORT

PREPARED FOR

Attn: Megan Lindstrom
Waste Connections, Inc.
13425 Courthouse Blvd
Rosemount, Minnesota 55068

Generated 4/25/2025 3:29:08 PM

JOB DESCRIPTION

SKB Cloquet CCR Groundwater
CCR Groundwater (Spring)

JOB NUMBER

310-304440-1



ANALYTICAL REPORT

PREPARED FOR

Attn: Megan Lindstrom
Waste Connections, Inc.
13425 Courthouse Blvd
Rosemount, Minnesota 55068

Generated 10/29/2025 11:32:55 AM

JOB DESCRIPTION

SKB Cloquet CCR Groundwater (Fall)
CCR Groundwater (Fall)

JOB NUMBER

310-318032-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
10/29/2025 11:32:55 AM

Authorized for release by
Zach Bindert, Senior Project Manager
Zach.Bindert@et.eurofinsus.com
(319)595-2016

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Case Narrative

Client: Waste Connections, Inc.
Project: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Job ID: 310-318032-1

Eurofins Cedar Falls

Job Narrative 310-318032-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 10/15/2025 2:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1°C and 0.6°C.

HPLC/IC

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: Waste Connections, Inc.

Job ID: 310-318032-1

Project/Site: SKB Cloquet CCR Groundwater (Fall)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-318032-1	P-1-CCR	Ground Water	10/13/25 09:55	10/15/25 14:15	Minnesota
310-318032-2	P-8-CCR	Ground Water	10/13/25 11:45	10/15/25 14:15	Minnesota
310-318032-3	P-9-CCR	Ground Water	10/13/25 12:50	10/15/25 14:15	Minnesota
310-318032-4	P-5R-CCR	Ground Water	10/13/25 13:45	10/15/25 14:15	Minnesota
310-318032-5	P-7-CCR	Ground Water	10/14/25 10:45	10/15/25 14:15	Minnesota
310-318032-6	P-6-CCR	Ground Water	10/14/25 09:50	10/15/25 14:15	Minnesota
310-318032-7	Field Blank	Water	10/14/25 11:00	10/15/25 14:15	Minnesota
310-318032-8	Equipment Blank	Water	10/14/25 11:10	10/15/25 14:15	Minnesota
310-318032-9	Duplicate 1 - CCR	Water	10/13/25 00:00	10/15/25 14:15	Minnesota

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-1-CCR

Lab Sample ID: 310-318032-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	191		5.00		mg/L	5		9056A	Total/NA
Sulfate	26.6		5.00		mg/L	5		9056A	Total/NA
Calcium	143		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	618		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.7	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-8-CCR

Lab Sample ID: 310-318032-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	96.1		5.00		mg/L	5		9056A	Total/NA
Sulfate	33.7		5.00		mg/L	5		9056A	Total/NA
Calcium	106		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	462		50.0		mg/L	1		SM 2540C	Total/NA
pH	8.0	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-9-CCR

Lab Sample ID: 310-318032-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	151		5.00		mg/L	5		9056A	Total/NA
Sulfate	27.2		5.00		mg/L	5		9056A	Total/NA
Calcium	106		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	562		50.0		mg/L	1		SM 2540C	Total/NA
pH	7.8	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-5R-CCR

Lab Sample ID: 310-318032-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	243		5.00		mg/L	5		9056A	Total/NA
Sulfate	22.5		5.00		mg/L	5		9056A	Total/NA
Calcium	139		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	796		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-7-CCR

Lab Sample ID: 310-318032-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	89.1		5.00		mg/L	5		9056A	Total/NA
Sulfate	58.9		5.00		mg/L	5		9056A	Total/NA
Boron	0.130		0.100		mg/L	1		6020B	Total/NA
Calcium	165		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	640		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-6-CCR

Lab Sample ID: 310-318032-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	58.6		5.00		mg/L	5		9056A	Total/NA
Sulfate	272		5.00		mg/L	5		9056A	Total/NA
Boron	0.243		0.100		mg/L	1		6020B	Total/NA
Calcium	198		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	900		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Waste Connections, Inc.

Job ID: 310-318032-1

Project/Site: SKB Cloquet CCR Groundwater (Fall)

Client Sample ID: Field Blank

Lab Sample ID: 310-318032-7

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	5.8	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Equipment Blank

Lab Sample ID: 310-318032-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	5.7	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Duplicate 1 - CCR

Lab Sample ID: 310-318032-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	97.6		5.00		mg/L	5		9056A	Total/NA
Sulfate	34.2		5.00		mg/L	5		9056A	Total/NA
Calcium	108		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	466		50.0		mg/L	1		SM 2540C	Total/NA
pH	8.0	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-1-CCR

Lab Sample ID: 310-318032-1

Date Collected: 10/13/25 09:55

Matrix: Ground Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	191		5.00		mg/L			10/21/25 20:45	5
Fluoride	<1.00		1.00		mg/L			10/21/25 20:45	5
Sulfate	26.6		5.00		mg/L			10/21/25 20:45	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 13:41	1
Calcium	143		0.500		mg/L		10/21/25 08:45	10/24/25 18:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	618		50.0		mg/L			10/16/25 13:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.7	HF	1.0		SU			10/16/25 02:42	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-8-CCR

Lab Sample ID: 310-318032-2

Date Collected: 10/13/25 11:45

Matrix: Ground Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.1		5.00		mg/L			10/21/25 20:57	5
Fluoride	<1.00		1.00		mg/L			10/21/25 20:57	5
Sulfate	33.7		5.00		mg/L			10/21/25 20:57	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100	F1	0.100		mg/L		10/21/25 08:45	10/27/25 13:44	1
Calcium	106		0.500		mg/L		10/21/25 08:45	10/24/25 19:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	462		50.0		mg/L			10/17/25 13:42	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	8.0	HF	1.0		SU			10/16/25 02:47	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-9-CCR

Lab Sample ID: 310-318032-3

Date Collected: 10/13/25 12:50

Matrix: Ground Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	151		5.00		mg/L			10/21/25 21:34	5
Fluoride	<1.00		1.00		mg/L			10/21/25 21:34	5
Sulfate	27.2		5.00		mg/L			10/21/25 21:34	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 14:01	1
Calcium	106		0.500		mg/L		10/21/25 08:45	10/24/25 19:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	562		50.0		mg/L			10/17/25 13:42	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.8	HF	1.0		SU			10/16/25 02:52	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-5R-CCR

Lab Sample ID: 310-318032-4

Date Collected: 10/13/25 13:45

Matrix: Ground Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	243		5.00		mg/L			10/21/25 21:46	5
Fluoride	<1.00		1.00		mg/L			10/21/25 21:46	5
Sulfate	22.5		5.00		mg/L			10/21/25 21:46	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 14:04	1
Calcium	139		0.500		mg/L		10/21/25 08:45	10/24/25 19:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	796		50.0		mg/L			10/17/25 13:42	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.9	HF	1.0		SU			10/16/25 02:53	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-7-CCR

Lab Sample ID: 310-318032-5

Date Collected: 10/14/25 10:45

Matrix: Ground Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.1		5.00		mg/L			10/21/25 21:59	5
Fluoride	<1.00		1.00		mg/L			10/21/25 21:59	5
Sulfate	58.9		5.00		mg/L			10/21/25 21:59	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.130		0.100		mg/L		10/21/25 08:45	10/27/25 14:07	1
Calcium	165		0.500		mg/L		10/21/25 08:45	10/24/25 19:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	640		50.0		mg/L			10/18/25 15:57	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.9	HF	1.0		SU			10/16/25 02:43	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-6-CCR

Lab Sample ID: 310-318032-6

Date Collected: 10/14/25 09:50

Matrix: Ground Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.6		5.00		mg/L			10/21/25 22:36	5
Fluoride	<1.00		1.00		mg/L			10/21/25 22:36	5
Sulfate	272		5.00		mg/L			10/21/25 22:36	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.243		0.100		mg/L		10/21/25 08:45	10/27/25 14:10	1
Calcium	198		0.500		mg/L		10/21/25 08:45	10/24/25 19:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	900		50.0		mg/L			10/18/25 15:57	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.9	HF	1.0		SU			10/16/25 02:40	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: Field Blank

Lab Sample ID: 310-318032-7

Date Collected: 10/14/25 11:00

Matrix: Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			10/21/25 22:48	1
Fluoride	<0.200		0.200		mg/L			10/21/25 22:48	1
Sulfate	<1.00		1.00		mg/L			10/21/25 22:48	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 14:13	1
Calcium	<0.500		0.500		mg/L		10/21/25 08:45	10/24/25 19:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<50.0		50.0		mg/L			10/18/25 15:57	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	5.8	HF	1.0		SU			10/16/25 02:45	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: Equipment Blank

Lab Sample ID: 310-318032-8

Date Collected: 10/14/25 11:10

Matrix: Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			10/21/25 23:01	1
Fluoride	<0.200		0.200		mg/L			10/21/25 23:01	1
Sulfate	<1.00		1.00		mg/L			10/21/25 23:01	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 14:16	1
Calcium	<0.500		0.500		mg/L		10/21/25 08:45	10/24/25 19:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<50.0		50.0		mg/L			10/18/25 15:57	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	5.7	HF	1.0		SU			10/16/25 02:46	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: Duplicate 1 - CCR

Lab Sample ID: 310-318032-9

Date Collected: 10/13/25 00:00

Matrix: Water

Date Received: 10/15/25 14:15

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.6		5.00		mg/L			10/22/25 11:55	5
Fluoride	<1.00		1.00		mg/L			10/22/25 11:55	5
Sulfate	34.2		5.00		mg/L			10/22/25 11:55	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 14:19	1
Calcium	108		0.500		mg/L		10/21/25 08:45	10/24/25 19:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	466		50.0		mg/L			10/17/25 13:42	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	8.0	HF	1.0		SU			10/16/25 02:53	1

Definitions/Glossary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

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

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-470984/3

Matrix: Water

Analysis Batch: 470984

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			10/21/25 18:48	1
Fluoride	<0.200		0.200		mg/L			10/21/25 18:48	1
Sulfate	<1.00		1.00		mg/L			10/21/25 18:48	1

Lab Sample ID: LCS 310-470984/4

Matrix: Water

Analysis Batch: 470984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.854		mg/L		99	90 - 110
Fluoride	2.00	2.084		mg/L		104	90 - 110
Sulfate	10.0	9.964		mg/L		100	90 - 110

Lab Sample ID: 310-318032-2 MS

Matrix: Ground Water

Analysis Batch: 470984

Client Sample ID: P-8-CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	96.1		25.0	121.7		mg/L		102	80 - 120
Fluoride	<1.00		5.00	5.251		mg/L		105	80 - 120
Sulfate	33.7		25.0	59.16		mg/L		102	80 - 120

Lab Sample ID: 310-318032-2 MSD

Matrix: Ground Water

Analysis Batch: 470984

Client Sample ID: P-8-CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	96.1		25.0	120.4		mg/L		97	80 - 120	1	15
Fluoride	<1.00		5.00	5.290		mg/L		106	80 - 120	1	15
Sulfate	33.7		25.0	58.82		mg/L		100	80 - 120	1	15

Lab Sample ID: MB 310-471675/3

Matrix: Water

Analysis Batch: 471675

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			10/22/25 11:27	1
Fluoride	<0.200		0.200		mg/L			10/22/25 11:27	1
Sulfate	<1.00		1.00		mg/L			10/22/25 11:27	1

Lab Sample ID: LCS 310-471675/4

Matrix: Water

Analysis Batch: 471675

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.739		mg/L		97	90 - 110
Fluoride	2.00	2.076		mg/L		104	90 - 110
Sulfate	10.0	9.898		mg/L		99	90 - 110

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 310-318032-9 MS

Matrix: Water

Analysis Batch: 471675

Client Sample ID: Duplicate 1 - CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	97.6		25.0	118.6		mg/L		84	80 - 120
Fluoride	<1.00		5.00	5.189		mg/L		104	80 - 120
Sulfate	34.2		25.0	58.06		mg/L		96	80 - 120

Lab Sample ID: 310-318032-9 MSD

Matrix: Water

Analysis Batch: 471675

Client Sample ID: Duplicate 1 - CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	97.6		25.0	118.7		mg/L		84	80 - 120	0	15
Fluoride	<1.00		5.00	5.296		mg/L		106	80 - 120	2	15
Sulfate	34.2		25.0	58.27		mg/L		96	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-470692/1-A

Matrix: Water

Analysis Batch: 471347

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.500		0.500		mg/L		10/21/25 08:45	10/24/25 18:47	1

Lab Sample ID: MB 310-470692/1-A

Matrix: Water

Analysis Batch: 471495

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/21/25 08:45	10/27/25 16:43	1

Lab Sample ID: LCS 310-470692/2-A

Matrix: Water

Analysis Batch: 471347

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	2.00	2.012		mg/L		101	80 - 120

Lab Sample ID: LCS 310-470692/2-A

Matrix: Water

Analysis Batch: 471495

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.200	0.1968		mg/L		98	80 - 120

Lab Sample ID: 310-318032-2 MS

Matrix: Ground Water

Analysis Batch: 471347

Client Sample ID: P-8-CCR

Prep Type: Total/NA

Prep Batch: 470692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	106		2.00	112.4	4	mg/L		312	75 - 125

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-318032-2 MS
Matrix: Ground Water
Analysis Batch: 471495

Client Sample ID: P-8-CCR
Prep Type: Total/NA
Prep Batch: 470692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	<0.100	F1	0.200	0.2547	F1	mg/L		127	75 - 125

Lab Sample ID: 310-318032-2 MSD
Matrix: Ground Water
Analysis Batch: 471347

Client Sample ID: P-8-CCR
Prep Type: Total/NA
Prep Batch: 470692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	106		2.00	110.5	4	mg/L		215	75 - 125	2	20

Lab Sample ID: 310-318032-2 MSD
Matrix: Ground Water
Analysis Batch: 471495

Client Sample ID: P-8-CCR
Prep Type: Total/NA
Prep Batch: 470692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	<0.100	F1	0.200	0.2547	F1	mg/L		127	75 - 125	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-470397/1
Matrix: Water
Analysis Batch: 470397

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			10/16/25 13:56	1

Lab Sample ID: LCS 310-470397/2
Matrix: Water
Analysis Batch: 470397

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	962.0		mg/L		96	89 - 110

Lab Sample ID: MB 310-470453/1
Matrix: Water
Analysis Batch: 470453

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			10/17/25 13:42	1

Lab Sample ID: LCS 310-470453/2
Matrix: Water
Analysis Batch: 470453

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	980.0		mg/L		98	89 - 110

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 310-470551/1
Matrix: Water
Analysis Batch: 470551

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			10/18/25 15:57	1

Lab Sample ID: LCS 310-470551/2
Matrix: Water
Analysis Batch: 470551

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	968.0		mg/L		97	89 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-470257/28
Matrix: Water
Analysis Batch: 470257

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	98 - 102

Lab Sample ID: 310-318032-6 DU
Matrix: Ground Water
Analysis Batch: 470257

Client Sample ID: P-6-CCR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.9	HF	6.9		SU		0.7	20

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

HPLC/IC

Analysis Batch: 470984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-1	P-1-CCR	Total/NA	Ground Water	9056A	
310-318032-2	P-8-CCR	Total/NA	Ground Water	9056A	
310-318032-3	P-9-CCR	Total/NA	Ground Water	9056A	
310-318032-4	P-5R-CCR	Total/NA	Ground Water	9056A	
310-318032-5	P-7-CCR	Total/NA	Ground Water	9056A	
310-318032-6	P-6-CCR	Total/NA	Ground Water	9056A	
310-318032-7	Field Blank	Total/NA	Water	9056A	
310-318032-8	Equipment Blank	Total/NA	Water	9056A	
MB 310-470984/3	Method Blank	Total/NA	Water	9056A	
LCS 310-470984/4	Lab Control Sample	Total/NA	Water	9056A	
310-318032-2 MS	P-8-CCR	Total/NA	Ground Water	9056A	
310-318032-2 MSD	P-8-CCR	Total/NA	Ground Water	9056A	

Analysis Batch: 471675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-9	Duplicate 1 - CCR	Total/NA	Water	9056A	
MB 310-471675/3	Method Blank	Total/NA	Water	9056A	
LCS 310-471675/4	Lab Control Sample	Total/NA	Water	9056A	
310-318032-9 MS	Duplicate 1 - CCR	Total/NA	Water	9056A	
310-318032-9 MSD	Duplicate 1 - CCR	Total/NA	Water	9056A	

Metals

Prep Batch: 470692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-1	P-1-CCR	Total/NA	Ground Water	3005A	
310-318032-2	P-8-CCR	Total/NA	Ground Water	3005A	
310-318032-3	P-9-CCR	Total/NA	Ground Water	3005A	
310-318032-4	P-5R-CCR	Total/NA	Ground Water	3005A	
310-318032-5	P-7-CCR	Total/NA	Ground Water	3005A	
310-318032-6	P-6-CCR	Total/NA	Ground Water	3005A	
310-318032-7	Field Blank	Total/NA	Water	3005A	
310-318032-8	Equipment Blank	Total/NA	Water	3005A	
310-318032-9	Duplicate 1 - CCR	Total/NA	Water	3005A	
MB 310-470692/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-470692/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-318032-2 MS	P-8-CCR	Total/NA	Ground Water	3005A	
310-318032-2 MSD	P-8-CCR	Total/NA	Ground Water	3005A	

Analysis Batch: 471347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-1	P-1-CCR	Total/NA	Ground Water	6020B	470692
310-318032-2	P-8-CCR	Total/NA	Ground Water	6020B	470692
310-318032-3	P-9-CCR	Total/NA	Ground Water	6020B	470692
310-318032-4	P-5R-CCR	Total/NA	Ground Water	6020B	470692
310-318032-5	P-7-CCR	Total/NA	Ground Water	6020B	470692
310-318032-6	P-6-CCR	Total/NA	Ground Water	6020B	470692
310-318032-7	Field Blank	Total/NA	Water	6020B	470692
310-318032-8	Equipment Blank	Total/NA	Water	6020B	470692
310-318032-9	Duplicate 1 - CCR	Total/NA	Water	6020B	470692
MB 310-470692/1-A	Method Blank	Total/NA	Water	6020B	470692

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QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Metals (Continued)

Analysis Batch: 471347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-470692/2-A	Lab Control Sample	Total/NA	Water	6020B	470692
310-318032-2 MS	P-8-CCR	Total/NA	Ground Water	6020B	470692
310-318032-2 MSD	P-8-CCR	Total/NA	Ground Water	6020B	470692

Analysis Batch: 471495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-1	P-1-CCR	Total/NA	Ground Water	6020B	470692
310-318032-2	P-8-CCR	Total/NA	Ground Water	6020B	470692
310-318032-3	P-9-CCR	Total/NA	Ground Water	6020B	470692
310-318032-4	P-5R-CCR	Total/NA	Ground Water	6020B	470692
310-318032-5	P-7-CCR	Total/NA	Ground Water	6020B	470692
310-318032-6	P-6-CCR	Total/NA	Ground Water	6020B	470692
310-318032-7	Field Blank	Total/NA	Water	6020B	470692
310-318032-8	Equipment Blank	Total/NA	Water	6020B	470692
310-318032-9	Duplicate 1 - CCR	Total/NA	Water	6020B	470692
MB 310-470692/1-A	Method Blank	Total/NA	Water	6020B	470692
LCS 310-470692/2-A	Lab Control Sample	Total/NA	Water	6020B	470692
310-318032-2 MS	P-8-CCR	Total/NA	Ground Water	6020B	470692
310-318032-2 MSD	P-8-CCR	Total/NA	Ground Water	6020B	470692

General Chemistry

Analysis Batch: 470257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-1	P-1-CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-318032-2	P-8-CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-318032-3	P-9-CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-318032-4	P-5R-CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-318032-5	P-7-CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-318032-6	P-6-CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-318032-7	Field Blank	Total/NA	Water	SM 4500 H+ B	
310-318032-8	Equipment Blank	Total/NA	Water	SM 4500 H+ B	
310-318032-9	Duplicate 1 - CCR	Total/NA	Water	SM 4500 H+ B	
LCS 310-470257/28	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-318032-6 DU	P-6-CCR	Total/NA	Ground Water	SM 4500 H+ B	

Analysis Batch: 470397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-1	P-1-CCR	Total/NA	Ground Water	SM 2540C	
MB 310-470397/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-470397/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 470453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-2	P-8-CCR	Total/NA	Ground Water	SM 2540C	
310-318032-3	P-9-CCR	Total/NA	Ground Water	SM 2540C	
310-318032-4	P-5R-CCR	Total/NA	Ground Water	SM 2540C	
310-318032-9	Duplicate 1 - CCR	Total/NA	Water	SM 2540C	
MB 310-470453/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-470453/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.

Job ID: 310-318032-1

Project/Site: SKB Cloquet CCR Groundwater (Fall)

General Chemistry

Analysis Batch: 470551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-318032-5	P-7-CCR	Total/NA	Ground Water	SM 2540C	
310-318032-6	P-6-CCR	Total/NA	Ground Water	SM 2540C	
310-318032-7	Field Blank	Total/NA	Water	SM 2540C	
310-318032-8	Equipment Blank	Total/NA	Water	SM 2540C	
MB 310-470551/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-470551/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-1-CCR

Date Collected: 10/13/25 09:55

Date Received: 10/15/25 14:15

Lab Sample ID: 310-318032-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	470984	ZRI4	EET CF	10/21/25 20:45
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 18:58
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 13:41
Total/NA	Analysis	SM 2540C		1	470397	TGN5	EET CF	10/16/25 13:56
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:42

Client Sample ID: P-8-CCR

Date Collected: 10/13/25 11:45

Date Received: 10/15/25 14:15

Lab Sample ID: 310-318032-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	470984	ZRI4	EET CF	10/21/25 20:57
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:01
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 13:44
Total/NA	Analysis	SM 2540C		1	470453	TGN5	EET CF	10/17/25 13:42
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:47

Client Sample ID: P-9-CCR

Date Collected: 10/13/25 12:50

Date Received: 10/15/25 14:15

Lab Sample ID: 310-318032-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	470984	ZRI4	EET CF	10/21/25 21:34
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:13
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:01
Total/NA	Analysis	SM 2540C		1	470453	TGN5	EET CF	10/17/25 13:42
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:52

Client Sample ID: P-5R-CCR

Date Collected: 10/13/25 13:45

Date Received: 10/15/25 14:15

Lab Sample ID: 310-318032-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	470984	ZRI4	EET CF	10/21/25 21:46
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:16
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:04

Eurofins Cedar Falls

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: P-5R-CCR

Lab Sample ID: 310-318032-4

Date Collected: 10/13/25 13:45

Matrix: Ground Water

Date Received: 10/15/25 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	470453	TGN5	EET CF	10/17/25 13:42
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:53

Client Sample ID: P-7-CCR

Lab Sample ID: 310-318032-5

Date Collected: 10/14/25 10:45

Matrix: Ground Water

Date Received: 10/15/25 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	470984	ZRI4	EET CF	10/21/25 21:59
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:18
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:07
Total/NA	Analysis	SM 2540C		1	470551	ENB7	EET CF	10/18/25 15:57
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:43

Client Sample ID: P-6-CCR

Lab Sample ID: 310-318032-6

Date Collected: 10/14/25 09:50

Matrix: Ground Water

Date Received: 10/15/25 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	470984	ZRI4	EET CF	10/21/25 22:36
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:21
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:10
Total/NA	Analysis	SM 2540C		1	470551	ENB7	EET CF	10/18/25 15:57
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:40

Client Sample ID: Field Blank

Lab Sample ID: 310-318032-7

Date Collected: 10/14/25 11:00

Matrix: Water

Date Received: 10/15/25 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	470984	ZRI4	EET CF	10/21/25 22:48
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:30
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:13
Total/NA	Analysis	SM 2540C		1	470551	ENB7	EET CF	10/18/25 15:57
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:45

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Client Sample ID: Equipment Blank

Lab Sample ID: 310-318032-8

Date Collected: 10/14/25 11:10

Matrix: Water

Date Received: 10/15/25 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	470984	ZRI4	EET CF	10/21/25 23:01
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:33
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:16
Total/NA	Analysis	SM 2540C		1	470551	ENB7	EET CF	10/18/25 15:57
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:46

Client Sample ID: Duplicate 1 - CCR

Lab Sample ID: 310-318032-9

Date Collected: 10/13/25 00:00

Matrix: Water

Date Received: 10/15/25 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	471675	ZRI4	EET CF	10/22/25 11:55
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471347	ZRI4	EET CF	10/24/25 19:36
Total/NA	Prep	3005A			470692	RLT9	EET CF	10/21/25 08:45
Total/NA	Analysis	6020B		1	471495	NFT2	EET CF	10/27/25 14:19
Total/NA	Analysis	SM 2540C		1	470453	TGN5	EET CF	10/17/25 13:42
Total/NA	Analysis	SM 4500 H+ B		1	470257	ZJX4	EET CF	10/16/25 02:53

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater (Fall)

Job ID: 310-318032-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Minnesota	NELAP	019-999-319	12-31-25

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

Method Summary

Client: Waste Connections, Inc.

Job ID: 310-318032-1

Project/Site: SKB Cloquet CCR Groundwater (Fall)

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

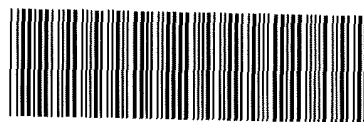
Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>GIES</u>			
City/State:	CITY <u>Eagan</u>	STATE <u>MN</u>	Project: <u>CCR</u>
Receipt Information			
Date/Time Received:	DATE <u>10/15/25</u>	TIME <u>1415</u>	Received By: <u>ES</u>
Delivery Type. ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? ☒ Yes ☐ No If yes: Cooler ID _____			
Multiple Coolers? ☒ Yes ☐ No If yes: Cooler # <u>1</u> of <u>2</u>			
Cooler Custody Seals Present? ☒ Yes ☐ No If yes: Cooler custody seals intact? ☒ Yes ☐ No			
Sample Custody Seals Present? ☐ Yes ☒ No If yes: Sample custody seals intact? ☐ Yes ☐ No			
Trip Blank Present? ☐ Yes ☒ No If yes. Which VOA samples are in cooler? ↓			
Temperature Record			
Coolant. ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID. <u>HA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C). <u>0.1</u>		Corrected Temp (°C): <u>0.1</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C).			
Corrected Temp (°C)			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No			
a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE. If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>GES</u>			
City/State:	CITY <u>Eagan</u>	STATE <u>MN</u>	Project: <u>CCR</u>
Receipt Information			
Date/Time Received:	DATE <u>10/15/25</u>	TIME <u>1415</u>	Received By: <u>ES</u>
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No If yes Cooler ID _____	
Multiple Coolers?		☒ Yes ☐ No If yes: Cooler # <u>2</u> of <u>2</u>	
Cooler Custody Seals Present?		☒ Yes ☐ No If yes Cooler custody seals intact? ☒ Yes ☐ No	
Sample Custody Seals Present?		☐ Yes ☒ No If yes Sample custody seals intact? ☐ Yes ☐ No	
Trip Blank Present?		☐ Yes ☒ No If yes. Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>AAA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C) <u>0.6</u>		Corrected Temp (°C): <u>0.6</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			

Client Information		Sampler		Lab P/N:		COC No.					
Client Contact: Mr. Nicholas Schlager		Phone: 651-792-6685		Bindert, Zach T		310-73819-21058-1					
Company: Groundwater & Environmental Services Inc		PWSID:		State of Origin: MN		Page 1 of 1					
Address: 1301 Corporate Center Drive Suite 190		Due Date Requested:		Carmer Tracking No(s):		Job #:					
City: Eagan		TAT Requested (days): Standard 7AT		Analysis Requested		Preservation Codes					
State Zip: MN 55121-1562		Compliance Project: Δ Yes Δ No		Perform MS/MSD (Yes or No)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)					
Phone:		Purchase Order Requested		Field Filtered Sample (Yes or No)		G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other					
Email: NSchlager@gesonline.com		WO #:		Chloride, Fluoride and Sulfate - 9066A_ORGFM_28D		Total Number of Containers					
Project Name: SKB Cloquet CCR Groundwater (Fall)		Project #:		6020B - Boron and Calcium		Special Instructions/Note:					
Site: Minnesota		SSOW#:		TDS - 2540C_Calcd, pH - SM4600_H+							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride, Fluoride and Sulfate - 9066A_ORGFM_28D	6020B - Boron and Calcium	TDS - 2540C_Calcd, pH - SM4600_H+	Analysis Requested	Preservation Codes
Duplicate 1 - CCR	10/13/25	9:35	6	Water							
P-1 - CCR	10/13/25	9:35	6	Water							
P-2 - CCR	10/13/25	9:35	6	Water							
P-3 - CCR	10/13/25	11:45	6	Water							
P-4 - CCR	10/13/25	12:50	6	Water							
P-5 - CCR	10/13/25	13:45	6	Water							
P-6 - CCR	10/14/25	10:40	6	Water							
P-7 - CCR	10/14/25	9:50	6	Water							
P-8 - CCR	10/14/25	11:00	6	Water							
P-9 - CCR	10/14/25	11:10	6	Water							
Field Blank - CCR				Water							
Equipment Blank - CCR				Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested I, II, III, IV Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date/Time: 10/14/25 1141 Company: Eurofins

Relinquished by: _____ Date/Time: 10/14/25 1630 Company: Eurofins

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Δ Yes Δ No

Custody Seal No. _____

Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: Waste Connections, Inc.

Job Number: 310-318032-1

SDG Number:

Login Number: 318032

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Authorized for release by
Zach Bindert, Senior Project Manager
Zach.Bindert@et.eurofinsus.com
(319)595-2016

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Case Narrative

Client: Waste Connections, Inc.
Project: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Job ID: 310-304440-1

Eurofins Cedar Falls

Job Narrative 310-304440-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt

The samples were received on 4/17/2025 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.5°C, 0.8°C and 1.8°C.

HPLC/IC

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: Duplicate 1 - CCR (310-304440-1), P-1 - CCR (310-304440-2), P-8 - CCR (310-304440-3), P-9 - CCR (310-304440-4) and P-6 - CCR (310-304440-5). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: P-7 - CCR (310-304440-6) and P-5R - CCR (310-304440-9). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-304440-1	Duplicate 1 - CCR	Ground Water	04/15/25 00:00	04/17/25 13:30
310-304440-2	P-1 - CCR	Ground Water	04/15/25 09:25	04/17/25 13:30
310-304440-3	P-8 - CCR	Ground Water	04/15/25 11:15	04/17/25 13:30
310-304440-4	P-9 - CCR	Ground Water	04/15/25 12:25	04/17/25 13:30
310-304440-5	P-6 - CCR	Ground Water	04/16/25 10:00	04/17/25 13:30
310-304440-6	P-7 - CCR	Ground Water	04/16/25 10:40	04/17/25 13:30
310-304440-7	Equipment Blank - CCR	Water	04/16/25 10:45	04/17/25 13:30
310-304440-8	Field Blank - CCR	Water	04/16/25 10:50	04/17/25 13:30
310-304440-9	P-5R - CCR	Ground Water	04/16/25 13:35	04/17/25 13:30

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: Duplicate 1 - CCR

Lab Sample ID: 310-304440-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	100		5.00		mg/L	5		9056A	Total/NA
Sulfate	34.0		5.00		mg/L	5		9056A	Total/NA
Calcium	106		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	436		50.0		mg/L	1		SM 2540C	Total/NA
pH	7.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-1 - CCR

Lab Sample ID: 310-304440-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	270		5.00		mg/L	5		9056A	Total/NA
Sulfate	25.3		5.00		mg/L	5		9056A	Total/NA
Calcium	167		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	756		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.7	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-8 - CCR

Lab Sample ID: 310-304440-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	103		5.00		mg/L	5		9056A	Total/NA
Sulfate	34.5		5.00		mg/L	5		9056A	Total/NA
Calcium	107		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	452		50.0		mg/L	1		SM 2540C	Total/NA
pH	7.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-9 - CCR

Lab Sample ID: 310-304440-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	137		5.00		mg/L	5		9056A	Total/NA
Sulfate	25.9		5.00		mg/L	5		9056A	Total/NA
Calcium	93.9		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	500		50.0		mg/L	1		SM 2540C	Total/NA
pH	7.6	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-6 - CCR

Lab Sample ID: 310-304440-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	65.0		5.00		mg/L	5		9056A	Total/NA
Sulfate	270		5.00		mg/L	5		9056A	Total/NA
Boron	0.263		0.100		mg/L	1		6020B	Total/NA
Calcium	201		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	994		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.8	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-7 - CCR

Lab Sample ID: 310-304440-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	77.3		5.00		mg/L	5		9056A	Total/NA
Sulfate	35.8		5.00		mg/L	5		9056A	Total/NA
Boron	0.100		0.100		mg/L	1		6020B	Total/NA
Calcium	117		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	520		50.0		mg/L	1		SM 2540C	Total/NA
pH	7.0	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-304440-7

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	6.0	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Field Blank - CCR

Lab Sample ID: 310-304440-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	5.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: P-5R - CCR

Lab Sample ID: 310-304440-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	232		5.00		mg/L	5		9056A	Total/NA
Sulfate	19.3		5.00		mg/L	5		9056A	Total/NA
Calcium	140		0.500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	758		50.0		mg/L	1		SM 2540C	Total/NA
pH	6.8	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: Duplicate 1 - CCR

Lab Sample ID: 310-304440-1

Date Collected: 04/15/25 00:00

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		5.00		mg/L			04/22/25 15:57	5
Fluoride	<1.00		1.00		mg/L			04/22/25 15:57	5
Sulfate	34.0		5.00		mg/L			04/22/25 15:57	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/18/25 12:37	04/22/25 14:40	1
Calcium	106		0.500		mg/L		04/18/25 12:37	04/22/25 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	436		50.0		mg/L			04/18/25 13:44	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			04/17/25 14:30	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-1 - CCR

Lab Sample ID: 310-304440-2

Date Collected: 04/15/25 09:25

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		5.00		mg/L			04/22/25 16:37	5
Fluoride	<1.00		1.00		mg/L			04/22/25 16:37	5
Sulfate	25.3		5.00		mg/L			04/22/25 16:37	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/18/25 12:37	04/22/25 14:37	1
Calcium	167		0.500		mg/L		04/18/25 12:37	04/22/25 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	756		50.0		mg/L			04/18/25 13:44	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.7	HF	1.0		SU			04/17/25 14:21	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-8 - CCR

Lab Sample ID: 310-304440-3

Date Collected: 04/15/25 11:15

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		5.00		mg/L			04/22/25 16:50	5
Fluoride	<1.00		1.00		mg/L			04/22/25 16:50	5
Sulfate	34.5		5.00		mg/L			04/22/25 16:50	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/18/25 12:37	04/22/25 13:42	1
Calcium	107		0.500		mg/L		04/18/25 12:37	04/22/25 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	452		50.0		mg/L			04/18/25 13:44	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.9	HF	1.0		SU			04/17/25 14:25	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-9 - CCR

Lab Sample ID: 310-304440-4

Date Collected: 04/15/25 12:25

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	137		5.00		mg/L			04/22/25 17:29	5
Fluoride	<1.00		1.00		mg/L			04/22/25 17:29	5
Sulfate	25.9		5.00		mg/L			04/22/25 17:29	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/21/25 09:00	04/23/25 15:20	1
Calcium	93.9		0.500		mg/L		04/21/25 09:00	04/23/25 15:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	500		50.0		mg/L			04/18/25 13:44	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.6	HF	1.0		SU			04/17/25 14:20	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-6 - CCR

Lab Sample ID: 310-304440-5

Date Collected: 04/16/25 10:00

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.0		5.00		mg/L			04/22/25 17:42	5
Fluoride	<1.00		1.00		mg/L			04/22/25 17:42	5
Sulfate	270		5.00		mg/L			04/22/25 17:42	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.263		0.100		mg/L		04/18/25 12:37	04/22/25 14:44	1
Calcium	201		0.500		mg/L		04/18/25 12:37	04/22/25 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	994		50.0		mg/L			04/18/25 13:46	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.8	HF	1.0		SU			04/17/25 14:27	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-7 - CCR

Lab Sample ID: 310-304440-6

Date Collected: 04/16/25 10:40

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.3		5.00		mg/L			04/22/25 16:30	5
Fluoride	<1.00		1.00		mg/L			04/22/25 16:30	5
Sulfate	35.8		5.00		mg/L			04/22/25 16:30	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.100		0.100		mg/L		04/18/25 12:37	04/22/25 14:42	1
Calcium	117		0.500		mg/L		04/18/25 12:37	04/22/25 14:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	520		50.0		mg/L			04/18/25 13:46	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.0	HF	1.0		SU			04/17/25 14:22	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-304440-7

Date Collected: 04/16/25 10:45

Matrix: Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			04/22/25 17:16	1
Fluoride	<0.200		0.200		mg/L			04/22/25 17:16	1
Sulfate	<1.00		1.00		mg/L			04/22/25 17:16	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/18/25 12:37	04/22/25 14:18	1
Calcium	<0.500		0.500		mg/L		04/18/25 12:37	04/22/25 14:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<50.0		50.0		mg/L			04/18/25 13:46	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.0	HF	1.0		SU			04/17/25 14:29	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: Field Blank - CCR

Lab Sample ID: 310-304440-8

Date Collected: 04/16/25 10:50

Matrix: Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			04/22/25 17:32	1
Fluoride	<0.200		0.200		mg/L			04/22/25 17:32	1
Sulfate	<1.00		1.00		mg/L			04/22/25 17:32	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/18/25 12:37	04/22/25 14:28	1
Calcium	<0.500		0.500		mg/L		04/18/25 12:37	04/22/25 14:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<50.0		50.0		mg/L			04/18/25 13:46	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	5.9	HF	1.0		SU			04/17/25 14:29	1

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-5R - CCR

Lab Sample ID: 310-304440-9

Date Collected: 04/16/25 13:35

Matrix: Ground Water

Date Received: 04/17/25 13:30

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	232		5.00		mg/L			04/22/25 17:47	5
Fluoride	<1.00		1.00		mg/L			04/22/25 17:47	5
Sulfate	19.3		5.00		mg/L			04/22/25 17:47	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/21/25 09:00	04/23/25 15:17	1
Calcium	140		0.500		mg/L		04/21/25 09:00	04/23/25 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	758		50.0		mg/L			04/18/25 13:46	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	6.8	HF	1.0		SU			04/17/25 14:28	1

Definitions/Glossary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Glossary

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

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-452649/3

Matrix: Water

Analysis Batch: 452649

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			04/22/25 14:00	1
Fluoride	<0.200		0.200		mg/L			04/22/25 14:00	1
Sulfate	<1.00		1.00		mg/L			04/22/25 14:00	1

Lab Sample ID: LCS 310-452649/4

Matrix: Water

Analysis Batch: 452649

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.24		mg/L		102	90 - 110
Fluoride	2.00	2.053		mg/L		103	90 - 110
Sulfate	10.0	10.38		mg/L		104	90 - 110

Lab Sample ID: 310-304440-3 MS

Matrix: Ground Water

Analysis Batch: 452649

Client Sample ID: P-8 - CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	103		25.0	127.4	4	mg/L		98	80 - 120
Fluoride	<1.00		5.00	5.046		mg/L		101	80 - 120
Sulfate	34.5		25.0	60.09		mg/L		102	80 - 120

Lab Sample ID: 310-304440-3 MSD

Matrix: Ground Water

Analysis Batch: 452649

Client Sample ID: P-8 - CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	103		25.0	121.4	4	mg/L		74	80 - 120	5	15
Fluoride	<1.00		5.00	4.794		mg/L		96	80 - 120	5	15
Sulfate	34.5		25.0	57.33		mg/L		91	80 - 120	5	15

Lab Sample ID: MB 310-452750/3

Matrix: Water

Analysis Batch: 452750

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			04/22/25 15:27	1
Fluoride	<0.200		0.200		mg/L			04/22/25 15:27	1
Sulfate	<1.00		1.00		mg/L			04/22/25 15:27	1

Lab Sample ID: LCS 310-452750/4

Matrix: Water

Analysis Batch: 452750

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.04		mg/L		100	90 - 110
Fluoride	2.00	2.123		mg/L		106	90 - 110
Sulfate	10.0	10.04		mg/L		100	90 - 110

Eurofins Cedar Falls

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-452056/1-A

Matrix: Water

Analysis Batch: 452401

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 452056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/18/25 12:37	04/22/25 13:38	1

Lab Sample ID: MB 310-452056/1-A

Matrix: Water

Analysis Batch: 452481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 452056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.500		0.500		mg/L		04/18/25 12:37	04/23/25 12:35	1

Lab Sample ID: LCS 310-452056/2-A

Matrix: Water

Analysis Batch: 452401

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 452056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.200	0.1779		mg/L		89	80 - 120

Lab Sample ID: LCS 310-452056/2-A

Matrix: Water

Analysis Batch: 452481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 452056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	2.00	1.598		mg/L		80	80 - 120

Lab Sample ID: 310-304440-3 MS

Matrix: Ground Water

Analysis Batch: 452401

Client Sample ID: P-8 - CCR

Prep Type: Total/NA

Prep Batch: 452056

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	<0.100		0.200	0.2214		mg/L		111	75 - 125
Calcium	107		2.00	105.2	4	mg/L		-93	75 - 125

Lab Sample ID: 310-304440-3 MSD

Matrix: Ground Water

Analysis Batch: 452401

Client Sample ID: P-8 - CCR

Prep Type: Total/NA

Prep Batch: 452056

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	<0.100		0.200	0.2219		mg/L		111	75 - 125	0	20
Calcium	107		2.00	105.0	4	mg/L		-103	75 - 125	0	20

Lab Sample ID: 310-304440-7 DU

Matrix: Water

Analysis Batch: 452401

Client Sample ID: Equipment Blank - CCR

Prep Type: Total/NA

Prep Batch: 452056

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	<0.100		<0.100		mg/L		NC	20
Calcium	<0.500		<0.500		mg/L		NC	20

Eurofins Cedar Falls

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-452057/1-A

Matrix: Water

Analysis Batch: 452529

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 452057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		04/21/25 09:00	04/23/25 14:53	1
Calcium	<0.500		0.500		mg/L		04/21/25 09:00	04/23/25 14:53	1

Lab Sample ID: LCS 310-452057/2-A

Matrix: Water

Analysis Batch: 452529

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 452057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.200	0.2004		mg/L		100	80 - 120
Calcium	2.00	1.804		mg/L		90	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-452075/1

Matrix: Water

Analysis Batch: 452075

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			04/18/25 13:44	1

Lab Sample ID: LCS 310-452075/2

Matrix: Water

Analysis Batch: 452075

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	964.0		mg/L		96	88 - 110

Lab Sample ID: 310-304440-3 DU

Matrix: Ground Water

Analysis Batch: 452075

Client Sample ID: P-8 - CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	452		450.0		mg/L		0.4	16

Lab Sample ID: MB 310-452076/1

Matrix: Water

Analysis Batch: 452076

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			04/18/25 13:46	1

Lab Sample ID: LCS 310-452076/2

Matrix: Water

Analysis Batch: 452076

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1014		mg/L		101	88 - 110

Eurofins Cedar Falls

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-451851/19

Matrix: Water

Analysis Batch: 451851

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	98 - 102

Lab Sample ID: 310-304440-3 DU

Matrix: Ground Water

Analysis Batch: 451851

Client Sample ID: P-8 - CCR

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.9	HF	7.9		SU		0.1	20

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

HPLC/IC

Analysis Batch: 452649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-1	Duplicate 1 - CCR	Total/NA	Ground Water	9056A	
310-304440-2	P-1 - CCR	Total/NA	Ground Water	9056A	
310-304440-3	P-8 - CCR	Total/NA	Ground Water	9056A	
310-304440-4	P-9 - CCR	Total/NA	Ground Water	9056A	
310-304440-5	P-6 - CCR	Total/NA	Ground Water	9056A	
MB 310-452649/3	Method Blank	Total/NA	Water	9056A	
LCS 310-452649/4	Lab Control Sample	Total/NA	Water	9056A	
310-304440-3 MS	P-8 - CCR	Total/NA	Ground Water	9056A	
310-304440-3 MSD	P-8 - CCR	Total/NA	Ground Water	9056A	

Analysis Batch: 452750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-6	P-7 - CCR	Total/NA	Ground Water	9056A	
310-304440-7	Equipment Blank - CCR	Total/NA	Water	9056A	
310-304440-8	Field Blank - CCR	Total/NA	Water	9056A	
310-304440-9	P-5R - CCR	Total/NA	Ground Water	9056A	
MB 310-452750/3	Method Blank	Total/NA	Water	9056A	
LCS 310-452750/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 452056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-1	Duplicate 1 - CCR	Total/NA	Ground Water	3005A	
310-304440-2	P-1 - CCR	Total/NA	Ground Water	3005A	
310-304440-3	P-8 - CCR	Total/NA	Ground Water	3005A	
310-304440-5	P-6 - CCR	Total/NA	Ground Water	3005A	
310-304440-6	P-7 - CCR	Total/NA	Ground Water	3005A	
310-304440-7	Equipment Blank - CCR	Total/NA	Water	3005A	
310-304440-8	Field Blank - CCR	Total/NA	Water	3005A	
MB 310-452056/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-452056/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-304440-3 MS	P-8 - CCR	Total/NA	Ground Water	3005A	
310-304440-3 MSD	P-8 - CCR	Total/NA	Ground Water	3005A	
310-304440-7 DU	Equipment Blank - CCR	Total/NA	Water	3005A	

Prep Batch: 452057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-4	P-9 - CCR	Total/NA	Ground Water	3005A	
310-304440-9	P-5R - CCR	Total/NA	Ground Water	3005A	
MB 310-452057/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-452057/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 452401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-1	Duplicate 1 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-2	P-1 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-3	P-8 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-5	P-6 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-6	P-7 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-7	Equipment Blank - CCR	Total/NA	Water	6020B	452056

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Metals (Continued)

Analysis Batch: 452401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-8	Field Blank - CCR	Total/NA	Water	6020B	452056
MB 310-452056/1-A	Method Blank	Total/NA	Water	6020B	452056
LCS 310-452056/2-A	Lab Control Sample	Total/NA	Water	6020B	452056
310-304440-3 MS	P-8 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-3 MSD	P-8 - CCR	Total/NA	Ground Water	6020B	452056
310-304440-7 DU	Equipment Blank - CCR	Total/NA	Water	6020B	452056

Analysis Batch: 452481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-452056/1-A	Method Blank	Total/NA	Water	6020B	452056
LCS 310-452056/2-A	Lab Control Sample	Total/NA	Water	6020B	452056

Analysis Batch: 452529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-4	P-9 - CCR	Total/NA	Ground Water	6020B	452057
310-304440-9	P-5R - CCR	Total/NA	Ground Water	6020B	452057
MB 310-452057/1-A	Method Blank	Total/NA	Water	6020B	452057
LCS 310-452057/2-A	Lab Control Sample	Total/NA	Water	6020B	452057

General Chemistry

Analysis Batch: 451851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-1	Duplicate 1 - CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-304440-2	P-1 - CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-304440-3	P-8 - CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-304440-4	P-9 - CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-304440-5	P-6 - CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-304440-6	P-7 - CCR	Total/NA	Ground Water	SM 4500 H+ B	
310-304440-7	Equipment Blank - CCR	Total/NA	Water	SM 4500 H+ B	
310-304440-8	Field Blank - CCR	Total/NA	Water	SM 4500 H+ B	
310-304440-9	P-5R - CCR	Total/NA	Ground Water	SM 4500 H+ B	
LCS 310-451851/19	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-304440-3 DU	P-8 - CCR	Total/NA	Ground Water	SM 4500 H+ B	

Analysis Batch: 452075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-1	Duplicate 1 - CCR	Total/NA	Ground Water	SM 2540C	
310-304440-2	P-1 - CCR	Total/NA	Ground Water	SM 2540C	
310-304440-3	P-8 - CCR	Total/NA	Ground Water	SM 2540C	
310-304440-4	P-9 - CCR	Total/NA	Ground Water	SM 2540C	
MB 310-452075/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-452075/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-304440-3 DU	P-8 - CCR	Total/NA	Ground Water	SM 2540C	

Analysis Batch: 452076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-5	P-6 - CCR	Total/NA	Ground Water	SM 2540C	
310-304440-6	P-7 - CCR	Total/NA	Ground Water	SM 2540C	
310-304440-7	Equipment Blank - CCR	Total/NA	Water	SM 2540C	
310-304440-8	Field Blank - CCR	Total/NA	Water	SM 2540C	

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

General Chemistry (Continued)

Analysis Batch: 452076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-304440-9	P-5R - CCR	Total/NA	Ground Water	SM 2540C	
MB 310-452076/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-452076/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: Duplicate 1 - CCR

Lab Sample ID: 310-304440-1

Date Collected: 04/15/25 00:00

Matrix: Ground Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452649	WZC8	EET CF	04/22/25 15:57
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 14:40
Total/NA	Analysis	SM 2540C		1	452075	WZC8	EET CF	04/18/25 13:44
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:30

Client Sample ID: P-1 - CCR

Lab Sample ID: 310-304440-2

Date Collected: 04/15/25 09:25

Matrix: Ground Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452649	WZC8	EET CF	04/22/25 16:37
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 14:37
Total/NA	Analysis	SM 2540C		1	452075	WZC8	EET CF	04/18/25 13:44
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:21

Client Sample ID: P-8 - CCR

Lab Sample ID: 310-304440-3

Date Collected: 04/15/25 11:15

Matrix: Ground Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452649	WZC8	EET CF	04/22/25 16:50
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 13:42
Total/NA	Analysis	SM 2540C		1	452075	WZC8	EET CF	04/18/25 13:44
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:25

Client Sample ID: P-9 - CCR

Lab Sample ID: 310-304440-4

Date Collected: 04/15/25 12:25

Matrix: Ground Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452649	WZC8	EET CF	04/22/25 17:29
Total/NA	Prep	3005A			452057	QTZ5	EET CF	04/21/25 09:00
Total/NA	Analysis	6020B		1	452529	NFT2	EET CF	04/23/25 15:20
Total/NA	Analysis	SM 2540C		1	452075	WZC8	EET CF	04/18/25 13:44
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:20

Eurofins Cedar Falls

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-6 - CCR

Lab Sample ID: 310-304440-5

Date Collected: 04/16/25 10:00

Matrix: Ground Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452649	WZC8	EET CF	04/22/25 17:42
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 14:44
Total/NA	Analysis	SM 2540C		1	452076	WZC8	EET CF	04/18/25 13:46
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:27

Client Sample ID: P-7 - CCR

Lab Sample ID: 310-304440-6

Date Collected: 04/16/25 10:40

Matrix: Ground Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452750	ZRI4	EET CF	04/22/25 16:30
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 14:42
Total/NA	Analysis	SM 2540C		1	452076	WZC8	EET CF	04/18/25 13:46
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:22

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-304440-7

Date Collected: 04/16/25 10:45

Matrix: Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	452750	ZRI4	EET CF	04/22/25 17:16
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 14:18
Total/NA	Analysis	SM 2540C		1	452076	WZC8	EET CF	04/18/25 13:46
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:29

Client Sample ID: Field Blank - CCR

Lab Sample ID: 310-304440-8

Date Collected: 04/16/25 10:50

Matrix: Water

Date Received: 04/17/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	452750	ZRI4	EET CF	04/22/25 17:32
Total/NA	Prep	3005A			452056	QTZ5	EET CF	04/18/25 12:37
Total/NA	Analysis	6020B		1	452401	NFT2	EET CF	04/22/25 14:28
Total/NA	Analysis	SM 2540C		1	452076	WZC8	EET CF	04/18/25 13:46
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:29

Eurofins Cedar Falls

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Client Sample ID: P-5R - CCR
Date Collected: 04/16/25 13:35
Date Received: 04/17/25 13:30

Lab Sample ID: 310-304440-9
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	452750	ZRI4	EET CF	04/22/25 17:47
Total/NA	Prep	3005A			452057	QTZ5	EET CF	04/21/25 09:00
Total/NA	Analysis	6020B		1	452529	NFT2	EET CF	04/23/25 15:17
Total/NA	Analysis	SM 2540C		1	452076	WZC8	EET CF	04/18/25 13:46
Total/NA	Analysis	SM 4500 H+ B		1	451851	W9YR	EET CF	04/17/25 14:28

Laboratory References:
EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Waste Connections, Inc.
Project/Site: SKB Cloquet CCR Groundwater

Job ID: 310-304440-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Minnesota	NELAP	019-999-319	12-31-25

1
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Method Summary

Client: Waste Connections, Inc.

Job ID: 310-304440-1

Project/Site: SKB Cloquet CCR Groundwater

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

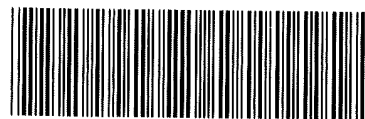
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Environment Testing
America



310-304440 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>GES</u>			
City/State:	CITY <u>Eagan</u>	STATE <u>MN</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>4.17.15</u>	TIME <u>1330</u>	Received By: <u>PH</u>
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID:
Multiple Coolers?		☒ Yes ☐ No	If yes: Cooler # <u>1</u> of <u>3</u>
Cooler Custody Seals Present?		☒ Yes ☐ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>-0.5</u>		Corrected Temp (°C): <u>-0.5</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>		<u>CONTAINER 2</u>
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☒ No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>GES</u>			
City/State:	CITY <u>Lagan</u>	STATE <u>MN</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>4.17.25</u>	TIME <u>1330</u>	Received By: <u>PH</u>
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID:
Multiple Coolers?		☒ Yes ☐ No	If yes: Cooler # <u>2</u> of <u>3</u>
Cooler Custody Seals Present?		☒ Yes ☐ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>0.8</u>		Corrected Temp (°C): <u>0.8</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>		<u>CONTAINER 2</u>
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Environment Testing
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Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>GES</u>			
City/State:	CITY <u>Edgemoor</u>	STATE <u>MN</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>4.17.15</u>	TIME <u>1330</u>	Received By: <u>PH</u>
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID: _____
Multiple Coolers?		☒ Yes ☐ No	If yes: Cooler # <u>3</u> of <u>3</u>
Cooler Custody Seals Present?		☒ Yes ☐ No	If yes: Cooler custody seals intact? ☒ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>1.8</u>		Corrected Temp (°C): <u>1.8</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>		<u>CONTAINER 2</u>
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Chain of Custody Record

Client Information		Lab PM.		Carrier Tracking No(s)		COC No:						
Client Contact:		Bindert, Zach T				310-68858-19695 1						
Mr Nicholas Schlage		E-Mail:		State of Origin:		Page:						
		Zach Bindert@Eurofinet.com		MN		Page 1 of 1						
Company:		PWSID:		Job #:								
Groundwater & Environmental Services Inc		106676										
Address:		Due Date Requested:		Analysis Requested		Preservation Codes.						
1301 Corporate Center Drive Suite 190		TAT Requested (days):				A - HCL M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)						
City:		Standard TAT										
Eagan		Compliance Project: Δ Yes Δ No										
State, Zip:		PO #:										
MN, 55121-1562		Purchase Order Requested										
Phone:		WO #:										
Email:		Project #:										
NSchlage@gesonline.com		3355 483										
Project Name:		SSOW#:										
SKB Cloquet CCR Groundwater												
Site:												
Minnesota												
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=overstabil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906A_ORGFM_2BD - Chloride, Fluoride, Sulfate	8020B - Boron and Calcium	2540C_Calcd - TDS, SM4600_H+ - pH	Total Number of containers	Special Instructions/Note:
Duplicate 1 - CCR	4/15/25	-	G	Water							4	USE SITES AND EVENTS
P-1 - CCR	4/15/25	9:25	6	Water							4	
P-2 - CCR	4/15/25	12:25	6	Water							4	WELL was dry, no sample
P-8 - CCR	4/15/25	11:15	6	Water							4	MS / MSD
P-9 CCR	4/15/25	12:25	6	Water							4	
P-6 - CCR	4/16/25	10:00	6	Water							4	
P-7 - CCR	4/16/25	10:40	6	Water							4	
Equipment Blank - CCR	4/16/25	10:45	6	Water							4	
Field Blank - CCR	4/16/25	10:50	6	Water							4	
P-5R - CCR	4/15/25	13:35	6	Water							4	
Possible Hazard Identification												
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological												
Deliverable Requested I, II, III, IV, Other (specify)												
Empty Kit Relinquished by:												
Relinquished by: [Signature]												
Relinquished by: [Signature]												
Relinquished by: [Signature]												
Custody Seals Intact: Δ Yes Δ No												
Custody Seal No.												
Cooler Temperature(s) °C and Other Remarks:												

Login Sample Receipt Checklist

Client: Waste Connections, Inc.

Job Number: 310-304440-1

SDG Number:

Login Number: 304440

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	



Appendix C – Statistical Evaluation Data

1			Background Statistics for Uncensored Full Data Sets							
2	User Selected Options									
3	Date/Time of Computation		ProUCL 5.2 12/9/2025 2:52:46 PM							
4	From File		N:\Minnesota\Projects\SKB Environmental\Cloquet Facility\Statistics\Input files\Cloquet 112_2025 total Proucl.xls							
5	Full Precision		OFF							
6	Confidence Coefficient		95%							
7	Coverage		95%							
8	New or Future K Observations		1							
9	Number of Bootstrap Operations		2000							
10										
11	Boron									
12										
13	General Statistics									
14	Total Number of Observations		171	Number of Distinct Observations				68		
15	Minimum		0.02	First Quartile				0.0455		
16	Second Largest		0.39	Median				0.1		
17	Maximum		0.41	Third Quartile				0.12		
18	Mean		0.109	SD				0.0889		
19	Coefficient of Variation		0.813	Skewness				1.7		
20	Mean of logged Data		-2.478	SD of logged Data				0.713		
21										
22	Critical Values for Background Threshold Values (BTVs)									
23	Tolerance Factor K (For UTL)		1.853	d2max (for USL)				3.384		
24										
25	Nonparametric Distribution Free Background Statistics									
26	Data do not follow a Discernible Distribution									
27										
28	Nonparametric Upper Limits for Background Threshold Values									
29	Order of Statistic, order		168	95% UTL with 95% Coverage				0.38		
30	Approx, f used to compute achieved CC		1.758	Approximate Actual Confidence Coefficient achieved by UTL				0.933		
31				Approximate Sample Size needed to achieve specified CC				153		
32	95% Percentile Bootstrap UTL with 95% Coverage		0.37	95% BCA Bootstrap UTL with 95% Coverage				0.365		
33	95% UPL		0.318	90% Percentile				0.263		
34	90% Chebyshev UPL		0.377	95% Percentile				0.31		
35	95% Chebyshev UPL		0.498	99% Percentile				0.383		
36	95% USL		0.41							
37										
38	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.									
39	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers									
40	and consists of observations collected from clean unimpacted locations.									
41	The use of USL tends to provide a balance between false positives and false negatives provided the data									
42	represents a background data set and when many onsite observations need to be compared with the BTV.									
43										
44	Calcium									
45										
46	General Statistics									
47	Total Number of Observations		159	Number of Distinct Observations				95		
48				Number of Missing Observations				1		
49	Minimum		27	First Quartile				112.5		
50	Second Largest		207	Median				139		
51	Maximum		235	Third Quartile				160		
52	Mean		135.4	SD				33.67		

	A	B	C	D	E	F	G	H	I	J	K	L
53	Coefficient of Variation					0.249	Skewness					-0.365
54	Mean of logged Data					4.87	SD of logged Data					0.299
55												
56	Critical Values for Background Threshold Values (BTVs)											
57	Tolerance Factor K (For UTL)					1.861	d2max (for USL)					3.361
58												
59	Normal GOF Test											
60	Shapiro Wilk Test Statistic					0.981	Normal GOF Test					
61	1% Shapiro Wilk P Value					0.44	Data appear Normal at 1% Significance Level					
62	Lilliefors Test Statistic					0.0767	Lilliefors GOF Test					
63	1% Lilliefors Critical Value					0.0817	Data appear Normal at 1% Significance Level					
64	Data appear Normal at 1% Significance Level											
65												
66	Background Statistics Assuming Normal Distribution											
67	95% UTL with 95% Coverage					198.1	90% Percentile (z)					178.6
68	95% UPL (t)					191.3	95% Percentile (z)					190.8
69	95% USL					248.6	99% Percentile (z)					213.8
70												
71	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
72	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
73	and consists of observations collected from clean unimpacted locations.											
74	The use of USL tends to provide a balance between false positives and false negatives provided the data											
75	represents a background data set and when many onsite observations need to be compared with the BTV.											
76												
77	chloride											
78												
79	General Statistics											
80	Total Number of Observations					152	Number of Distinct Observations					123
81	Minimum					4	First Quartile					64.88
82	Second Largest					243	Median					97.85
83	Maximum					270	Third Quartile					141.5
84	Mean					111.1	SD					58.69
85	Coefficient of Variation					0.528	Skewness					0.7
86	Mean of logged Data					4.549	SD of logged Data					0.629
87												
88	Critical Values for Background Threshold Values (BTVs)											
89	Tolerance Factor K (For UTL)					1.866	d2max (for USL)					3.347
90												
91	Gamma GOF Test											
92	A-D Test Statistic					0.551	Anderson-Darling Gamma GOF Test					
93	5% A-D Critical Value					0.759	Detected data appear Gamma Distributed at 5% Significance Level					
94	K-S Test Statistic					0.045	Kolmogorov-Smirnov Gamma GOF Test					
95	5% K-S Critical Value					0.0765	Detected data appear Gamma Distributed at 5% Significance Level					
96	Detected data appear Gamma Distributed at 5% Significance Level											
97												
98	Gamma Statistics											
99	k hat (MLE)					3.256	k star (bias corrected MLE)					3.196
100	Theta hat (MLE)					34.11	Theta star (bias corrected MLE)					34.75
101	nu hat (MLE)					989.7	nu star (bias corrected)					971.5
102	MLE Mean (bias corrected)					111.1	MLE Sd (bias corrected)					62.12
103												
104	Background Statistics Assuming Gamma Distribution											

	A	B	C	D	E	F	G	H	I	J	K	L
105	95% Wilson Hilferty (WH) Approx. Gamma UPL					228.8	90% Percentile					194.4
106	95% Hawkins Wixley (HW) Approx. Gamma UPL					235	95% Percentile					228.9
107	95% WH Approx. Gamma UTL with 95% Coverage					249.8	99% Percentile					303.5
108	95% HW Approx. Gamma UTL with 95% Coverage					258.5						
109	95% WH USL					440.2	95% HW USL					483.2
110												
111												
112	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
113	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
114	and consists of observations collected from clean unimpacted locations.											
115	The use of USL tends to provide a balance between false positives and false negatives provided the data											
116	represents a background data set and when many onsite observations need to be compared with the BTV.											
117												
118	fluoride											
119												
120	General Statistics											
121	Total Number of Observations					145	Number of Distinct Observations					11
122	Minimum					0.05	First Quartile					0.25
123	Second Largest					1	Median					0.25
124	Maximum					1	Third Quartile					0.5
125	Mean					0.336	SD					0.222
126	Coefficient of Variation					0.659	Skewness					1.766
127	Mean of logged Data					-1.274	SD of logged Data					0.619
128												
129	Critical Values for Background Threshold Values (BTVs)											
130	Tolerance Factor K (For UTL)					1.872	d2max (for USL)					3.332
131												
132	Nonparametric Distribution Free Background Statistics											
133	Data do not follow a Discernible Distribution											
134												
135	Nonparametric Upper Limits for Background Threshold Values											
136	Order of Statistic, order					143	95% UTL with 95% Coverage					1
137	Approx, f used to compute achieved CC					1.868	Approximate Actual Confidence Coefficient achieved by UTL					0.935
138							Approximate Sample Size needed to achieve specified CC					124
139	95% Percentile Bootstrap UTL with 95% Coverage					1	95% BCA Bootstrap UTL with 95% Coverage					1
140	95% UPL					1	90% Percentile					0.5
141	90% Chebyshev UPL					1.004	95% Percentile					1
142	95% Chebyshev UPL					1.306	99% Percentile					1
143	95% USL					1						
144												
145	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
146	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
147	and consists of observations collected from clean unimpacted locations.											
148	The use of USL tends to provide a balance between false positives and false negatives provided the data											
149	represents a background data set and when many onsite observations need to be compared with the BTV.											
150												
151	ph											
152												
153	General Statistics											
154	Total Number of Observations					184	Number of Distinct Observations					18
155	Minimum					6.1	First Quartile					6.9
156	Second Largest					8.1	Median					7.2

	A	B	C	D	E	F	G	H	I	J	K	L
157	Maximum					8.1	Third Quartile					7.425
158	Mean					7.207	SD					0.369
159	Coefficient of Variation					0.0512	Skewness					0.308
160	Mean of logged Data					1.974	SD of logged Data					0.051
161												
162	Critical Values for Background Threshold Values (BTVs)											
163	Tolerance Factor K (For UTL)					1.844	d2max (for USL)					3.407
164												
165												
166	Nonparametric Distribution Free Background Statistics											
167	Data do not follow a Discernible Distribution											
168												
169	Nonparametric Upper Limits for Background Threshold Values											
170	Order of Statistic, order					180	95% UTL with 95% Coverage					8
171	Approx, f used to compute achieved CC					1.57	Approximate Actual Confidence Coefficient achieved by UTL					0.902
172							Approximate Sample Size needed to achieve specified CC					181
173	95% Percentile Bootstrap UTL with 95% Coverage					7.985	95% BCA Bootstrap UTL with 95% Coverage					7.9
174	95% UPL					7.9	90% Percentile					7.7
175	90% Chebyshev UPL					8.318	95% Percentile					7.9
176	95% Chebyshev UPL					8.821	99% Percentile					8.017
177	95% USL					8.1						
178												
179	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
180	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
181	and consists of observations collected from clean unimpacted locations.											
182	The use of USL tends to provide a balance between false positives and false negatives provided the data											
183	represents a background data set and when many onsite observations need to be compared with the BTV.											
184												
185	sulfate											
186												
187	General Statistics											
188	Total Number of Observations					158	Number of Distinct Observations					136
189	Minimum					5	First Quartile					28.93
190	Second Largest					160	Median					39.7
191	Maximum					161	Third Quartile					62.95
192	Mean					52.08	SD					34.97
193	Coefficient of Variation					0.671	Skewness					1.443
194	Mean of logged Data					3.754	SD of logged Data					0.641
195												
196	Critical Values for Background Threshold Values (BTVs)											
197	Tolerance Factor K (For UTL)					1.862	d2max (for USL)					3.359
198												
199												
200	Lognormal GOF Test											
201	Shapiro Wilk Test Statistic					0.96	Shapiro Wilk Lognormal GOF Test					
202	10% Shapiro Wilk P Value					0.00227	Data Not Lognormal at 10% Significance Level					
203	Lilliefors Test Statistic					0.0628	Lilliefors Lognormal GOF Test					
204	10% Lilliefors Critical Value					0.0649	Data appear Lognormal at 10% Significance Level					
205	Data appear Approximate Lognormal at 10% Significance Level											
206												
207	Background Statistics assuming Lognormal Distribution											
208	95% UTL with 95% Coverage					140.8	90% Percentile (z)					97.09

	A	B	C	D	E	F	G	H	I	J	K	L
209	95% UPL (t)					123.7	95% Percentile (z)					122.6
210	95% USL					368	99% Percentile (z)					189.7
211												
212	Nonparametric Distribution Free Background Statistics											
213	Data appear Approximate Lognormal at 10% Significance Level											
214	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
215	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
216	and consists of observations collected from clean unimpacted locations.											
217	The use of USL tends to provide a balance between false positives and false negatives provided the data											
218	represents a background data set and when many onsite observations need to be compared with the BTV.											
219												
220	TDS											
221												
222	General Statistics											
223	Total Number of Observations					118	Number of Distinct Observations					114
224	Minimum					90	First Quartile					488.5
225	Second Largest					969	Median					625
226	Maximum					994	Third Quartile					770.8
227	Mean					621.8	SD					187.6
228	Coefficient of Variation					0.302	Skewness					-0.381
229	Mean of logged Data					6.373	SD of logged Data					0.383
230												
231	Critical Values for Background Threshold Values (BTVs)											
232	Tolerance Factor K (For UTL)					1.899	d2max (for USL)					3.265
233												
234	Normal GOF Test											
235	Shapiro Wilk Test Statistic					0.969	Normal GOF Test					
236	1% Shapiro Wilk P Value					0.0888	Data appear Normal at 1% Significance Level					
237	Lilliefors Test Statistic					0.0951	Lilliefors GOF Test					
238	1% Lilliefors Critical Value					0.0947	Data Not Normal at 1% Significance Level					
239	Data appear Approximate Normal at 1% Significance Level											
240												
241	Background Statistics Assuming Normal Distribution											
242	95% UTL with		95% Coverage		978	90% Percentile (z)					862.2	
243			95% UPL (t)		934.1	95% Percentile (z)					930.3	
244			95% USL		1234	99% Percentile (z)					1058	
245												
246	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
247	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
248	and consists of observations collected from clean unimpacted locations.											
249	The use of USL tends to provide a balance between false positives and false negatives provided the data											
250	represents a background data set and when many onsite observations need to be compared with the BTV.											
251												

