

SKB Environmental, Inc.

2023 Coal Combustion Residuals Annual Monitoring Report

SKB Rosemount Industrial Waste Facility
13425 Courthouse Boulevard
Rosemount, Minnesota
Permit SW-383

January 30, 2024





2023 Coal Combustion Residuals Annual Monitoring Report

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13425 Courthouse Boulevard
Rosemount, Minnesota
Permit SW-383

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Date:
January 30, 2024

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature:

Typed or Printed Name: Kevin Michael Lienau

Date: 01/30/2024 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 |
| GES | Groundwater & Environmental Services, Inc. |
| GPS | Groundwater Protection Standards |
| EPA | Environmental Protection Agency |
| Eurofins TA | Eurofins Test America, Inc. |
| MCLs | Maximum Contaminant Levels |
| mg/L | milligrams per liter |
| MDH | Minnesota Department of Health |
| MPCA | Minnesota Pollution Control Agency |
| NGVD | National Geodetic Vertical Datum |
| ORP | Oxidation-Reduction Potential |
| pCi/L | picocuries per liter |
| QA/QC | Quality assurance/quality control |
| Report | Coal Combustion Residuals Annual Monitoring Report |
| SKB Rosemount Landfill | SKB Rosemount Industrial Waste Facility |
| SSI | Statistically Significant Increase |
| USL | Upper Simultaneous Limit |



1 Introduction

The *2023 Combustion Coal Residuals Annual Monitoring Report* (Report) was prepared to summarize the results of 2023 groundwater monitoring events and associated analysis for Appendix III (detection monitoring) and Appendix IV (assessment monitoring), per 40 Code of Federal Regulations (CFR) §§ 257.90 – 257.98, at the SKB Rosemount Industrial Waste Facility (SKB Rosemount Landfill). The SKB Landfill operates under Minnesota Pollution Control Agency (MPCA) Site Permit Number SW-383. The SKB Rosemount Landfill is located at 13425 Courthouse Boulevard, Rosemount, and Dakota County, Minnesota (**Figure 1**).

Two groundwater sampling events were conducted at the SKB Rosemount Landfill in the winter and fall of 2023. Groundwater samples were analyzed for parameters included in Appendix III (detection monitoring) and Appendix IV (assessment monitoring). Analytical results from the groundwater monitoring events were compared and evaluated to Background Threshold Values (BTVs) and Groundwater Protection Standards (GPS) established for the SKB Rosemount Landfill.

1.1 Scope of Work

The following scope of work was conducted for the 2023 Coal Combustion Residuals (CCR) groundwater monitoring events:

- Conduct two gauging and sampling events of the site's 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

SKB Rosemount Landfill is an industrial waste containment facility with separate waste stream disposal areas. Active filling occurs through landfill in: Cell 4, which is a Municipal Solid Waste Incinerator Ash cell; Cell 5 which is a construction and demolition debris disposal cell; and, in Cells 1,2,3,4, and 6 where industrial waste is placed (Cell 6 is allowed to co-mingle both industrial solid waste and construction and demolition debris). The facility also consists of the 3M Cell which



accepted waste only from 3M operations and manufacturing. The 3M Cell has since been closed, and a closure report is on-file at the MPCA.

The site is located within a 236-acre parcel of land in Sections 19, 20, and 29, Township 115 North, Range 18 West, Rosemount, Dakota County, Minnesota (**Figure 1**). With reference to roadways, the facility is located between State Highway 55 and Ehlers Path East. The facility entrance is off of State Highway 55.

Located in the Vermillion River watershed, the historical property prior to development, consist of rolling topography ranging in elevation from 820 feet above the National Geodetic Vertical Datum of 1929 (NGVD 29) in the southwest corner to 907 feet above NGVD 29 near the middle of the site. The site has since been altered, with the low point 800 feet above NGVD in the bottom of Cell 3A and Cell 3B to approximately 1,010 feet above NGVD at the top of Cells 3A/3D. A seasonal pond is located on the southwest corner of the property. Storm water flows either to natural depressions scattered about the site or to storm water retention areas in the southwest and north-central parts of the property. Storm water collected in these areas infiltrates into the soil. The nearest open water body is the Mississippi River located approximately 1-mile northeast of the site.

3 Monitoring Network Systems and Sampling Schedule

The CCR sampling groundwater monitoring network at the SKB Rosemount Landfill was designed based on the local and regional hydrologic conditions. Formerly, the system consisted of 28 monitoring wells. After receiving MPCA approval, seven monitoring wells were abandoned in April 2021 in accordance with Minnesota Department of Health (MDH) regulations. The monitoring well abandonments were in association with the SKB Rosemount Landfill Cell 6 expansion. Therefore, the current groundwater monitoring network system comprises 21 monitoring wells (**Figure 2**).

The monitoring wells used as data collection points have been divided into five groups for the purpose of this report:

- Shallow Upgradient Monitoring Points (designated U#S): The shallow upgradient monitoring points consist of monitoring wells completed in the shallow water table aquifer south (upgradient) of the compliance boundary.
- Deep Upgradient Monitoring Points (designated U#D): The deep upgradient monitoring points consist of monitoring wells completed in the Outwash/Prairie du Chien aquifer south (upgradient) of the compliance boundary.
- Shallow Downgradient Monitoring Points (designated D#S): The shallow downgradient monitoring points consist of monitoring wells completed in the shallow water table aquifer along the north (downgradient) compliance boundary.
- Deep Downgradient Monitoring Points (designated D#D): The deep downgradient monitoring points consist of monitoring wells completed in the Outwash/Prairie du Chien aquifer north (downgradient) of the compliance boundary.
- Cell Wells (designated CW#): The cell wells are monitoring wells completed in the shallow aquifer immediately downgradient of the cell sumps.



For the CCR evaluation, two groundwater monitoring events were conducted in 2023 on the following dates:

- February 20-22, 2023
- October 25-27, 2023

4 Groundwater Sample Methodology

During the SKB Rosemount 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 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 Test America (Eurofins TA) of Cedar Falls, Iowa.

Groundwater samples were collected from 16 monitoring wells during the two sampling events in 2023. Groundwater monitoring well D-7 was dry during both events. Remaining wells (CW4-1, D-6, D-1VD, and DV-2D) are gauge only. Groundwater samples were analyzed for parameters specified in Appendix III (winter and fall events) and Appendix IV (winter analytes detected in fall 2022 event) and fall (full analyte list) events) per §§ 257.93 – 257.95 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 (Method 2540C)

Metals (Total)

- Boron
- Calcium



Appendix IV

Metals (Total)

- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium
- Cobalt
- Lead
- Lithium
- Mercury
- Molybdenum
- Radium 226
- Radium 228
- Selenium
- Thallium

General Chemistry

- Fluoride (Method 9056A)

The above metals were analyzed by Methods 6020B, and 7470A. Radium was analyzed by Methods 9315 and 9320.

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 February 20 and October 25, 2023 gauging events. Groundwater elevation contour maps for both the water table and the deeper monitoring zone are presented in **Figures 3** through **6**. The groundwater flow is to the northeast across the site. The groundwater flow direction is consistent with historically recorded flow directions.

5.2 Groundwater Analytical Data

Groundwater analytical results for the CCR monitoring events are presented in **Tables 2** and **3**. QA/QC duplicate samples were collected for precision evaluation, but were not included in the tables. A summary of the stabilization parameter tests performed for each well prior to sampling are provided in **Table 4** and copies of field sampling data sheets are in **Appendix A**. Laboratory analytical reports are included in **Appendix B**.



The calculated BTVs for the SKB Rosemount Landfill are provided in **Table 5**. Comparing the 2023 sampling results to the BTVs (**Tables 2 and 3**) is summarized below.

Appendix III Analytes - Result Summary of BTV Exceedances

Chloride (BTV = 126 milligrams per liter (mg/L))

- Downgradient monitoring well
 - D-3S (330 mg/L) (10/26/2023) – BTV exceedance.

Appendix IV Analytes - Result Summary of BTV Exceedances

Chromium (BTV = 0.052 milligrams per liter (mg/L))

- Downgradient monitoring well
 - D-3D (0.065 mg/L) (2/21/2023) – BTV exceedance confirmed.
 - D-3D (0.064 mg/L) (10/26/2023) – BTV exceedance confirmed.
 - D-4S (0.072 mg/L) (2/21/2023) – BTV exceedance.

Cobalt (BTV = 0.0015 mg/L)

- Sidegradient monitoring well
 - D-9 (0.0021 mg/L) (2/21/2023) – BTV exceedance.

Molybdenum (BTV = 0.0032 mg/L)

- Upgradient monitoring well
 - U-5S (0.0035 mg/L) (10/26/2023) – BTV exceedance.

Thallium (BTV = 0.021 milligrams per liter (mg/L))

- Downgradient monitoring well
 - D-3S (0.022 mg/L) (10/26/2023) – BTV exceedance.

Due to monitoring well D-7 being dry in 2017 during CCR background sampling events, limited background groundwater analytical data for D-7 is available. Thus, a separate evaluation of monitoring well D-7 groundwater sampling results is typically generated during the annual report. However, monitoring well D-7 was dry during the sampling events conducted in 2023; therefore, therefore, no evaluation of monitoring well D-7 data will be completed for 2023.

6 Statistical Evaluation Data

This groundwater statistical evaluation for landfill monitoring is conducted in accordance with § 257.93(f)(3). Specifically, current concentrations were compared to the interwell upper simultaneous limits (USLs) in order 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 to the most recent sampling event in October 2023.



Statistical evaluation of the 2017 - 2023 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 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. Compounds where the data distribution does not fit the definition of background population (includes multiple outliers, is heavily skewed to the right), the BTV was calculated using Chebyshev's UPL, which allows calculation of an upper limit when the data does not fit the USL definition.

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). A Type I error is defined as false positive relative to the initial hypothesis. A Type II error is defined as a false negative relative to the initial hypothesis. 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 in order 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 calculated 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 (Background Threshold Values (BTVs)) were calculated using ProUCL 5.0.00 (Singh, 2013) for each COC when five or more detections were present:

- 95% upper simultaneous limit (USL) or
- 95% upper prediction limit (UPL)

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.

The 95% UPL was selected as the proposed BTV for datasets with more than 20 observations when:

- 3) The data distribution for a COC contained multiple outliers.
- 4) The data set was skewed to the right.

For the above cases, the COC data sets no longer fit the definition of background population appropriate for USL calculations. In these cases, the BTV was calculated using Chebyshev's UPL, which allows calculation of an upper limit when the data does not fit the USL definition.

If there were no detected results, the highest detection limit was proposed as the BTV. The calculated BTVs are included in **Table 5**. The statistical evaluation data is included in **Appendix C**.

6.1 SSI Determination

The detected concentrations for the first and second half 2023 sampling event with the respective BTV are listed below. Compliance is determined by comparing the current concentration to the calculated BTV. Chromium concentrations at D-3D was confirmed as an SSI.

Comparison of 2023 Confirmed COC Concentrations to BTVs

| Monitoring Well | Analyte | First Half 2023 Conc | BTV Conc | Second Half 2023 Conc | USL Notes |
|-----------------|----------|----------------------|---------------------|-----------------------|----------------------|
| | | (mg/L unless noted) | (mg/L unless noted) | (mg/L unless noted) | |
| D-3D | Chromium | 0.065 | 0.052 | 0.064 | Exceedance Confirmed |

Conc = Concentration

mg/L = milligrams per Liter

Bolded concentration exceeds the respective BTV.

7 Groundwater Protection Standards

Per § 257.95(d)(2), Groundwater Protection Standards (GPS) were established for each Appendix IV constituent detected in the groundwater. GPS were established using United States Environmental Protection Agency (EPA) Maximum Contaminant Levels (MCLs) for detected Appendix IV constituents. For constituents for which the background level is higher than the MCL, the background value will be the GPS. GPS levels are shown in **Table 6**.

For the sampling events conducted in 2023, Thallium was the only constituent in Appendix IV that was detected above established GPS levels (0.002 milligrams per liter [mg/L]) for the site (**Table**



7) at several wells, both upgradient and downgradient (U-5S, D-1D, D-2S and D-3S) ranging in concentrations from 0.014 mg/L to 0.022 mg/L.

8 Report Summary

Per the 40 CFR §§ 40.257.93 – 257.95, 2 monitoring events (spring and fall) were conducted in 2022 at the SKB Rosemount Landfill. Groundwater samples were collected from the monitoring network's 16 monitoring wells (D-1D, D-1S, D-2D, D-2S, D-3D, D-3S, D-4D, D-4S, D-5D, D-5S2, D-8, D-9, U-4D, U-4S, U-5D, and U-5S). Monitoring well D-7 was dry during the 2 monitoring events, and therefore, was not sampled. Groundwater samples were analyzed for parameters specified in Appendix III (detection monitoring) and Appendix IV (assessment monitoring).

The groundwater data collected during the 2017 – 2023 sampling events were statistically tested following the concepts outlined in this report to form a background data set. Interwell USLs were developed for Boron, Calcium, Chloride, Fluoride, Sulfate as SO₄, and Total Dissolved Solids, and in 16 monitoring wells (D-1D, D-1S, D-2D, D-2S, D-3D, D-3S, D-4D, D-4S, D-5D, D-5S2, D-8, D-9, U-4D, U-4S, U-5D, and U-5S). Upper and lower threshold values were developed for pH using box plot statistics. The resulting BTVs were compared to the current concentrations for each COC and well pair.

The following analytes were reported above the calculated BTVs in 2023:

Appendix IV Analytes

- A Chloride concentration was detected above the BTV at downgradient monitoring well D-3S during the fall 2023 sampling event. This concentration is not a confirmed exceedance until additional sampling in spring 2024 is collected.
- A Chromium concentration was detected above the BTV at downgradient monitoring well D-3D during the spring and fall 2023 sampling events. These concentrations were confirmed exceedances.
- A Chromium concentration was detected above the BTV at downgradient monitoring well D-4S during the spring 2023 sampling event. Subsequent confirmation sampling during the fall 2023 determined this exceedance was not considered statistically significant.
- A Cobalt concentration was detected above the BTV at sidegradient monitoring well D-9 during the spring 2023 sampling event. Subsequent confirmation sampling during the fall 2023 determined this exceedance was not considered statistically significant.
- A Molybdenum concentration was detected above the BTV at upgradient monitoring well U-5S during the fall 2023 sampling event. This concentration is not a confirmed exceedance until additional sampling in spring 2024 is collected.



- A Thallium concentration was detected above the BTV at downgradient monitoring well D-3S during the fall 2023 sampling event. This concentration is not a confirmed exceedance until additional sampling in spring 2024 is collected.

Groundwater concentrations from the 2023 monitoring events were compared to established GPS values. Thallium was the only constituents in Appendix IV that were detected above established GPS values for the site.

9 Recommendations

CCR groundwater monitoring events will be conducted in 2024 by the following schedule:

Late February or Early March 2024

Conduct a groundwater sampling event of the site's monitoring well network and analyze the groundwater samples for constituents listed in Appendix III and Appendix IV (only analytes detected in the fall 2023 event).

Fall 2024

Conduct a groundwater sampling event of the site's monitoring well network and analyze the groundwater samples for constituents listed in Appendix III and Appendix IV (full list).

An evaluation of groundwater analytical results after each monitoring event will be completed to determine if a significant increase over BTVs for one or more constituent listed in Appendix III and Appendix IV has occurred at any monitoring well. The evaluation will be performed using a tolerance or prediction interval procedure (§ 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 considered to be an exceedance. Confirmation sampling will determine whether the BTV exceedance is statistically significant. Additionally, groundwater concentrations of constituents listed in Appendix IV will be compared to establish GPS values.

Groundwater samples will be collected from monitoring well D-7 during 2024 groundwater monitoring events and analyzed for Appendix III and Appendix IV analytes (full list). Additionally, dissolved metal analysis will also be included for Appendix III and Appendix IV metals for total metal vs. dissolved metal evaluation.

A 2024 CCR Annual Monitoring Report will be prepared and include sampling results from the 2024 CCR groundwater monitoring events and an evaluation of the analytical results as they pertained to BTVs and GPS values.



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.
- United States Geological Survey, 1967 (revised 1993). *7.5-minute quadrangle map, Inver Grove Heights*.



Figures



SOURCE: USGS 7.5 MINUTE SERIES
 TOPOGRAPHIC QUADRANGLE 1993
 INVER GROVE HEIGHTS, MINNESOTA
 CONTOUR INTERVAL = 10'



QUADRANGLE LOCATION

| | | |
|---------------------------------|--|-----------------|
| DRAFTED BY: W.G.S. (N.J.) | SITE LOCATION MAP | |
| CHECKED BY: JFS | SKB ENVIRONMENTAL INC. ROSEMOUNT FACILITY 13425 COURTHOUSE BOULEVARD ROSEMOUNT, MINNESOTA | |
| REVIEWED BY: JFS | Groundwater & Environmental Services, Inc. 1285 CORPORATE CENTER DRIVE, SUITE 120, EAGAN, MN 55121 | |
| NORTH | SCALE IN FEET | DATE 1-10-14 |
| | 0 2000 | FIGURE 1 |

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Legend

- PROPERTY BOUNDARY
- x- FENCE
- MONITORING WELL
- ⊙ METHANE MONITORING POINT
- ABANDONED METHANE MONITORING POINT

Note:
Survey completed on 10/18/2023

Site Map

SKB Environmental Inc.
Rosemount Facility
13425 Courthouse Boulevard
Rosemount, Minnesota

Drawn
GKS
Designed
DMC
Approved
NJS

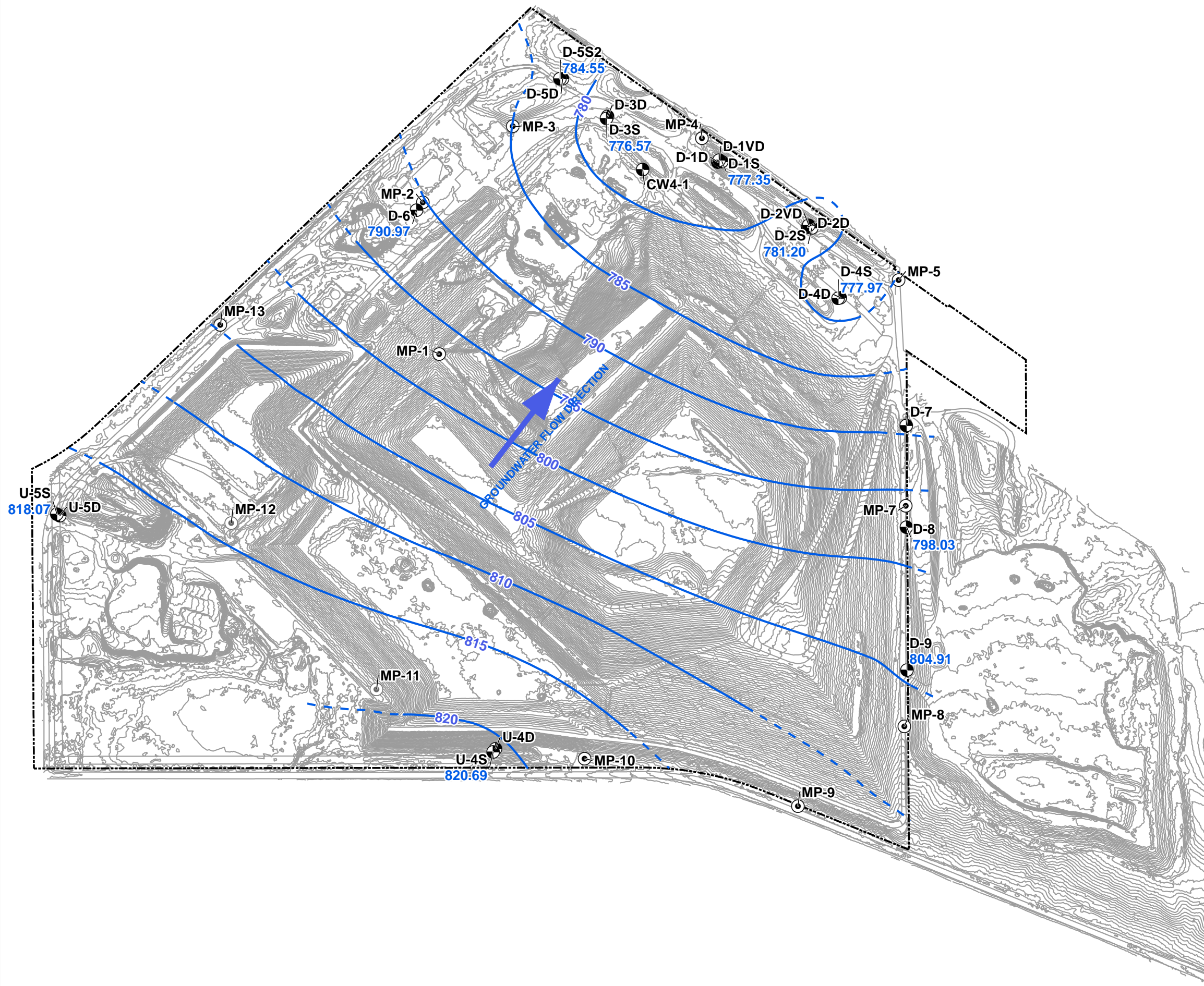


Date
1/4/24
Figure
2

Scale In Feet (Approximate)



Groundwater & Environmental Services, Inc.



Legend

- Groundwater Elevation Contour (ft MSL)
- Inferred Groundwater Elevation Isocontour (ft MSL)
- Monitoring Well
- Abandoned Methane Monitoring Point
- Methane Monitoring Point
- Property Boundary
- 821.32** Measured Groundwater Elevation (ft MSL)

Note:
Survey completed on 10/13/2022

Shallow Aquifer Contour Map
February 20, 2023

SKB Environmental Inc.
Rosemount Facility
13425 Courthouse Boulevard
Rosemount, Minnesota

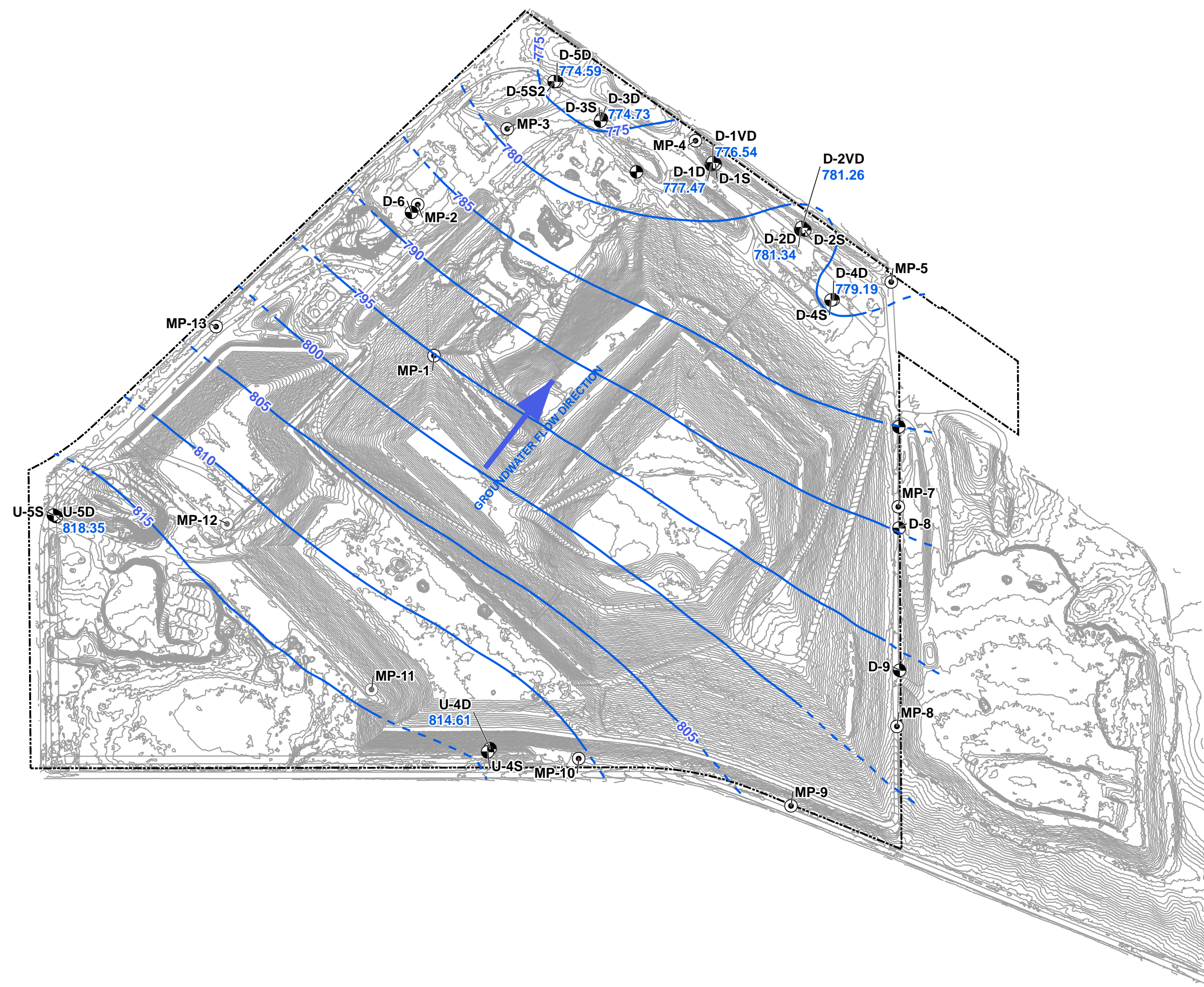
Drawn
GKS
Designed
DMC
Approved
-



Date
1/22/24
Figure
3

Scale In Feet (Approximate)
0 450

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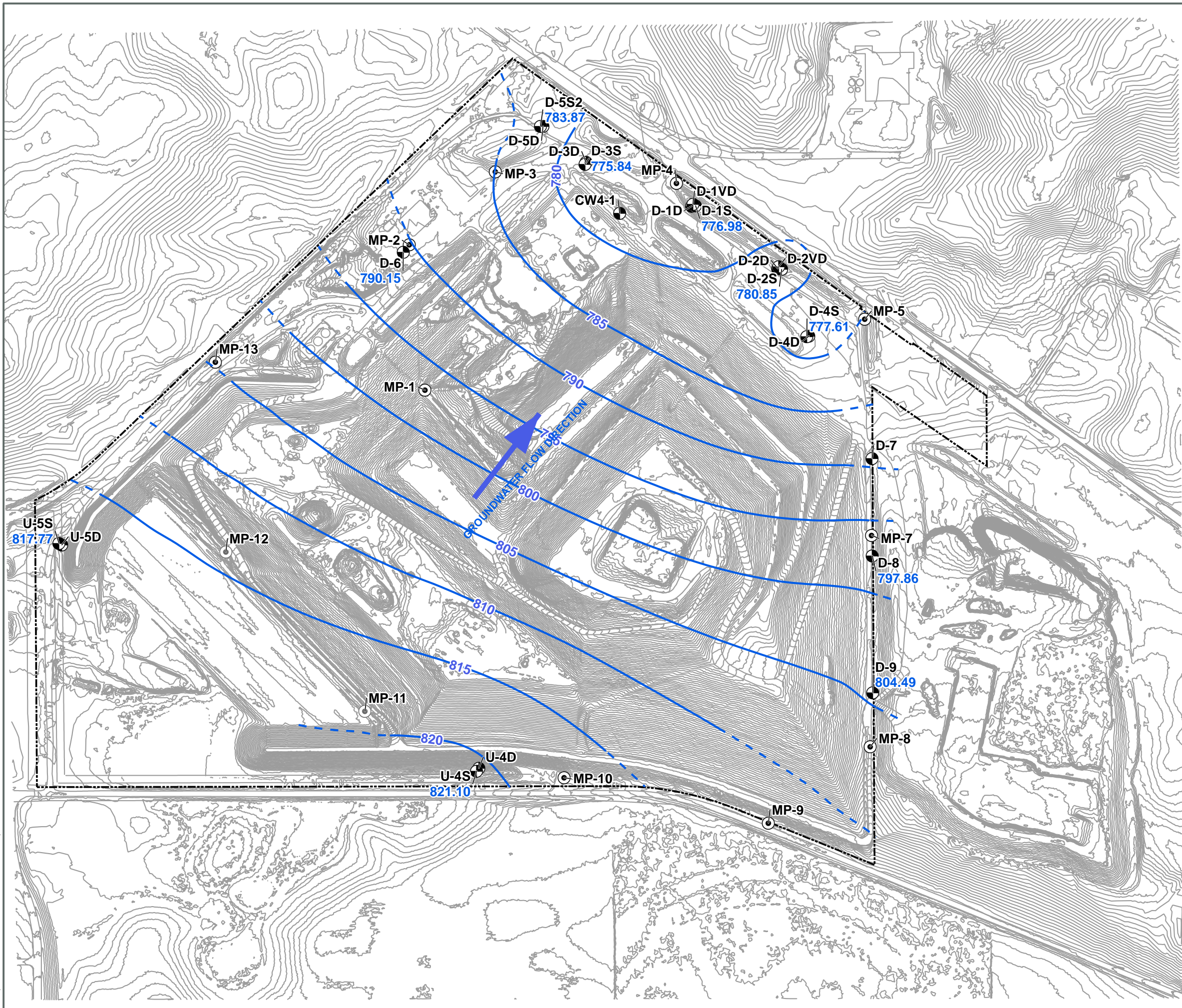


- Legend**
- Groundwater Elevation Contour (ft MSL)
 - Inferred Groundwater Elevation Isocontour (ft MSL)
 - Monitoring Well
 - Abandoned Methane Monitoring Point
 - Methane Monitoring Point
 - Property Boundary
- 821.32** Measured Groundwater Elevation (ft MSL)

Note:
Survey completed on 10/13/2022

| | |
|--|--|
| Deep Aquifer Contour Map February 20, 2023 | |
| SKB Environmental Inc. Rosemount Facility 13425 Courthouse Boulevard Rosemount, Minnesota | |
| Drawn GKS Designed DMC Approved - | Date 1/22/24 Figure 4 |
| | |
| Scale In Feet (Approximate) | |
| | |

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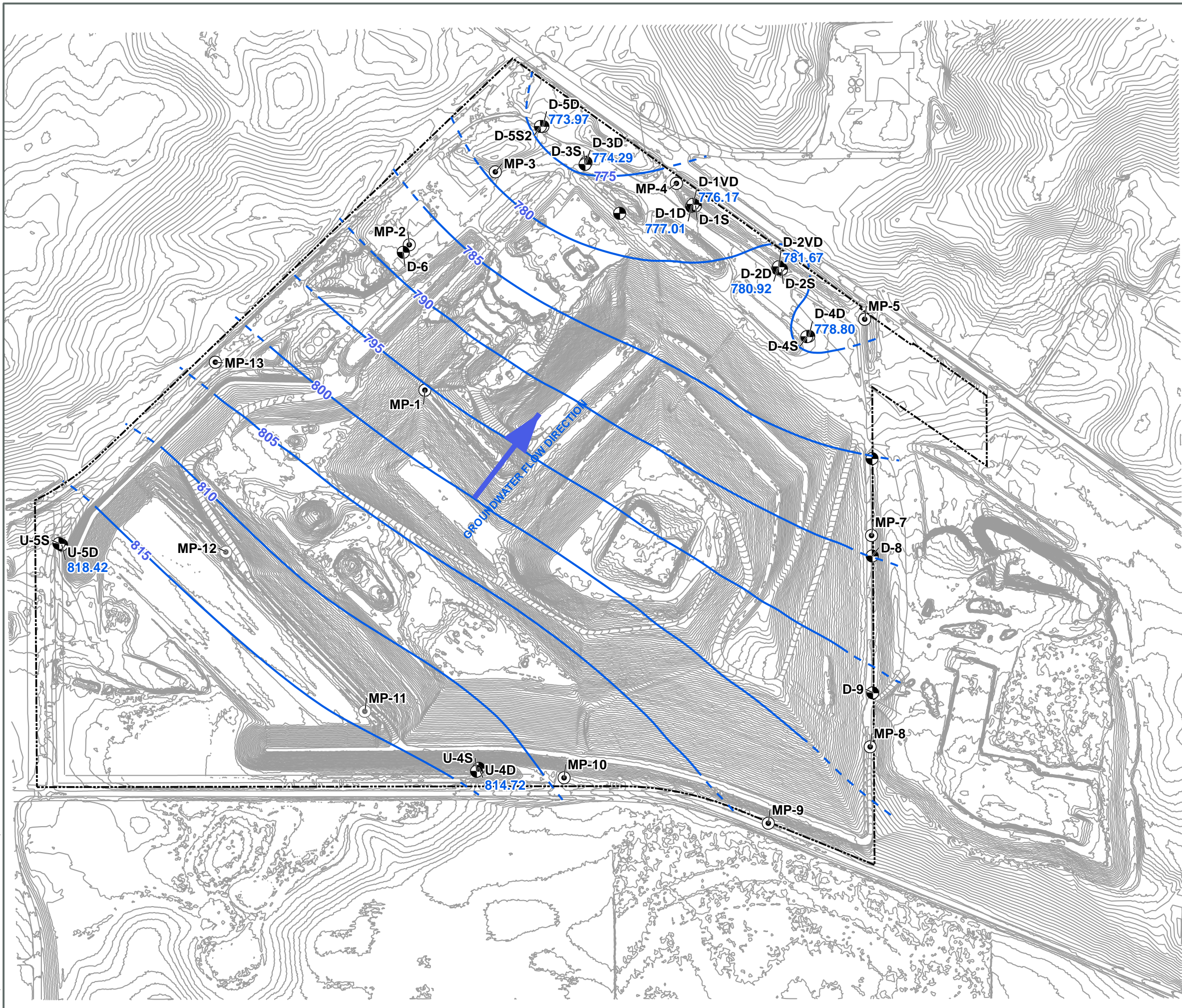
Legend

- Groundwater Elevation Contour (ft MSL)
- Inferred Groundwater Elevation Isocontour (ft MSL)
- Monitoring Well
- Abandoned Methane Monitoring Point
- Methane Monitoring Point
- Property Boundary
- 821.32** Measured Groundwater Elevation (ft MSL)

Note:
Survey completed on 10/18/2023

| | |
|--|--|
| Shallow Aquifer Contour Map October 25, 2023 | |
| SKB Environmental Inc. Rosemount Facility 13425 Courthouse Boulevard Rosemount, Minnesota | |
| Drawn GKS Designed DMC Approved EML | Date 1/22/24 Figure 5 |
| Scale In Feet (Approximate) Groundwater & Environmental Services, Inc. | |

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Legend

- Groundwater Elevation Contour (ft MSL)
- Inferred Groundwater Elevation Isocontour (ft MSL)
- Monitoring Well
- Abandoned Methane Monitoring Point
- Methane Monitoring Point
- Property Boundary

821.32 Measured Groundwater Elevation (ft MSL)

Note:
Survey completed on 10/18/2023

| | |
|--|--|
| Deep Aquifer Contour Map October 25, 2023 | |
| SKB Environmental Inc. Rosemount Facility 13425 Courthouse Boulevard Rosemount, Minnesota | |
| Drawn GKS Designed DMC Approved EML | Date 1/22/24 Figure 6 |
| Scale In Feet (Approximate) Groundwater & Environmental Services, Inc. | |



Tables

Table 1
Groundwater Elevations



| DATE | D-1D | D-1VD | D-2D | D-2VD | D-3D | D-4D | D-5D |
|------------|--------|--------|--------|--------|--------|--------|--------|
| 02/20/2023 | 777.47 | 776.54 | 781.34 | 781.26 | 774.73 | 779.19 | 774.59 |
| 10/25/2023 | 777.01 | 776.17 | 780.92 | 781.67 | 774.29 | 778.80 | 773.97 |

*Groundwater elevations in feet above MSL.

Table 1
Groundwater Elevations



| DATE | D-1S | D-2S | D-3S | D-4S | D-5S2 | D-6 | D-7 | D-8 | D-9 |
|------------|--------|--------|--------|--------|--------|--------|-----|--------|--------|
| 02/20/2023 | 777.35 | 781.20 | 776.57 | 777.97 | 784.55 | 790.97 | DRY | 798.03 | 804.91 |
| 10/25/2023 | 776.98 | 780.85 | 775.84 | 777.61 | 783.87 | 790.15 | DRY | 797.86 | 804.49 |

*Groundwater elevations in feet above MSL.

Table 1
Groundwater Elevations



| DATE | U-4D | U-5D |
|------------|--------|--------|
| 02/20/2023 | 814.61 | 818.35 |
| 10/25/2023 | 814.72 | 818.42 |

*Groundwater elevations in feet above MSL.

Table 1
Groundwater Elevations



| DATE | U-4S | U-5S |
|------------|--------|--------|
| 02/20/2023 | 820.69 | 818.07 |
| 10/25/2023 | 821.10 | 817.77 |

*Groundwater elevations in feet above MSL.

Table 2



Groundwater Analytical Data
 Appendix III

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|------------------------|--------|----------------------------------|----------|------------|
| D-1D | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-1D | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-1D | 02/20/2023 | Calcium | 80.4 | 151.7 | mg/l | 7440-70-2 |
| D-1D | 10/26/2023 | Calcium | 75.2 | 151.7 | mg/l | 7440-70-2 |
| D-1D | 02/20/2023 | Chloride | 31 | 126 | mg/l | 16887-00-6 |
| D-1D | 10/26/2023 | Chloride | 30 | 126 | mg/l | 16887-00-6 |
| D-1D | 02/20/2023 | pH | 7.9 | 7.1 < 8.1 | pH UNITS | PH |
| D-1D | 10/26/2023 | pH | 7.8 | 7.1 < 8.1 | pH UNITS | PH |
| D-1D | 02/20/2023 | Sulfate as SO4 | 25 | 67.3 | mg/l | 14808-79-8 |
| D-1D | 10/26/2023 | Sulfate as SO4 | 25 | 67.3 | mg/l | 14808-79-8 |
| D-1D | 02/20/2023 | Total Dissolved Solids | 394 | 640.7 | mg/l | TDS |
| D-1D | 10/26/2023 | Total Dissolved Solids | 376 | 640.7 | mg/l | TDS |
| D-1S | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-1S | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-1S | 02/20/2023 | Calcium | 89.1 | 151.7 | mg/l | 7440-70-2 |
| D-1S | 10/26/2023 | Calcium | 74.5 | 151.7 | mg/l | 7440-70-2 |
| D-1S | 02/20/2023 | Chloride | 45 | 126 | mg/l | 16887-00-6 |
| D-1S | 10/26/2023 | Chloride | 46 | 126 | mg/l | 16887-00-6 |
| D-1S | 02/20/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| D-1S | 10/26/2023 | pH | 7.4 | 7.1 < 8.1 | pH UNITS | PH |
| D-1S | 02/20/2023 | Sulfate as SO4 | 14 | 67.3 | mg/l | 14808-79-8 |
| D-1S | 10/26/2023 | Sulfate as SO4 | 16 | 67.3 | mg/l | 14808-79-8 |
| D-1S | 02/20/2023 | Total Dissolved Solids | 366 | 640.7 | mg/l | TDS |
| D-1S | 10/26/2023 | Total Dissolved Solids | 378 | 640.7 | mg/l | TDS |
| D-2D | 02/21/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-2D | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-2D | 02/21/2023 | Calcium | 90.1 | 151.7 | mg/l | 7440-70-2 |
| D-2D | 10/26/2023 | Calcium | 82.2 | 151.7 | mg/l | 7440-70-2 |
| D-2D | 02/21/2023 | Chloride | 31 | 126 | mg/l | 16887-00-6 |
| D-2D | 10/26/2023 | Chloride | 28 | 126 | mg/l | 16887-00-6 |
| D-2D | 02/21/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| D-2D | 10/26/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| D-2D | 02/21/2023 | Sulfate as SO4 | 22 | 67.3 | mg/l | 14808-79-8 |
| D-2D | 10/26/2023 | Sulfate as SO4 | 21 | 67.3 | mg/l | 14808-79-8 |
| D-2D | 02/21/2023 | Total Dissolved Solids | 394 | 640.7 | mg/l | TDS |
| D-2D | 10/26/2023 | Total Dissolved Solids | 418 | 640.7 | mg/l | TDS |
| D-2S | 02/22/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-2S | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-2S | 02/22/2023 | Calcium | 90.7 | 151.7 | mg/l | 7440-70-2 |
| D-2S | 10/26/2023 | Calcium | 84.5 | 151.7 | mg/l | 7440-70-2 |
| D-2S | 02/22/2023 | Chloride | 48 | 126 | mg/l | 16887-00-6 |
| D-2S | 10/26/2023 | Chloride | 50 | 126 | mg/l | 16887-00-6 |
| D-2S | 02/22/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-2S | 10/26/2023 | pH | 7.4 | 7.1 < 8.1 | pH UNITS | PH |
| D-2S | 02/22/2023 | Sulfate as SO4 | 18 | 67.3 | mg/l | 14808-79-8 |
| D-2S | 10/26/2023 | Sulfate as SO4 | 16 | 67.3 | mg/l | 14808-79-8 |
| D-2S | 02/22/2023 | Total Dissolved Solids | 452 | 640.7 | mg/l | TDS |
| D-2S | 10/26/2023 | Total Dissolved Solids | 380 | 640.7 | mg/l | TDS |
| D-3D | 02/21/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |

Table 2



Groundwater Analytical Data
 Appendix III

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|-------------|-------------------|------------------------|------------|----------------------------------|-------------|-------------------|
| D-3D | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-3D | 02/21/2023 | Calcium | 89.7 | 151.7 | mg/l | 7440-70-2 |
| D-3D | 10/26/2023 | Calcium | 81.2 | 151.7 | mg/l | 7440-70-2 |
| D-3D | 02/21/2023 | Chloride | 63 | 126 | mg/l | 16887-00-6 |
| D-3D | 10/26/2023 | Chloride | 67 | 126 | mg/l | 16887-00-6 |
| D-3D | 02/21/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-3D | 10/26/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-3D | 02/21/2023 | Sulfate as SO4 | 27 | 67.3 | mg/l | 14808-79-8 |
| D-3D | 10/26/2023 | Sulfate as SO4 | 26 | 67.3 | mg/l | 14808-79-8 |
| D-3D | 02/21/2023 | Total Dissolved Solids | 464 | 640.7 | mg/l | TDS |
| D-3D | 10/26/2023 | Total Dissolved Solids | 440 | 640.7 | mg/l | TDS |
| D-3S | 02/21/2023 | Boron | 0.13 | 0.31 | mg/l | 7440-42-8 |
| D-3S | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-3S | 02/21/2023 | Calcium | 77.8 | 151.7 | mg/l | 7440-70-2 |
| D-3S | 10/26/2023 | Calcium | 150 | 151.7 | mg/l | 7440-70-2 |
| D-3S | 02/21/2023 | Chloride | 51 | 126 | mg/l | 16887-00-6 |
| D-3S | 10/26/2023 | Chloride | 330 | 126 | mg/l | 16887-00-6 |
| D-3S | 02/21/2023 | pH | 7.8 | 7.1 < 8.1 | pH UNITS | PH |
| D-3S | 10/26/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-3S | 02/21/2023 | Sulfate as SO4 | 22 | 67.3 | mg/l | 14808-79-8 |
| D-3S | 10/26/2023 | Sulfate as SO4 | 44 | 67.3 | mg/l | 14808-79-8 |
| D-3S | 02/21/2023 | Total Dissolved Solids | 376 | 640.7 | mg/l | TDS |
| D-3S | 10/26/2023 | Total Dissolved Solids | 790 | 640.7 | mg/l | TDS |
| D-4D | 02/21/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-4D | 10/27/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-4D | 02/21/2023 | Calcium | 101 | 151.7 | mg/l | 7440-70-2 |
| D-4D | 10/27/2023 | Calcium | 88.4 | 151.7 | mg/l | 7440-70-2 |
| D-4D | 02/21/2023 | Chloride | 47 | 126 | mg/l | 16887-00-6 |
| D-4D | 10/27/2023 | Chloride | 46 | 126 | mg/l | 16887-00-6 |
| D-4D | 02/21/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| D-4D | 10/27/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| D-4D | 02/21/2023 | Sulfate as SO4 | 22 | 67.3 | mg/l | 14808-79-8 |
| D-4D | 10/27/2023 | Sulfate as SO4 | 22 | 67.3 | mg/l | 14808-79-8 |
| D-4D | 02/21/2023 | Total Dissolved Solids | 468 | 640.7 | mg/l | TDS |
| D-4D | 10/27/2023 | Total Dissolved Solids | 404 | 640.7 | mg/l | TDS |
| D-4S | 02/21/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-4S | 10/27/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-4S | 02/21/2023 | Calcium | 108 | 151.7 | mg/l | 7440-70-2 |
| D-4S | 10/27/2023 | Calcium | 93.4 | 151.7 | mg/l | 7440-70-2 |
| D-4S | 02/21/2023 | Chloride | 48 | 126 | mg/l | 16887-00-6 |
| D-4S | 10/27/2023 | Chloride | 49 | 126 | mg/l | 16887-00-6 |
| D-4S | 02/21/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| D-4S | 10/27/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-4S | 02/21/2023 | Sulfate as SO4 | 23 | 67.3 | mg/l | 14808-79-8 |
| D-4S | 10/27/2023 | Sulfate as SO4 | 25 | 67.3 | mg/l | 14808-79-8 |
| D-4S | 02/21/2023 | Total Dissolved Solids | 458 | 640.7 | mg/l | TDS |
| D-4S | 10/27/2023 | Total Dissolved Solids | 446 | 640.7 | mg/l | TDS |
| D-5D | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-5D | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |

Table 2



Groundwater Analytical Data
 Appendix III

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|------------------------|--------|----------------------------------|----------|------------|
| D-5D | 02/20/2023 | Calcium | 108 | 151.7 | mg/l | 7440-70-2 |
| D-5D | 10/26/2023 | Calcium | 90.0 | 151.7 | mg/l | 7440-70-2 |
| D-5D | 02/20/2023 | Chloride | 68 | 126 | mg/l | 16887-00-6 |
| D-5D | 10/26/2023 | Chloride | 65 | 126 | mg/l | 16887-00-6 |
| D-5D | 02/20/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-5D | 10/26/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| D-5D | 02/20/2023 | Sulfate as SO4 | 31 | 67.3 | mg/l | 14808-79-8 |
| D-5D | 10/26/2023 | Sulfate as SO4 | 29 | 67.3 | mg/l | 14808-79-8 |
| D-5D | 02/20/2023 | Total Dissolved Solids | 468 | 640.7 | mg/l | TDS |
| D-5D | 10/26/2023 | Total Dissolved Solids | 478 | 640.7 | mg/l | TDS |
| D-5S2 | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-5S2 | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-5S2 | 02/20/2023 | Calcium | 100 | 151.7 | mg/l | 7440-70-2 |
| D-5S2 | 10/26/2023 | Calcium | 94.0 | 151.7 | mg/l | 7440-70-2 |
| D-5S2 | 02/20/2023 | Chloride | 89 | 126 | mg/l | 16887-00-6 |
| D-5S2 | 10/26/2023 | Chloride | 86 | 126 | mg/l | 16887-00-6 |
| D-5S2 | 02/20/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| D-5S2 | 10/26/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| D-5S2 | 02/20/2023 | Sulfate as SO4 | 47 | 67.3 | mg/l | 14808-79-8 |
| D-5S2 | 10/26/2023 | Sulfate as SO4 | 51 | 67.3 | mg/l | 14808-79-8 |
| D-5S2 | 02/20/2023 | Total Dissolved Solids | 520 | 640.7 | mg/l | TDS |
| D-5S2 | 10/26/2023 | Total Dissolved Solids | 474 | 640.7 | mg/l | TDS |
| D-8 | 02/21/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-8 | 10/27/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-8 | 02/21/2023 | Calcium | 116 | 151.7 | mg/l | 7440-70-2 |
| D-8 | 10/27/2023 | Calcium | 92.1 | 151.7 | mg/l | 7440-70-2 |
| D-8 | 02/21/2023 | Chloride | 36 | 126 | mg/l | 16887-00-6 |
| D-8 | 10/27/2023 | Chloride | 32 | 126 | mg/l | 16887-00-6 |
| D-8 | 02/21/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| D-8 | 10/27/2023 | pH | 7.5 | 7.1 < 8.1 | pH UNITS | PH |
| D-8 | 02/21/2023 | Sulfate as SO4 | 26 | 67.3 | mg/l | 14808-79-8 |
| D-8 | 10/27/2023 | Sulfate as SO4 | 28 | 67.3 | mg/l | 14808-79-8 |
| D-8 | 02/21/2023 | Total Dissolved Solids | 524 | 640.7 | mg/l | TDS |
| D-8 | 10/27/2023 | Total Dissolved Solids | 450 | 640.7 | mg/l | TDS |
| D-9 | 02/21/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-9 | 10/27/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| D-9 | 02/21/2023 | Calcium | 93.9 | 151.7 | mg/l | 7440-70-2 |
| D-9 | 10/27/2023 | Calcium | 101 | 151.7 | mg/l | 7440-70-2 |
| D-9 | 02/21/2023 | Chloride | 54 | 126 | mg/l | 16887-00-6 |
| D-9 | 10/27/2023 | Chloride | 43 | 126 | mg/l | 16887-00-6 |
| D-9 | 02/21/2023 | pH | 7.3 | 7.1 < 8.1 | pH UNITS | PH |
| D-9 | 10/27/2023 | pH | 7.4 | 7.1 < 8.1 | pH UNITS | PH |
| D-9 | 02/21/2023 | Sulfate as SO4 | 8.4 | 67.3 | mg/l | 14808-79-8 |
| D-9 | 10/27/2023 | Sulfate as SO4 | 12 | 67.3 | mg/l | 14808-79-8 |
| D-9 | 02/21/2023 | Total Dissolved Solids | 512 | 640.7 | mg/l | TDS |
| D-9 | 10/27/2023 | Total Dissolved Solids | 484 | 640.7 | mg/l | TDS |
| U-4D | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-4D | 10/25/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-4D | 02/20/2023 | Calcium | 90.3 | 151.7 | mg/l | 7440-70-2 |

Table 2



Groundwater Analytical Data
 Appendix III

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|------------------------|--------|----------------------------------|----------|------------|
| U-4D | 10/25/2023 | Calcium | 80.2 | 151.7 | mg/l | 7440-70-2 |
| U-4D | 02/20/2023 | Chloride | 31 | 126 | mg/l | 16887-00-6 |
| U-4D | 10/25/2023 | Chloride | 30 | 126 | mg/l | 16887-00-6 |
| U-4D | 02/20/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| U-4D | 10/25/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| U-4D | 02/20/2023 | Sulfate as SO4 | 24 | 67.3 | mg/l | 14808-79-8 |
| U-4D | 10/25/2023 | Sulfate as SO4 | 23 | 67.3 | mg/l | 14808-79-8 |
| U-4D | 02/20/2023 | Total Dissolved Solids | 406 | 640.7 | mg/l | TDS |
| U-4D | 10/25/2023 | Total Dissolved Solids | 472 | 640.7 | mg/l | TDS |
| U-4S | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-4S | 10/25/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-4S | 02/20/2023 | Calcium | 95.6 | 151.7 | mg/l | 7440-70-2 |
| U-4S | 10/25/2023 | Calcium | 102 | 151.7 | mg/l | 7440-70-2 |
| U-4S | 02/20/2023 | Chloride | 45 | 126 | mg/l | 16887-00-6 |
| U-4S | 10/25/2023 | Chloride | 51 | 126 | mg/l | 16887-00-6 |
| U-4S | 02/20/2023 | pH | 7.4 | 7.1 < 8.1 | pH UNITS | PH |
| U-4S | 10/25/2023 | pH | 7.4 | 7.1 < 8.1 | pH UNITS | PH |
| U-4S | 02/20/2023 | Sulfate as SO4 | 24 | 67.3 | mg/l | 14808-79-8 |
| U-4S | 10/25/2023 | Sulfate as SO4 | 58 | 67.3 | mg/l | 14808-79-8 |
| U-4S | 02/20/2023 | Total Dissolved Solids | 488 | 640.7 | mg/l | TDS |
| U-4S | 10/25/2023 | Total Dissolved Solids | 524 | 640.7 | mg/l | TDS |
| U-5D | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-5D | 10/25/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-5D | 02/20/2023 | Calcium | 83.8 | 151.7 | mg/l | 7440-70-2 |
| U-5D | 10/25/2023 | Calcium | 73.7 | 151.7 | mg/l | 7440-70-2 |
| U-5D | 02/20/2023 | Chloride | 26 | 126 | mg/l | 16887-00-6 |
| U-5D | 10/25/2023 | Chloride | 26 | 126 | mg/l | 16887-00-6 |
| U-5D | 02/20/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| U-5D | 10/25/2023 | pH | 7.6 | 7.1 < 8.1 | pH UNITS | PH |
| U-5D | 02/20/2023 | Sulfate as SO4 | 27 | 67.3 | mg/l | 14808-79-8 |
| U-5D | 10/25/2023 | Sulfate as SO4 | 25 | 67.3 | mg/l | 14808-79-8 |
| U-5D | 02/20/2023 | Total Dissolved Solids | 386 | 640.7 | mg/l | TDS |
| U-5D | 10/25/2023 | Total Dissolved Solids | 388 | 640.7 | mg/l | TDS |
| U-5S | 02/20/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-5S | 10/26/2023 | Boron | < 0.10 | 0.31 | mg/l | 7440-42-8 |
| U-5S | 02/20/2023 | Calcium | 86.8 | 151.7 | mg/l | 7440-70-2 |
| U-5S | 10/26/2023 | Calcium | 79.7 | 151.7 | mg/l | 7440-70-2 |
| U-5S | 02/20/2023 | Chloride | 38 | 126 | mg/l | 16887-00-6 |
| U-5S | 10/26/2023 | Chloride | 43 | 126 | mg/l | 16887-00-6 |
| U-5S | 02/20/2023 | pH | 7.7 | 7.1 < 8.1 | pH UNITS | PH |
| U-5S | 10/26/2023 | pH | 7.4 | 7.1 < 8.1 | pH UNITS | PH |
| U-5S | 02/20/2023 | Sulfate as SO4 | 23 | 67.3 | mg/l | 14808-79-8 |
| U-5S | 10/26/2023 | Sulfate as SO4 | 24 | 67.3 | mg/l | 14808-79-8 |
| U-5S | 02/20/2023 | Total Dissolved Solids | 460 | 640.7 | mg/l | TDS |
| U-5S | 10/26/2023 | Total Dissolved Solids | 432 | 640.7 | mg/l | TDS |

Results in milligrams per liter (mg/l)

Bold = Indicates concentration above Background Threshold Value

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|----------------|-----------|----------------------------------|-------|------------|
| D-1D | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-1D | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-1D | 02/20/2023 | Barium | 0.043 | 0.11 | mg/l | 7440-39-3 |
| D-1D | 10/26/2023 | Barium | 0.047 | 0.11 | mg/l | 7440-39-3 |
| D-1D | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-1D | 10/26/2023 | Cadmium | 0.00025 | 0.001 | mg/l | 7440-43-9 |
| D-1D | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-1D | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-1D | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-1D | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-1D | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-1D | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-1D | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-1D | 10/26/2023 | Lead | 0.00084 | 0.01 | mg/l | 7439-92-1 |
| D-1D | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-1D | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-1D | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-1D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-1D | 02/20/2023 | Radium (226) | < 0.113 | 0.479 | pci/l | 13982-63-3 |
| D-1D | 10/26/2023 | Radium (226) | 0.232 | 0.479 | pci/l | 13982-63-3 |
| D-1D | 02/20/2023 | Radium 228 | < 0.590 | 1.45 | pci/l | 15262-20-1 |
| D-1D | 10/26/2023 | Radium 228 | 0.600 | 1.45 | pci/l | 15262-20-1 |
| D-1D | 02/20/2023 | Radium-226/228 | < 0.590 | 1.929 | pci/l | 425 |
| D-1D | 10/26/2023 | Radium-226/228 | 0.832 | 1.929 | pci/l | 425 |
| D-1D | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-1D | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-1D | 10/26/2023 | Thallium | 0.014 | 0.021 | mg/l | 7440-28-0 |
| D-1S | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-1S | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-1S | 02/20/2023 | Barium | 0.046 | 0.11 | mg/l | 7440-39-3 |
| D-1S | 10/26/2023 | Barium | 0.043 | 0.11 | mg/l | 7440-39-3 |
| D-1S | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-1S | 10/26/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-1S | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-1S | 10/26/2023 | Chromium | 0.013 | 0.052 | mg/l | 7440-47-3 |
| D-1S | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-1S | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-1S | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-1S | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-1S | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-1S | 10/26/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-1S | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-1S | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-1S | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-1S | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-1S | 02/20/2023 | Radium (226) | < 0.0909 | 0.479 | pci/l | 13982-63-3 |
| D-1S | 10/26/2023 | Radium (226) | < 0.183 | 0.479 | pci/l | 13982-63-3 |
| D-1S | 02/20/2023 | Radium 228 | < 0.526 | 1.45 | pci/l | 15262-20-1 |
| D-1S | 10/26/2023 | Radium 228 | < 0.497 | 1.45 | pci/l | 15262-20-1 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|----------------|-----------|----------------------------------|-------|------------|
| D-1S | 02/20/2023 | Radium-226/228 | < 0.526 | 1.929 | pci/l | 425 |
| D-1S | 10/26/2023 | Radium-226/228 | < 0.497 | 1.929 | pci/l | 425 |
| D-1S | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-1S | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-1S | 10/26/2023 | Thallium | 0.0019 | 0.021 | mg/l | 7440-28-0 |
| D-2D | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-2D | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-2D | 02/21/2023 | Barium | 0.051 | 0.11 | mg/l | 7440-39-3 |
| D-2D | 10/26/2023 | Barium | 0.052 | 0.11 | mg/l | 7440-39-3 |
| D-2D | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-2D | 10/26/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-2D | 02/21/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-2D | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-2D | 02/21/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-2D | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-2D | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-2D | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-2D | 02/21/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-2D | 10/26/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-2D | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-2D | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-2D | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-2D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-2D | 02/21/2023 | Radium (226) | 0.0947 | 0.479 | pci/l | 13982-63-3 |
| D-2D | 10/26/2023 | Radium (226) | 0.148 | 0.479 | pci/l | 13982-63-3 |
| D-2D | 02/21/2023 | Radium 228 | 0.612 | 1.45 | pci/l | 15262-20-1 |
| D-2D | 10/26/2023 | Radium 228 | 0.502 | 1.45 | pci/l | 15262-20-1 |
| D-2D | 02/21/2023 | Radium-226/228 | 0.707 | 1.929 | pci/l | 425 |
| D-2D | 10/26/2023 | Radium-226/228 | 0.649 | 1.929 | pci/l | 425 |
| D-2D | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-2D | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-2D | 10/26/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-2S | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-2S | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-2S | 02/22/2023 | Barium | 0.050 | 0.11 | mg/l | 7440-39-3 |
| D-2S | 10/26/2023 | Barium | 0.046 | 0.11 | mg/l | 7440-39-3 |
| D-2S | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-2S | 10/26/2023 | Cadmium | 0.00026 | 0.001 | mg/l | 7440-43-9 |
| D-2S | 02/22/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-2S | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-2S | 02/22/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-2S | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-2S | 02/22/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-2S | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-2S | 02/22/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-2S | 10/26/2023 | Lead | 0.0012 | 0.01 | mg/l | 7439-92-1 |
| D-2S | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-2S | 02/22/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-2S | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|-------------|-------------------|-----------------|--------------|----------------------------------|-------------|------------------|
| D-2S | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-2S | 02/22/2023 | Radium (226) | < 0.0798 | 0.479 | pci/l | 13982-63-3 |
| D-2S | 10/26/2023 | Radium (226) | < 0.143 | 0.479 | pci/l | 13982-63-3 |
| D-2S | 02/22/2023 | Radium 228 | 0.578 | 1.45 | pci/l | 15262-20-1 |
| D-2S | 10/26/2023 | Radium 228 | < 0.587 | 1.45 | pci/l | 15262-20-1 |
| D-2S | 02/22/2023 | Radium-226/228 | 0.621 | 1.929 | pci/l | 425 |
| D-2S | 10/26/2023 | Radium-226/228 | < 0.587 | 1.929 | pci/l | 425 |
| D-2S | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-2S | 02/22/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-2S | 10/26/2023 | Thallium | 0.014 | 0.021 | mg/l | 7440-28-0 |
| D-3D | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-3D | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-3D | 02/21/2023 | Barium | 0.054 | 0.11 | mg/l | 7440-39-3 |
| D-3D | 10/26/2023 | Barium | 0.055 | 0.11 | mg/l | 7440-39-3 |
| D-3D | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-3D | 10/26/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-3D | 02/21/2023 | Chromium | 0.065 | 0.052 | mg/l | 7440-47-3 |
| D-3D | 10/26/2023 | Chromium | 0.064 | 0.052 | mg/l | 7440-47-3 |
| D-3D | 02/21/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-3D | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-3D | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-3D | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-3D | 02/21/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-3D | 10/26/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-3D | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-3D | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-3D | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-3D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-3D | 02/21/2023 | Radium (226) | < 0.101 | 0.479 | pci/l | 13982-63-3 |
| D-3D | 10/26/2023 | Radium (226) | 0.209 | 0.479 | pci/l | 13982-63-3 |
| D-3D | 02/21/2023 | Radium 228 | < 0.461 | 1.45 | pci/l | 15262-20-1 |
| D-3D | 10/26/2023 | Radium 228 | 0.666 | 1.45 | pci/l | 15262-20-1 |
| D-3D | 02/21/2023 | Radium-226/228 | < 0.461 | 1.929 | pci/l | 425 |
| D-3D | 10/26/2023 | Radium-226/228 | 0.875 | 1.929 | pci/l | 425 |
| D-3D | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-3D | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-3D | 10/26/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-3S | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-3S | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-3S | 02/21/2023 | Barium | 0.042 | 0.11 | mg/l | 7440-39-3 |
| D-3S | 10/26/2023 | Barium | 0.081 | 0.11 | mg/l | 7440-39-3 |
| D-3S | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-3S | 10/26/2023 | Cadmium | 0.00030 | 0.001 | mg/l | 7440-43-9 |
| D-3S | 02/21/2023 | Chromium | 0.020 | 0.052 | mg/l | 7440-47-3 |
| D-3S | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-3S | 02/21/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-3S | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-3S | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-3S | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|-------------|-------------------|-----------------|--------------|----------------------------------|-------------|------------------|
| D-3S | 02/21/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-3S | 10/26/2023 | Lead | 0.00081 | 0.01 | mg/l | 7439-92-1 |
| D-3S | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-3S | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-3S | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-3S | 10/26/2023 | MOLYBDENUM | 0.0032 | 0.0032 | mg/l | 7439-98-7 |
| D-3S | 02/21/2023 | Radium (226) | < 0.0864 | 0.479 | pci/l | 13982-63-3 |
| D-3S | 10/26/2023 | Radium (226) | < 0.146 | 0.479 | pci/l | 13982-63-3 |
| D-3S | 02/21/2023 | Radium 228 | < 0.520 | 1.45 | pci/l | 15262-20-1 |
| D-3S | 10/26/2023 | Radium 228 | < 0.434 | 1.45 | pci/l | 15262-20-1 |
| D-3S | 02/21/2023 | Radium-226/228 | < 0.520 | 1.929 | pci/l | 425 |
| D-3S | 10/26/2023 | Radium-226/228 | < 0.434 | 1.929 | pci/l | 425 |
| D-3S | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-3S | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-3S | 10/26/2023 | Thallium | 0.022 | 0.021 | mg/l | 7440-28-0 |
| D-4D | 10/27/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-4D | 10/27/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-4D | 02/21/2023 | Barium | 0.069 | 0.11 | mg/l | 7440-39-3 |
| D-4D | 10/27/2023 | Barium | 0.068 | 0.11 | mg/l | 7440-39-3 |
| D-4D | 10/27/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-4D | 10/27/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-4D | 02/21/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-4D | 10/27/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-4D | 02/21/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-4D | 10/27/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-4D | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-4D | 10/27/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-4D | 02/21/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-4D | 10/27/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-4D | 10/27/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-4D | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-4D | 10/27/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-4D | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-4D | 02/21/2023 | Radium (226) | < 0.0811 | 0.479 | pci/l | 13982-63-3 |
| D-4D | 10/27/2023 | Radium (226) | < 0.136 | 0.479 | pci/l | 13982-63-3 |
| D-4D | 02/21/2023 | Radium 228 | < 0.456 | 1.45 | pci/l | 15262-20-1 |
| D-4D | 10/27/2023 | Radium 228 | < 0.508 | 1.45 | pci/l | 15262-20-1 |
| D-4D | 02/21/2023 | Radium-226/228 | < 0.456 | 1.929 | pci/l | 425 |
| D-4D | 10/27/2023 | Radium-226/228 | < 0.508 | 1.929 | pci/l | 425 |
| D-4D | 10/27/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-4D | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-4D | 10/27/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-4S | 10/27/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-4S | 10/27/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-4S | 02/21/2023 | Barium | 0.094 | 0.11 | mg/l | 7440-39-3 |
| D-4S | 10/27/2023 | Barium | 0.079 | 0.11 | mg/l | 7440-39-3 |
| D-4S | 10/27/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-4S | 10/27/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-4S | 02/21/2023 | Chromium | 0.072 | 0.052 | mg/l | 7440-47-3 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|----------------|-----------|----------------------------------|-------|------------|
| D-4S | 10/27/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-4S | 02/21/2023 | Cobalt | 0.00072 | 0.0015 | mg/l | 7440-48-4 |
| D-4S | 10/27/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-4S | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-4S | 10/27/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-4S | 02/21/2023 | Lead | 0.0050 | 0.01 | mg/l | 7439-92-1 |
| D-4S | 10/27/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-4S | 10/27/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-4S | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-4S | 10/27/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-4S | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-4S | 02/21/2023 | Radium (226) | < 0.106 | 0.479 | pci/l | 13982-63-3 |
| D-4S | 10/27/2023 | Radium (226) | < 0.145 | 0.479 | pci/l | 13982-63-3 |
| D-4S | 02/21/2023 | Radium 228 | < 0.747 | 1.45 | pci/l | 15262-20-1 |
| D-4S | 10/27/2023 | Radium 228 | < 0.525 | 1.45 | pci/l | 15262-20-1 |
| D-4S | 02/21/2023 | Radium-226/228 | < 0.747 | 1.929 | pci/l | 425 |
| D-4S | 10/27/2023 | Radium-226/228 | < 0.525 | 1.929 | pci/l | 425 |
| D-4S | 10/27/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-4S | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-4S | 10/27/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-5D | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-5D | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-5D | 02/20/2023 | Barium | 0.058 | 0.11 | mg/l | 7440-39-3 |
| D-5D | 10/26/2023 | Barium | 0.055 | 0.11 | mg/l | 7440-39-3 |
| D-5D | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-5D | 10/26/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-5D | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-5D | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-5D | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-5D | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-5D | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-5D | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-5D | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-5D | 10/26/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-5D | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-5D | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-5D | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-5D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-5D | 02/20/2023 | Radium (226) | < 0.124 | 0.479 | pci/l | 13982-63-3 |
| D-5D | 10/26/2023 | Radium (226) | < 0.139 | 0.479 | pci/l | 13982-63-3 |
| D-5D | 02/20/2023 | Radium 228 | < 0.496 | 1.45 | pci/l | 15262-20-1 |
| D-5D | 10/26/2023 | Radium 228 | < 0.556 | 1.45 | pci/l | 15262-20-1 |
| D-5D | 02/20/2023 | Radium-226/228 | < 0.496 | 1.929 | pci/l | 425 |
| D-5D | 10/26/2023 | Radium-226/228 | < 0.556 | 1.929 | pci/l | 425 |
| D-5D | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-5D | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-5D | 10/26/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-5S2 | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-5S2 | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|----------------|-----------|----------------------------------|-------|------------|
| D-5S2 | 02/20/2023 | Barium | 0.059 | 0.11 | mg/l | 7440-39-3 |
| D-5S2 | 10/26/2023 | Barium | 0.060 | 0.11 | mg/l | 7440-39-3 |
| D-5S2 | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-5S2 | 10/26/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-5S2 | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-5S2 | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-5S2 | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-5S2 | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-5S2 | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-5S2 | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-5S2 | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-5S2 | 10/26/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-5S2 | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-5S2 | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-5S2 | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-5S2 | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-5S2 | 02/20/2023 | Radium (226) | < 0.0766 | 0.479 | pci/l | 13982-63-3 |
| D-5S2 | 10/26/2023 | Radium (226) | < 0.153 | 0.479 | pci/l | 13982-63-3 |
| D-5S2 | 02/20/2023 | Radium 228 | 0.548 | 1.45 | pci/l | 15262-20-1 |
| D-5S2 | 10/26/2023 | Radium 228 | < 0.542 | 1.45 | pci/l | 15262-20-1 |
| D-5S2 | 02/20/2023 | Radium-226/228 | 0.603 | 1.929 | pci/l | 425 |
| D-5S2 | 10/26/2023 | Radium-226/228 | < 0.542 | 1.929 | pci/l | 425 |
| D-5S2 | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-5S2 | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-5S2 | 10/26/2023 | Thallium | 0.0017 | 0.021 | mg/l | 7440-28-0 |
| D-8 | 10/27/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-8 | 10/27/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-8 | 02/21/2023 | Barium | 0.094 | 0.11 | mg/l | 7440-39-3 |
| D-8 | 10/27/2023 | Barium | 0.071 | 0.11 | mg/l | 7440-39-3 |
| D-8 | 10/27/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-8 | 10/27/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-8 | 02/21/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-8 | 10/27/2023 | Chromium | 0.0057 | 0.052 | mg/l | 7440-47-3 |
| D-8 | 02/21/2023 | Cobalt | 0.00091 | 0.0015 | mg/l | 7440-48-4 |
| D-8 | 10/27/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-8 | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-8 | 10/27/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-8 | 02/21/2023 | Lead | 0.00058 | 0.01 | mg/l | 7439-92-1 |
| D-8 | 10/27/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-8 | 10/27/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-8 | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-8 | 10/27/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-8 | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-8 | 02/21/2023 | Radium (226) | 0.172 | 0.479 | pci/l | 13982-63-3 |
| D-8 | 10/27/2023 | Radium (226) | < 0.185 | 0.479 | pci/l | 13982-63-3 |
| D-8 | 02/21/2023 | Radium 228 | < 0.661 | 1.45 | pci/l | 15262-20-1 |
| D-8 | 10/27/2023 | Radium 228 | < 0.670 | 1.45 | pci/l | 15262-20-1 |
| D-8 | 02/21/2023 | Radium-226/228 | < 0.661 | 1.929 | pci/l | 425 |
| D-8 | 10/27/2023 | Radium-226/228 | < 0.670 | 1.929 | pci/l | 425 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|------------|-------------------|----------------|---------------|----------------------------------|-------------|------------------|
| D-8 | 10/27/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-8 | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-8 | 10/27/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-9 | 10/27/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| D-9 | 10/27/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| D-9 | 02/21/2023 | Barium | 0.087 | 0.11 | mg/l | 7440-39-3 |
| D-9 | 10/27/2023 | Barium | 0.078 | 0.11 | mg/l | 7440-39-3 |
| D-9 | 10/27/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| D-9 | 10/27/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| D-9 | 02/21/2023 | Chromium | 0.012 | 0.052 | mg/l | 7440-47-3 |
| D-9 | 10/27/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| D-9 | 02/21/2023 | Cobalt | 0.0021 | 0.0015 | mg/l | 7440-48-4 |
| D-9 | 10/27/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| D-9 | 02/21/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| D-9 | 10/27/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| D-9 | 02/21/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-9 | 10/27/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| D-9 | 10/27/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| D-9 | 02/21/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-9 | 10/27/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| D-9 | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| D-9 | 02/21/2023 | Radium (226) | < 0.158 | 0.479 | pci/l | 13982-63-3 |
| D-9 | 10/27/2023 | Radium (226) | < 0.160 | 0.479 | pci/l | 13982-63-3 |
| D-9 | 02/21/2023 | Radium 228 | < 1.04 | 1.45 | pci/l | 15262-20-1 |
| D-9 | 10/27/2023 | Radium 228 | < 0.630 | 1.45 | pci/l | 15262-20-1 |
| D-9 | 02/21/2023 | Radium-226/228 | < 1.04 | 1.929 | pci/l | 425 |
| D-9 | 10/27/2023 | Radium-226/228 | < 0.630 | 1.929 | pci/l | 425 |
| D-9 | 10/27/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| D-9 | 02/21/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| D-9 | 10/27/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-4D | 10/25/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| U-4D | 10/25/2023 | Arsenic | 0.0021 | 0.0021 | mg/l | 7440-38-2 |
| U-4D | 02/20/2023 | Barium | 0.041 | 0.11 | mg/l | 7440-39-3 |
| U-4D | 10/25/2023 | Barium | 0.042 | 0.11 | mg/l | 7440-39-3 |
| U-4D | 10/25/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| U-4D | 10/25/2023 | Cadmium | 0.0010 | 0.001 | mg/l | 7440-43-9 |
| U-4D | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-4D | 10/25/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-4D | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-4D | 10/25/2023 | Cobalt | 0.00098 | 0.0015 | mg/l | 7440-48-4 |
| U-4D | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| U-4D | 10/25/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| U-4D | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| U-4D | 10/25/2023 | Lead | 0.0020 | 0.01 | mg/l | 7439-92-1 |
| U-4D | 10/25/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| U-4D | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-4D | 10/25/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-4D | 10/25/2023 | MOLYBDENUM | 0.0021 | 0.0032 | mg/l | 7439-98-7 |
| U-4D | 02/20/2023 | Radium (226) | < 0.0743 | 0.479 | pci/l | 13982-63-3 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|----------|------------|----------------|-----------|----------------------------------|-------|------------|
| U-4D | 10/25/2023 | Radium (226) | < 0.155 | 0.479 | pci/l | 13982-63-3 |
| U-4D | 02/20/2023 | Radium 228 | < 0.504 | 1.45 | pci/l | 15262-20-1 |
| U-4D | 10/25/2023 | Radium 228 | < 0.470 | 1.45 | pci/l | 15262-20-1 |
| U-4D | 02/20/2023 | Radium-226/228 | < 0.504 | 1.929 | pci/l | 425 |
| U-4D | 10/25/2023 | Radium-226/228 | < 0.470 | 1.929 | pci/l | 425 |
| U-4D | 10/25/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| U-4D | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-4D | 10/25/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-4S | 10/25/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| U-4S | 10/25/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| U-4S | 02/20/2023 | Barium | 0.040 | 0.11 | mg/l | 7440-39-3 |
| U-4S | 10/25/2023 | Barium | 0.048 | 0.11 | mg/l | 7440-39-3 |
| U-4S | 10/25/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| U-4S | 10/25/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| U-4S | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-4S | 10/25/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-4S | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-4S | 10/25/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-4S | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| U-4S | 10/25/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| U-4S | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| U-4S | 10/25/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| U-4S | 10/25/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| U-4S | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-4S | 10/25/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-4S | 10/25/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| U-4S | 02/20/2023 | Radium (226) | 0.0996 | 0.479 | pci/l | 13982-63-3 |
| U-4S | 10/25/2023 | Radium (226) | 0.238 | 0.479 | pci/l | 13982-63-3 |
| U-4S | 02/20/2023 | Radium 228 | < 0.617 | 1.45 | pci/l | 15262-20-1 |
| U-4S | 10/25/2023 | Radium 228 | < 0.562 | 1.45 | pci/l | 15262-20-1 |
| U-4S | 02/20/2023 | Radium-226/228 | < 0.617 | 1.929 | pci/l | 425 |
| U-4S | 10/25/2023 | Radium-226/228 | < 0.562 | 1.929 | pci/l | 425 |
| U-4S | 10/25/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| U-4S | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-4S | 10/25/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-5D | 10/25/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| U-5D | 10/25/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| U-5D | 02/20/2023 | Barium | 0.054 | 0.11 | mg/l | 7440-39-3 |
| U-5D | 10/25/2023 | Barium | 0.053 | 0.11 | mg/l | 7440-39-3 |
| U-5D | 10/25/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| U-5D | 10/25/2023 | Cadmium | < 0.00020 | 0.001 | mg/l | 7440-43-9 |
| U-5D | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-5D | 10/25/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-5D | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-5D | 10/25/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-5D | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| U-5D | 10/25/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| U-5D | 02/20/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |
| U-5D | 10/25/2023 | Lead | < 0.00050 | 0.01 | mg/l | 7439-92-1 |

Table 3



Groundwater Analytical Data
 Appendix IV

| Location | Date | Parameter | Result | Background Threshold Value (BTV) | Units | CAS # |
|-------------|-------------------|-------------------|---------------|----------------------------------|-------------|------------------|
| U-5D | 10/25/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| U-5D | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-5D | 10/25/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-5D | 10/25/2023 | MOLYBDENUM | < 0.0020 | 0.0032 | mg/l | 7439-98-7 |
| U-5D | 02/20/2023 | Radium (226) | < 0.0724 | 0.479 | pci/l | 13982-63-3 |
| U-5D | 10/25/2023 | Radium (226) | < 0.139 | 0.479 | pci/l | 13982-63-3 |
| U-5D | 02/20/2023 | Radium 228 | < 0.497 | 1.45 | pci/l | 15262-20-1 |
| U-5D | 10/25/2023 | Radium 228 | < 0.473 | 1.45 | pci/l | 15262-20-1 |
| U-5D | 02/20/2023 | Radium-226/228 | < 0.497 | 1.929 | pci/l | 425 |
| U-5D | 10/25/2023 | Radium-226/228 | < 0.473 | 1.929 | pci/l | 425 |
| U-5D | 10/25/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| U-5D | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-5D | 10/25/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-5S | 10/26/2023 | Antimony | < 0.0020 | 0.002 | mg/l | 7440-36-0 |
| U-5S | 10/26/2023 | Arsenic | < 0.0020 | 0.0021 | mg/l | 7440-38-2 |
| U-5S | 02/20/2023 | Barium | 0.062 | 0.11 | mg/l | 7440-39-3 |
| U-5S | 10/26/2023 | Barium | 0.063 | 0.11 | mg/l | 7440-39-3 |
| U-5S | 10/26/2023 | Beryllium | < 0.0010 | 0.001 | mg/l | 7440-41-7 |
| U-5S | 10/26/2023 | Cadmium | 0.00033 | 0.001 | mg/l | 7440-43-9 |
| U-5S | 02/20/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-5S | 10/26/2023 | Chromium | < 0.0050 | 0.052 | mg/l | 7440-47-3 |
| U-5S | 02/20/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-5S | 10/26/2023 | Cobalt | < 0.00050 | 0.0015 | mg/l | 7440-48-4 |
| U-5S | 02/20/2023 | Fluoride | < 0.50 | 1 | mg/l | 16984-48-8 |
| U-5S | 10/26/2023 | Fluoride | < 1.0 | 1 | mg/l | 16984-48-8 |
| U-5S | 02/20/2023 | Lead | 0.0017 | 0.01 | mg/l | 7439-92-1 |
| U-5S | 10/26/2023 | Lead | 0.00087 | 0.01 | mg/l | 7439-92-1 |
| U-5S | 10/26/2023 | Lithium | < 0.010 | 0.03 | mg/l | 7439-93-2 |
| U-5S | 02/20/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-5S | 10/26/2023 | Mercury | < 0.00020 | 0.0002 | mg/l | 7439-97-6 |
| U-5S | 10/26/2023 | MOLYBDENUM | 0.0035 | 0.0032 | mg/l | 7439-98-7 |
| U-5S | 02/20/2023 | Radium (226) | 0.120 | 0.479 | pci/l | 13982-63-3 |
| U-5S | 10/26/2023 | Radium (226) | < 0.135 | 0.479 | pci/l | 13982-63-3 |
| U-5S | 02/20/2023 | Radium 228 | < 0.934 | 1.45 | pci/l | 15262-20-1 |
| U-5S | 10/26/2023 | Radium 228 | < 0.462 | 1.45 | pci/l | 15262-20-1 |
| U-5S | 02/20/2023 | Radium-226/228 | < 0.934 | 1.929 | pci/l | 425 |
| U-5S | 10/26/2023 | Radium-226/228 | < 0.462 | 1.929 | pci/l | 425 |
| U-5S | 10/26/2023 | Selenium | < 0.0050 | 0.005 | mg/l | 7782-49-2 |
| U-5S | 02/20/2023 | Thallium | < 0.0010 | 0.021 | mg/l | 7440-28-0 |
| U-5S | 10/26/2023 | Thallium | 0.021 | 0.021 | mg/l | 7440-28-0 |

Results in milligrams per liter (mg/l) or picocuries per liter (pci/l)
Bold = Indicates concentration above Background Threshold Value

Table 4



Well Stabilization Data

| Well ID | Measurement Date | Purge Rate (ml/min) | Purge Volume (gallons) | Field pH | Field Specific Conductivity (umhos/cm) | Field Temp (°C) | Dissolved Oxygen (mg/l) | Turbidity (NTU) | ORP (mV) |
|---------|-------------------|---------------------|------------------------|----------|--|-----------------|-------------------------|-----------------|----------|
| D-1D | 2/20/23 3:30 PM | 1000 | 0.1 | 7.62 | 602 | 10.70 | 13.19 | 8.4 | 119 |
| D-1D | 2/20/23 3:40 PM | 1000 | 2.5 | 7.65 | 674 | 10.33 | 12.89 | 5.9 | 120 |
| D-1D | 2/20/23 3:50 PM | 1000 | 5 | 7.65 | 674 | 10.87 | 13.14 | 4.3 | 120 |
| D-1D | 2/20/23 4:00 PM | 1000 | 7.5 | 7.65 | 674 | 10.88 | 12.92 | 4.1 | 120 |
| D-1D | 2/20/23 4:10 PM | | | 7.65 | 674 | 10.88 | 12.92 | 4.1 | 120 |
| D-1D | 10/26/23 11:00 AM | 1000 | 0.1 | 7.83 | 685 | 12.91 | 6.43 | 20.9 | 212 |
| D-1D | 10/26/23 11:10 AM | 1000 | 7 | 8.18 | 678 | 12.84 | 7.01 | 21.5 | 261 |
| D-1D | 10/26/23 11:20 AM | 1000 | 14 | 8.19 | 678 | 12.87 | 7.43 | 21.3 | 266 |
| D-1D | 10/26/23 11:35 AM | 1000 | 22 | 8.17 | 676 | 12.70 | 8.16 | 21.7 | 271 |
| D-1D | 10/26/23 11:40 AM | | | 8.20 | 676 | 12.79 | 8.08 | 21.6 | 270 |
| D-1S | 2/20/23 3:30 PM | 1000 | 0.1 | 7.50 | 652 | 10.65 | 11.49 | 6.2 | 118 |
| D-1S | 2/20/23 3:35 PM | 1000 | 1 | 7.33 | 687 | 11.13 | 11.02 | 9.8 | 113 |
| D-1S | 2/20/23 3:40 PM | 1000 | 2 | 7.28 | 680 | 11.37 | 8.58 | 2.9 | 100 |
| D-1S | 2/20/23 3:45 PM | 1000 | 2.5 | 7.28 | 686 | 11.50 | 8.53 | 2.8 | 100 |
| D-1S | 2/20/23 3:50 PM | | | 7.27 | 685 | 11.60 | 8.42 | 2.9 | 99 |
| D-1S | 10/26/23 11:00 AM | 1000 | 0.1 | 8.24 | 610 | 13.09 | 9.32 | 22.5 | 233 |
| D-1S | 10/26/23 11:10 AM | 1000 | 2 | 7.96 | 686 | 12.92 | 8.58 | 21.1 | 265 |
| D-1S | 10/26/23 11:20 AM | 1000 | 4 | 7.88 | 688 | 12.92 | 7.74 | 20.1 | 244 |
| D-1S | 10/26/23 11:35 AM | 1000 | 6.5 | 7.83 | 685 | 12.91 | 6.44 | 21.9 | 212 |
| D-1S | 10/26/23 11:40 AM | | | 7.83 | 685 | 12.91 | 6.43 | 20.9 | 212 |
| D-2D | 2/21/23 12:30 PM | 1000 | 0.1 | 7.36 | 758 | 5.39 | 10.00 | 28.1 | 115 |
| D-2D | 2/21/23 12:40 PM | 1000 | 2.5 | 7.28 | 822 | 8.51 | 9.00 | 35.1 | 124 |
| D-2D | 2/21/23 12:50 PM | 1000 | 5 | 7.29 | 737 | 8.74 | 9.07 | 25.1 | 126 |
| D-2D | 2/21/23 1:00 PM | 1000 | 8 | 7.29 | 736 | 8.85 | 11.03 | 24.1 | 126 |
| D-2D | 2/21/23 1:05 PM | | | 7.28 | 742 | 8.75 | 12.21 | 25.4 | 125 |
| D-2D | 10/26/23 11:00 AM | 1000 | 0.1 | 8.01 | 724 | 10.73 | 5.35 | 19.7 | 272 |
| D-2D | 10/26/23 11:10 AM | 1000 | 7.5 | 8.00 | 723 | 10.67 | 5.90 | 23.6 | 283 |
| D-2D | 10/26/23 11:20 AM | 1000 | 15 | 8.00 | 720 | 10.63 | 5.95 | 20.1 | 287 |
| D-2D | 10/26/23 11:35 AM | 1000 | 23 | 8.00 | 716 | 10.69 | 5.97 | 19.9 | 288 |
| D-2D | 10/26/23 11:40 AM | | | 7.99 | 716 | 10.66 | 6.05 | 20.1 | 289 |
| D-2S | 2/21/23 8:55 AM | 1000 | 0.1 | 7.64 | 592 | 2.30 | 15.10 | 39.3 | 135 |
| D-2S | 2/21/23 9:00 AM | 1000 | 1 | 7.22 | 778 | 8.79 | 12.17 | 74.9 | 145 |
| D-2S | 2/21/23 9:05 AM | 1000 | 2 | 7.06 | 756 | 9.31 | 12.36 | 72.0 | 144 |
| D-2S | 2/21/23 9:10 AM | 1000 | 3 | 7.11 | 742 | 9.44 | 11.96 | 54.5 | 130 |
| D-2S | 2/21/23 9:15 AM | | | 7.11 | 740 | 9.45 | 11.89 | 52.5 | 127 |
| D-2S | 10/26/23 12:55 PM | 1000 | 0.1 | 8.27 | 584 | 13.12 | 7.38 | 20.3 | 227 |
| D-2S | 10/26/23 1:00 PM | 1000 | 2.5 | 7.94 | 727 | 11.31 | 0.00 | 16.7 | 265 |
| D-2S | 10/26/23 1:05 PM | 1000 | 5 | 7.85 | 716 | 11.22 | 0.00 | 16.6 | 261 |
| D-2S | 10/26/23 1:10 PM | 1000 | 8 | 7.83 | 715 | 11.14 | 0.00 | 17.5 | 255 |
| D-2S | 10/26/23 1:15 PM | | | 7.83 | 715 | 11.15 | 0.00 | 17.7 | 255 |
| D-3D | 2/21/23 10:25 AM | 1000 | 0.1 | 7.20 | 763 | 9.24 | 12.81 | 23.1 | 52 |
| D-3D | 2/21/23 10:35 AM | 1000 | 2.5 | 7.13 | 769 | 9.43 | 11.52 | 20.6 | 38 |
| D-3D | 2/21/23 10:45 AM | 1000 | 5 | 7.08 | 768 | 10.16 | 4.09 | 16.8 | 39 |
| D-3D | 2/21/23 10:55 AM | 1000 | 7.5 | 7.08 | 781 | 9.09 | 4.25 | 14.6 | 39 |
| D-3D | 2/21/23 11:00 AM | | | 7.08 | 772 | 10.15 | 4.06 | 12.8 | 40 |
| D-3D | 10/26/23 12:55 PM | 1000 | 0.1 | 7.96 | 780 | 34.10 | 1.85 | 34.1 | 72 |
| D-3D | 10/26/23 1:00 PM | 1000 | 7 | 7.96 | 775 | 42.50 | 2.17 | 42.5 | 89 |
| D-3D | 10/26/23 1:05 PM | 1000 | 14 | 7.93 | 782 | 32.10 | 2.97 | 32.1 | 110 |
| D-3D | 10/26/23 1:10 PM | 1000 | 22 | 7.93 | 782 | 32.10 | 2.97 | 32.1 | 110 |
| D-3D | 10/26/23 1:15 PM | | | 7.95 | 777 | 11.47 | 2.78 | 33.1 | 116 |
| D-3S | 2/21/23 10:20 AM | 1000 | 0.1 | 8.00 | 670 | 9.89 | 12.16 | 22.1 | 161 |
| D-3S | 2/21/23 10:25 AM | 1000 | 1.5 | 7.58 | 656 | 10.84 | 5.81 | 46.0 | 78 |
| D-3S | 2/21/23 10:30 AM | 1000 | 3 | 7.32 | 671 | 10.83 | 12.72 | 16.7 | 46 |
| D-3S | 2/21/23 10:35 AM | 1000 | 5 | 7.28 | 690 | 9.89 | 12.21 | 11.7 | 51 |
| D-3S | 2/21/23 10:40 AM | | | 7.28 | 691 | 9.85 | 12.13 | 10.2 | 52 |

Table 4
 Well Stabilization Data



| Well ID | Measurement Date | Purge Rate (ml/min) | Purge Volume (gallons) | Field pH | Field Specific Conductivity (umhos/cm) | Field Temp (°C) | Dissolved Oxygen (mg/l) | Turbidity (NTU) | ORP (mV) |
|---------|-------------------|---------------------|------------------------|----------|--|-----------------|-------------------------|-----------------|----------|
| D-3S | 10/26/23 9:30 AM | 1000 | 0.1 | 8.20 | 709 | 13.29 | 7.64 | 24.0 | 238 |
| D-3S | 10/26/23 9:40 AM | 1000 | 4 | 7.89 | 1360 | 11.88 | 0.00 | 21.8 | 13 |
| D-3S | 10/26/23 9:50 AM | 1000 | 8 | 7.86 | 1390 | 11.86 | 0.00 | 20.5 | 8 |
| D-3S | 10/26/23 10:00 AM | 1000 | 12 | 7.84 | 1390 | 11.84 | 0.00 | 20.3 | 24 |
| D-3S | 10/26/23 10:05 AM | | | 7.84 | 1390 | 11.83 | 0.00 | 20.3 | 24 |
| D-4S | 2/21/23 1:25 PM | 1000 | 0.1 | 7.32 | 789 | 10.69 | 11.06 | 12.9 | 12.1 |
| D-4S | 2/21/23 1:30 PM | 1000 | 2 | 7.19 | 789 | 11.06 | 11.75 | 15.5 | 119 |
| D-4S | 2/21/23 1:35 PM | 1000 | 4 | 7.18 | 789 | 10.96 | 8.91 | 9.1 | 119 |
| D-4S | 2/21/23 1:40 PM | 1000 | 5.5 | 7.18 | 785 | 10.96 | 11.51 | 6.2 | 119 |
| D-4S | 2/21/23 1:45 PM | | | 7.17 | 784 | 10.79 | 11.98 | 4.8 | 119 |
| D-4S | 10/27/23 9:30 AM | 1000 | 0.1 | 7.85 | 780 | 12.11 | 5.17 | 20.1 | 295 |
| D-4S | 10/27/23 9:30 AM | 1000 | 5 | 7.89 | 778 | 12.07 | 5.64 | 20.0 | 299 |
| D-4S | 10/27/23 9:30 AM | 1000 | 10 | 7.90 | 778 | 12.09 | 5.83 | 20.6 | 299 |
| D-4S | 10/27/23 9:30 AM | 1000 | 16 | 7.90 | 778 | 12.09 | 5.80 | 20.2 | 300 |
| D-4S | 10/27/23 9:30 AM | | | 7.88 | 778 | 12.09 | 5.75 | 20.0 | 300 |
| D-4S | 2/21/23 1:10 PM | 1000 | 0.1 | 7.38 | 717 | 6.29 | 12.52 | 14.2 | 121 |
| D-4S | 2/21/23 1:15 PM | 1000 | 1 | 7.31 | 725 | 8.62 | 9.72 | 3.4 | 119 |
| D-4S | 2/21/23 1:20 PM | 1000 | 2 | 7.30 | 730 | 8.55 | 9.83 | 3.1 | 119 |
| D-4S | 2/21/23 1:25 PM | 1000 | 3 | 7.30 | 745 | 8.44 | 9.79 | 2.9 | 119 |
| D-4S | 2/21/23 1:30 PM | | | 7.30 | 762 | 8.25 | 9.69 | 2.7 | 119 |
| D-4S | 10/27/23 8:35 AM | 1000 | 0.1 | 7.99 | 800 | 11.49 | 7.98 | 28.2 | 259 |
| D-4S | 10/27/23 8:45 AM | 1000 | 2.5 | 7.88 | 792 | 12.21 | 5.76 | 23.9 | 286 |
| D-4S | 10/27/23 8:55 AM | 1000 | 5 | 7.83 | 788 | 12.19 | 5.26 | 21.6 | 292 |
| D-4S | 10/27/23 9:05 AM | 1000 | 7 | 7.82 | 786 | 12.22 | 4.79 | 20.8 | 294 |
| D-4S | 10/27/23 9:10 AM | | | 7.82 | 786 | 12.22 | 4.80 | 20.5 | 294 |
| D-5D | 2/20/23 2:35 PM | 1000 | 0.1 | 7.17 | 860 | 9.34 | 7.92 | 4.3 | 111 |
| D-5D | 2/20/23 2:45 PM | 1000 | 2.5 | 7.17 | 865 | 9.30 | 7.80 | 4.3 | 110 |
| D-5D | 2/20/23 2:55 PM | 1000 | 5 | 7.17 | 864 | 7.44 | 7.87 | 3.8 | 110 |
| D-5D | 2/20/23 3:05 PM | 1000 | 7 | 7.17 | 865 | 9.35 | 7.76 | 4.1 | 110 |
| D-5D | 2/20/23 3:10 PM | | | 7.18 | 859 | 9.35 | 10.65 | 5.2 | 110 |
| D-5D | 10/26/23 9:30 AM | 1000 | 0.1 | 7.95 | 841 | 10.93 | 4.95 | 17.6 | 286 |
| D-5D | 10/26/23 9:40 AM | 1000 | 6.5 | 7.95 | 832 | 10.94 | 4.78 | 17.7 | 287 |
| D-5D | 10/26/23 9:50 AM | 1000 | 13 | 7.93 | 829 | 10.89 | 6.91 | 18.0 | 289 |
| D-5D | 10/26/23 10:00 AM | 1000 | 20 | 7.93 | 832 | 10.91 | 8.71 | 19.4 | 290 |
| D-5D | 10/26/23 10:05 AM | | | 7.92 | 825 | 10.89 | 8.71 | 19.5 | 290 |
| D-5S2 | 2/20/23 2:35 PM | 1000 | 0.1 | 7.53 | 770 | 9.21 | 9.14 | 7.1 | 126 |
| D-5S2 | 2/20/23 2:40 PM | 1000 | 1 | 7.29 | 863 | 10.08 | 2.47 | 13.1 | 119 |
| D-5S2 | 2/20/23 2:45 PM | 1000 | 2 | 7.19 | 865 | 10.11 | 2.26 | 9.5 | 114 |
| D-5S2 | 2/20/23 2:50 PM | 1000 | 2.5 | 7.16 | 866 | 10.08 | 2.11 | 5.9 | 113 |
| D-5S2 | 2/20/23 2:55 PM | | | 7.15 | 866 | 10.07 | 2.10 | 5.4 | 112 |
| D-5S2 | 10/26/23 8:00 AM | 1000 | 0.1 | 8.25 | 835 | 12.29 | 6.27 | 28.7 | 181 |
| D-5S2 | 10/26/23 8:10 AM | 1000 | 2.5 | 8.06 | 865 | 11.30 | 2.48 | 15.2 | 247 |
| D-5S2 | 10/26/23 8:20 AM | 1000 | 5 | 7.96 | 866 | 11.19 | 1.82 | 15.5 | 274 |
| D-5S2 | 10/26/23 8:25 AM | 1000 | 7 | 7.92 | 868 | 11.16 | 1.59 | 16.8 | 282 |
| D-5S2 | 10/26/23 8:30 AM | | | 7.91 | 867 | 11.14 | 1.54 | 16.8 | 283 |
| D-8 | 2/21/23 2:25 PM | 1000 | 0.1 | 7.56 | 864 | 8.40 | 11.77 | 209.0 | 114 |
| | 2/21/23 2:30 PM | 1000 | 1 | 7.30 | 848 | 9.80 | 10.60 | 229.0 | 87 |
| | 2/21/23 2:35 PM | 1000 | 2 | 7.23 | 840 | 9.77 | 10.61 | 177.0 | 9 |
| D-8 | 2/21/23 2:40 PM | 1000 | 3.5 | 7.24 | 862 | 8.84 | 12.43 | 132.0 | -8 |
| D-8 | 2/21/23 2:45 PM | | | 7.26 | 869 | 8.56 | 12.51 | 131.0 | -8 |
| D-8 | 10/27/23 9:45 AM | 1000 | 0.1 | 8.05 | 794 | 12.24 | 9.34 | 24.5 | 283 |
| D-8 | 10/27/23 9:55 AM | 1000 | 3 | 7.95 | 786 | 10.90 | 7.31 | 24.5 | 294 |
| D-8 | 10/27/23 10:05 AM | 1000 | 6 | 7.88 | 796 | 10.89 | 7.04 | 26.8 | -30 |
| D-8 | 10/27/23 10:15 AM | 1000 | 10 | 7.88 | 788 | 10.91 | 7.20 | 28.7 | -48 |
| D-8 | 10/27/23 10:20 AM | | | 7.87 | 789 | 10.88 | 7.24 | 29.6 | -45 |

Table 4
 Well Stabilization Data



| Well ID | Measurement Date | Purge Rate (ml/min) | Purge Volume (gallons) | Field pH | Field Specific Conductivity (umhos/cm) | Field Temp (°C) | Dissolved Oxygen (mg/l) | Turbidity (NTU) | ORP (mV) |
|---------|-------------------|---------------------|------------------------|----------|--|-----------------|-------------------------|-----------------|----------|
| D-9 | 2/21/23 2:50 PM | 1000 | 0.1 | 7.48 | 748 | 9.25 | 13.69 | 31.4 | 12 |
| D-9 | 2/21/23 2:55 PM | 1000 | 1 | 7.21 | 801 | 9.31 | 6.48 | 908.0 | 58 |
| D-9 | 2/21/23 3:00 PM | 1000 | 2 | 7.21 | 831 | 9.40 | 6.43 | 163.0 | -17 |
| D-9 | 2/21/23 3:05 PM | 1000 | 3.5 | 7.17 | 819 | 9.20 | 10.26 | 67.2 | -67 |
| D-9 | 2/21/23 3:10 PM | | | 7.16 | 817 | 9.13 | 8.97 | 72.0 | -69 |
| D-9 | 10/27/23 10:35 AM | 1000 | 0.1 | 7.44 | 125 | 12.49 | 11.82 | 73.7 | 89 |
| D-9 | 10/27/23 10:50 AM | 1000 | 3 | 7.64 | 849 | 11.89 | 8.00 | 36.8 | -149 |
| D-9 | 10/27/23 11:00 AM | 1000 | 6 | 7.67 | 847 | 11.85 | 6.21 | 34.7 | -122 |
| D-9 | 10/27/23 11:10 AM | 1000 | 9 | 7.67 | 852 | 11.83 | 6.27 | 29.3 | -105 |
| D-9 | 10/27/23 11:15 AM | | | 7.72 | 854 | 11.82 | 6.29 | 29.2 | -102 |
| U-4D | 2/20/23 10:10 AM | 1000 | 0.1 | 7.76 | 621 | 8.96 | 6.64 | 10.1 | 115 |
| U-4D | 2/20/23 10:20 AM | 1000 | 4 | 7.56 | 725 | 9.30 | 9.28 | 6.1 | 109 |
| U-4D | 2/20/23 10:30 AM | 1000 | 8 | 7.50 | 724 | 9.24 | 8.76 | 4.0 | 107 |
| U-4D | 2/20/23 10:40 AM | 1000 | 11 | 7.38 | 721 | 9.27 | 9.06 | 5.8 | 108 |
| U-4D | 2/20/23 10:45 AM | | | 7.40 | 721 | 9.23 | 9.01 | 5.9 | 109 |
| U-4D | 10/25/23 10:35 AM | 1000 | 0.1 | 7.88 | 754 | 11.16 | 10.32 | 20.0 | 254 |
| U-4D | 10/25/23 11:05 AM | 1000 | 10 | 7.88 | 667 | 10.40 | 9.66 | 20.3 | 261 |
| U-4D | 10/25/23 11:35 AM | 1000 | 20 | 7.86 | 668 | 10.32 | 7.18 | 19.9 | 263 |
| U-4D | 10/25/23 12:10 PM | 1000 | 33 | 7.84 | 679 | 1030.00 | 7.18 | 19.9 | 260 |
| U-4D | 10/25/23 12:15 PM | | | 7.82 | 668 | 10.32 | 7.22 | 20.0 | 262 |
| U-4S | 2/20/23 9:45 AM | 1000 | 0.1 | 10.22 | 805 | 8.35 | 8.14 | 43.0 | 158 |
| U-4S | 2/20/23 9:50 AM | 1000 | 1.5 | 8.46 | 773 | 9.59 | 2.08 | 2.1 | 134 |
| U-4S | 2/20/23 9:55 AM | 1000 | 3 | 7.86 | 767 | 9.60 | 2.11 | 1.5 | 122 |
| U-4S | 2/20/23 10:00 AM | 1000 | 4 | 7.67 | 787 | 8.03 | 5.54 | 1.1 | 122 |
| U-4S | 2/20/23 10:05 AM | | | 7.68 | 782 | 8.20 | 4.08 | 0.7 | 122 |
| U-4S | 10/25/23 10:35 AM | 1000 | 0.1 | 8.30 | 747 | 13.06 | 12.66 | 29.8 | 207 |
| U-4S | 10/25/23 10:50 AM | 1000 | 4 | 7.81 | 863 | 11.40 | 0.00 | 20.5 | 242 |
| U-4S | 10/25/23 11:05 AM | 1000 | 8 | 7.72 | 862 | 11.36 | 0.00 | 28.4 | 254 |
| U-4S | 10/25/23 11:20 AM | 1000 | 11 | 7.69 | 861 | 11.32 | 0.00 | 20.1 | 259 |
| U-4S | 10/25/23 11:25 AM | | | 7.69 | 861 | 11.32 | 0.00 | 20.0 | 259 |
| U-5D | 2/20/23 1:30 PM | 1000 | 0.1 | 7.32 | 704 | 9.55 | 5.80 | 12.6 | 143 |
| U-5D | 2/20/23 1:40 PM | 1000 | 4 | 7.32 | 704 | 9.55 | 5.97 | 12.7 | 143 |
| U-5D | 2/20/23 1:50 PM | 1000 | 8 | 7.52 | 704 | 9.55 | 5.67 | 13.1 | 143 |
| U-5D | 2/20/23 2:00 PM | 1000 | 11.5 | 7.33 | 704 | 9.55 | 5.66 | 12.6 | 144 |
| U-5D | 2/20/23 2:05 PM | | | 7.34 | 704 | 9.34 | 5.36 | 12.7 | 145 |
| U-5D | 10/25/23 1:00 PM | 1000 | 0.1 | 8.08 | 696 | 11.07 | 4.66 | 22.1 | 241 |
| U-5D | 10/25/23 1:15 PM | 1000 | 10 | 8.24 | 696 | 10.86 | 5.04 | 21.5 | 251 |
| U-5D | 10/25/23 1:30 PM | 1000 | 20 | 8.25 | 695 | 10.85 | 5.15 | 21.6 | 252 |
| U-5D | 10/25/23 1:45 PM | 1000 | 30 | 8.25 | 694 | 10.85 | 5.50 | 21.4 | 255 |
| U-5D | 10/25/23 1:55 PM | 1000 | 35 | 8.25 | 694 | 10.85 | 5.70 | 21.3 | 256 |
| U-5D | 10/25/23 2:00 PM | | | 8.25 | 694 | 10.84 | 5.20 | 21.7 | 256 |
| U-5S | 2/20/23 1:30 PM | 1000 | 0.1 | 7.49 | 726 | 10.56 | 6.34 | 795.0 | 110 |
| U-5S | 2/20/23 1:35 PM | 1000 | 1 | 7.37 | 724 | 10.84 | 6.27 | 441.0 | 110 |
| U-5S | 2/20/23 1:40 PM | 1000 | 1.5 | 7.18 | 724 | 10.86 | 6.05 | 115.0 | 112 |
| U-5S | 2/20/23 1:45 PM | 1000 | 2 | 7.09 | 725 | 10.88 | 5.69 | 72.7 | 113 |
| U-5S | 2/20/23 1:50 PM | | | 7.07 | 725 | 10.91 | 5.71 | 60.4 | 114 |
| U-5S | 10/25/23 1:00 PM | 1000 | 0.1 | 7.95 | 733 | 11.77 | 7.47 | 259.0 | 229 |
| U-5S | 10/25/23 1:05 PM | 1000 | 2 | 7.87 | 738 | 11.43 | 5.26 | 37.2 | 250 |
| U-5S | 10/25/23 1:10 PM | 1000 | 4 | 7.85 | 740 | 11.45 | 5.11 | 27.6 | 258 |
| U-5S | 10/25/23 1:15 PM | 1000 | 6 | 7.83 | 741 | 11.46 | 5.10 | 24.1 | 261 |
| U-5S | 10/25/23 1:20 PM | | | 7.83 | 741 | 11.46 | 5.09 | 24.2 | 262 |

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 5



Background Threshold Values

Appendix III to Part 257

| Parameter | Background Threshold Value (BTV) | Units | CAS # |
|----------------------------|----------------------------------|----------|------------|
| Boron | 0.31 | mg/l | 7440-42-8 |
| Calcium | 151.7 | mg/l | 7440-70-2 |
| Chloride | 126 | mg/l | 16887-00-6 |
| Fluoride | 0.5 | mg/l | 15984-48-8 |
| pH | 7.1 < 8.1 | pH UNITS | PH |
| Sulfate as SO ₄ | 67.3 | mg/l | 14808-79-8 |
| Total Dissolved Solids | 640.7 | mg/l | TDS |

Appendix IV to Part 257

| Parameter | Background Threshold Value (BTV) | Units | CAS # |
|----------------------|----------------------------------|-------|------------|
| Antimony | 0.002 | mg/l | 7440-36-0 |
| Arsenic | 0.0021 | mg/l | 7440-38-2 |
| Barium | 0.11 | mg/l | 7440-39-3 |
| Beryllium | 0.001 | mg/l | 7440-41-7 |
| Cadmium | 0.001 | mg/l | 7440-43-9 |
| Chromium | 0.052 | mg/l | 7440-47-3 |
| Cobalt | 0.0015 | mg/l | 7440-48-4 |
| Fluoride | 1 | mg/l | 15984-48-8 |
| Lead | 0.01 | mg/l | 7439-92-1 |
| Lithium | 0.03 | mg/l | 7439-93-2 |
| Mercury | 0.0002 | mg/l | 7439-97-6 |
| Molybdenum | 0.0032 | mg/l | 7439-98-7 |
| Radium 226 | 0.479 | pci/l | 13982-63-3 |
| Radium 228 | 1.45 | pci/l | 15262-20-1 |
| Total Radium 226/228 | 1.929 | pci/l | 425 |
| Selenium | 0.005 | mg/l | 7782-49-2 |
| Thallium | 0.021 | mg/l | 7440-28-0 |

Values are in milligrams per liter (mg/l) or picocuries per liter (pci/l)

Table 6



2023 Groundwater Protection Standards

Appendix IV to Part 257

| Parameter | Background Threshold Value (BTV) | EPA Maximum Contaminate Level (MCL) | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------------|----------------------------------|-------------------------------------|---------------------------------------|-------|------------|
| Antimony | 0.002 | 0.006 | 0.006 | mg/l | 7440-36-0 |
| Arsenic | 0.0021 | 0.010 | 0.010 | mg/l | 7440-38-2 |
| Barium | 0.11 | 2 | 2 | mg/l | 7440-39-3 |
| Beryllium | 0.001 | 0.004 | 0.004 | mg/l | 7440-41-7 |
| Cadmium | 0.001 | 0.005 | 0.005 | mg/l | 7440-43-9 |
| Chromium | 0.052 | 0.1 | 0.1 | mg/l | 7440-47-3 |
| Cobalt | 0.0015 | 0.006 | 0.006 | mg/l | 7440-48-4 |
| Fluoride | 1 | 4 | 4 | mg/l | 15984-48-8 |
| Lead | 0.01 | 0.015 | 0.015 | mg/l | 7439-92-1 |
| Lithium | 0.03 | 0.04 | 0.04 | mg/l | 7439-93-2 |
| Mercury | 0.0002 | 0.002 | 0.002 | mg/l | 7439-97-6 |
| Molybdenum | 0.0032 | 0.1 | 0.1 | mg/l | 7439-98-7 |
| Radium 226 | 0.479 | -- | -- | pci/l | 13982-63-3 |
| Radium 228 | 1.45 | -- | -- | pci/l | 15262-20-1 |
| Radium 226/228 | 1.929 | 5 | 5 | pci/l | EDF-206 |
| Selenium | 0.005 | 0.05 | 0.05 | mg/l | 7782-49-2 |
| Thallium | 0.021 | 0.002 | 0.002 | mg/l | 7440-28-0 |

Results in milligrams per liter (mg/l) or peccuries per liter (pci/l)

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|-------------|-------------------|-----------------|--------------|---------------------------------------|-------|------------|
| D-1D | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-1D | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-1D | 02/20/2023 | Barium | 0.043 | 2 | mg/l | 7440-39-3 |
| D-1D | 10/26/2023 | Barium | 0.047 | 2 | mg/l | 7440-39-3 |
| D-1D | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-1D | 10/26/2023 | Cadmium | 0.00025 | 0.005 | mg/l | 7440-43-9 |
| D-1D | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-1D | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-1D | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-1D | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-1D | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-1D | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-1D | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-1D | 10/26/2023 | Lead | 0.00084 | 0.015 | mg/l | 7439-92-1 |
| D-1D | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-1D | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-1D | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-1D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-1D | 02/20/2023 | Radium (226) | < 0.113 | -- | pci/l | 13982-63-3 |
| D-1D | 10/26/2023 | Radium (226) | 0.232 | -- | pci/l | 13982-63-3 |
| D-1D | 02/20/2023 | Radium 228 | < 0.590 | -- | pci/l | 15262-20-1 |
| D-1D | 10/26/2023 | Radium 228 | 0.600 | -- | pci/l | 15262-20-1 |
| D-1D | 02/20/2023 | Radium-226/228 | < 0.590 | 5 | pci/l | 425 |
| D-1D | 10/26/2023 | Radium-226/228 | 0.832 | 5 | pci/l | 425 |
| D-1D | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-1D | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-1D | 10/26/2023 | Thallium | 0.014 | 0.002 | mg/l | 7440-28-0 |
| D-1S | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-1S | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-1S | 02/20/2023 | Barium | 0.046 | 2 | mg/l | 7440-39-3 |
| D-1S | 10/26/2023 | Barium | 0.043 | 2 | mg/l | 7440-39-3 |
| D-1S | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-1S | 10/26/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-1S | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-1S | 10/26/2023 | Chromium | 0.013 | 0.1 | mg/l | 7440-47-3 |
| D-1S | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-1S | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-1S | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-1S | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-1S | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-1S | 10/26/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-1S | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-1S | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-1S | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-1S | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-1S | 02/20/2023 | Radium (226) | < 0.0909 | -- | pci/l | 13982-63-3 |
| D-1S | 10/26/2023 | Radium (226) | < 0.183 | -- | pci/l | 13982-63-3 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------|------------|----------------|-----------|---------------------------------------|-------|------------|
| D-1S | 02/20/2023 | Radium 228 | < 0.526 | -- | pci/l | 15262-20-1 |
| D-1S | 10/26/2023 | Radium 228 | < 0.497 | -- | pci/l | 15262-20-1 |
| D-1S | 02/20/2023 | Radium-226/228 | < 0.526 | 5 | pci/l | 425 |
| D-1S | 10/26/2023 | Radium-226/228 | < 0.497 | 5 | pci/l | 425 |
| D-1S | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-1S | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-1S | 10/26/2023 | Thallium | 0.0019 | 0.002 | mg/l | 7440-28-0 |
| D-2D | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-2D | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-2D | 02/21/2023 | Barium | 0.051 | 2 | mg/l | 7440-39-3 |
| D-2D | 10/26/2023 | Barium | 0.052 | 2 | mg/l | 7440-39-3 |
| D-2D | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-2D | 10/26/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-2D | 02/21/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-2D | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-2D | 02/21/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-2D | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-2D | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-2D | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-2D | 02/21/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-2D | 10/26/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-2D | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-2D | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-2D | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-2D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-2D | 02/21/2023 | Radium (226) | 0.0947 | -- | pci/l | 13982-63-3 |
| D-2D | 10/26/2023 | Radium (226) | 0.148 | -- | pci/l | 13982-63-3 |
| D-2D | 02/21/2023 | Radium 228 | 0.612 | -- | pci/l | 15262-20-1 |
| D-2D | 10/26/2023 | Radium 228 | 0.502 | -- | pci/l | 15262-20-1 |
| D-2D | 02/21/2023 | Radium-226/228 | 0.707 | 5 | pci/l | 425 |
| D-2D | 10/26/2023 | Radium-226/228 | 0.649 | 5 | pci/l | 425 |
| D-2D | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-2D | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-2D | 10/26/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-2S | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-2S | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-2S | 02/22/2023 | Barium | 0.050 | 2 | mg/l | 7440-39-3 |
| D-2S | 10/26/2023 | Barium | 0.046 | 2 | mg/l | 7440-39-3 |
| D-2S | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-2S | 10/26/2023 | Cadmium | 0.00026 | 0.005 | mg/l | 7440-43-9 |
| D-2S | 02/22/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-2S | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-2S | 02/22/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-2S | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-2S | 02/22/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-2S | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-2S | 02/22/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|-------------|-------------------|-----------------|--------------|---------------------------------------|-------------|------------------|
| D-2S | 10/26/2023 | Lead | 0.0012 | 0.015 | mg/l | 7439-92-1 |
| D-2S | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-2S | 02/22/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-2S | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-2S | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-2S | 02/22/2023 | Radium (226) | < 0.0798 | -- | pci/l | 13982-63-3 |
| D-2S | 10/26/2023 | Radium (226) | < 0.143 | -- | pci/l | 13982-63-3 |
| D-2S | 02/22/2023 | Radium 228 | 0.578 | -- | pci/l | 15262-20-1 |
| D-2S | 10/26/2023 | Radium 228 | < 0.587 | -- | pci/l | 15262-20-1 |
| D-2S | 02/22/2023 | Radium-226/228 | 0.621 | 5 | pci/l | 425 |
| D-2S | 10/26/2023 | Radium-226/228 | < 0.587 | 5 | pci/l | 425 |
| D-2S | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-2S | 02/22/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-2S | 10/26/2023 | Thallium | 0.014 | 0.002 | mg/l | 7440-28-0 |
| D-3D | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-3D | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-3D | 02/21/2023 | Barium | 0.054 | 2 | mg/l | 7440-39-3 |
| D-3D | 10/26/2023 | Barium | 0.055 | 2 | mg/l | 7440-39-3 |
| D-3D | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-3D | 10/26/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-3D | 02/21/2023 | Chromium | 0.065 | 0.1 | mg/l | 7440-47-3 |
| D-3D | 10/26/2023 | Chromium | 0.064 | 0.1 | mg/l | 7440-47-3 |
| D-3D | 02/21/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-3D | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-3D | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-3D | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-3D | 02/21/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-3D | 10/26/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-3D | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-3D | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-3D | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-3D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-3D | 02/21/2023 | Radium (226) | < 0.101 | -- | pci/l | 13982-63-3 |
| D-3D | 10/26/2023 | Radium (226) | 0.209 | -- | pci/l | 13982-63-3 |
| D-3D | 02/21/2023 | Radium 228 | < 0.461 | -- | pci/l | 15262-20-1 |
| D-3D | 10/26/2023 | Radium 228 | 0.666 | -- | pci/l | 15262-20-1 |
| D-3D | 02/21/2023 | Radium-226/228 | < 0.461 | 5 | pci/l | 425 |
| D-3D | 10/26/2023 | Radium-226/228 | 0.875 | 5 | pci/l | 425 |
| D-3D | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-3D | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-3D | 10/26/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-3S | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-3S | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-3S | 02/21/2023 | Barium | 0.042 | 2 | mg/l | 7440-39-3 |
| D-3S | 10/26/2023 | Barium | 0.081 | 2 | mg/l | 7440-39-3 |
| D-3S | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-3S | 10/26/2023 | Cadmium | 0.00030 | 0.005 | mg/l | 7440-43-9 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|-------------|-------------------|-----------------|--------------|---------------------------------------|-------------|------------------|
| D-3S | 02/21/2023 | Chromium | 0.020 | 0.1 | mg/l | 7440-47-3 |
| D-3S | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-3S | 02/21/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-3S | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-3S | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-3S | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-3S | 02/21/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-3S | 10/26/2023 | Lead | 0.00081 | 0.015 | mg/l | 7439-92-1 |
| D-3S | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-3S | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-3S | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-3S | 10/26/2023 | MOLYBDENUM | 0.0032 | 0.1 | mg/l | 7439-98-7 |
| D-3S | 02/21/2023 | Radium (226) | < 0.0864 | -- | pci/l | 13982-63-3 |
| D-3S | 10/26/2023 | Radium (226) | < 0.146 | -- | pci/l | 13982-63-3 |
| D-3S | 02/21/2023 | Radium 228 | < 0.520 | -- | pci/l | 15262-20-1 |
| D-3S | 10/26/2023 | Radium 228 | < 0.434 | -- | pci/l | 15262-20-1 |
| D-3S | 02/21/2023 | Radium-226/228 | < 0.520 | 5 | pci/l | 425 |
| D-3S | 10/26/2023 | Radium-226/228 | < 0.434 | 5 | pci/l | 425 |
| D-3S | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-3S | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-3S | 10/26/2023 | Thallium | 0.022 | 0.002 | mg/l | 7440-28-0 |
| D-4D | 10/27/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-4D | 10/27/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-4D | 02/21/2023 | Barium | 0.069 | 2 | mg/l | 7440-39-3 |
| D-4D | 10/27/2023 | Barium | 0.068 | 2 | mg/l | 7440-39-3 |
| D-4D | 10/27/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-4D | 10/27/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-4D | 02/21/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-4D | 10/27/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-4D | 02/21/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-4D | 10/27/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-4D | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-4D | 10/27/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-4D | 02/21/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-4D | 10/27/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-4D | 10/27/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-4D | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-4D | 10/27/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-4D | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-4D | 02/21/2023 | Radium (226) | < 0.0811 | -- | pci/l | 13982-63-3 |
| D-4D | 10/27/2023 | Radium (226) | < 0.136 | -- | pci/l | 13982-63-3 |
| D-4D | 02/21/2023 | Radium 228 | < 0.456 | -- | pci/l | 15262-20-1 |
| D-4D | 10/27/2023 | Radium 228 | < 0.508 | -- | pci/l | 15262-20-1 |
| D-4D | 02/21/2023 | Radium-226/228 | < 0.456 | 5 | pci/l | 425 |
| D-4D | 10/27/2023 | Radium-226/228 | < 0.508 | 5 | pci/l | 425 |
| D-4D | 10/27/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-4D | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------|------------|----------------|-----------|---------------------------------------|-------|------------|
| D-4D | 10/27/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-4S | 10/27/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-4S | 10/27/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-4S | 02/21/2023 | Barium | 0.094 | 2 | mg/l | 7440-39-3 |
| D-4S | 10/27/2023 | Barium | 0.079 | 2 | mg/l | 7440-39-3 |
| D-4S | 10/27/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-4S | 10/27/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-4S | 02/21/2023 | Chromium | 0.072 | 0.1 | mg/l | 7440-47-3 |
| D-4S | 10/27/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-4S | 02/21/2023 | Cobalt | 0.00072 | 0.006 | mg/l | 7440-48-4 |
| D-4S | 10/27/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-4S | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-4S | 10/27/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-4S | 02/21/2023 | Lead | 0.0050 | 0.015 | mg/l | 7439-92-1 |
| D-4S | 10/27/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-4S | 10/27/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-4S | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-4S | 10/27/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-4S | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-4S | 02/21/2023 | Radium (226) | < 0.106 | -- | pci/l | 13982-63-3 |
| D-4S | 10/27/2023 | Radium (226) | < 0.145 | -- | pci/l | 13982-63-3 |
| D-4S | 02/21/2023 | Radium 228 | < 0.747 | -- | pci/l | 15262-20-1 |
| D-4S | 10/27/2023 | Radium 228 | < 0.525 | -- | pci/l | 15262-20-1 |
| D-4S | 02/21/2023 | Radium-226/228 | < 0.747 | 5 | pci/l | 425 |
| D-4S | 10/27/2023 | Radium-226/228 | < 0.525 | 5 | pci/l | 425 |
| D-4S | 10/27/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-4S | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-4S | 10/27/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-5D | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-5D | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-5D | 02/20/2023 | Barium | 0.058 | 2 | mg/l | 7440-39-3 |
| D-5D | 10/26/2023 | Barium | 0.055 | 2 | mg/l | 7440-39-3 |
| D-5D | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-5D | 10/26/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-5D | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-5D | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-5D | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-5D | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-5D | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-5D | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-5D | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-5D | 10/26/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-5D | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-5D | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-5D | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-5D | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-5D | 02/20/2023 | Radium (226) | < 0.124 | -- | pci/l | 13982-63-3 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------|------------|----------------|-----------|---------------------------------------|-------|------------|
| D-5D | 10/26/2023 | Radium (226) | < 0.139 | -- | pci/l | 13982-63-3 |
| D-5D | 02/20/2023 | Radium 228 | < 0.496 | -- | pci/l | 15262-20-1 |
| D-5D | 10/26/2023 | Radium 228 | < 0.556 | -- | pci/l | 15262-20-1 |
| D-5D | 02/20/2023 | Radium-226/228 | < 0.496 | 5 | pci/l | 425 |
| D-5D | 10/26/2023 | Radium-226/228 | < 0.556 | 5 | pci/l | 425 |
| D-5D | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-5D | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-5D | 10/26/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-5S2 | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-5S2 | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-5S2 | 02/20/2023 | Barium | 0.059 | 2 | mg/l | 7440-39-3 |
| D-5S2 | 10/26/2023 | Barium | 0.060 | 2 | mg/l | 7440-39-3 |
| D-5S2 | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-5S2 | 10/26/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-5S2 | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-5S2 | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-5S2 | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-5S2 | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-5S2 | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-5S2 | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-5S2 | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-5S2 | 10/26/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-5S2 | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-5S2 | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-5S2 | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-5S2 | 10/26/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-5S2 | 02/20/2023 | Radium (226) | < 0.0766 | -- | pci/l | 13982-63-3 |
| D-5S2 | 10/26/2023 | Radium (226) | < 0.153 | -- | pci/l | 13982-63-3 |
| D-5S2 | 02/20/2023 | Radium 228 | 0.548 | -- | pci/l | 15262-20-1 |
| D-5S2 | 10/26/2023 | Radium 228 | < 0.542 | -- | pci/l | 15262-20-1 |
| D-5S2 | 02/20/2023 | Radium-226/228 | 0.603 | 5 | pci/l | 425 |
| D-5S2 | 10/26/2023 | Radium-226/228 | < 0.542 | 5 | pci/l | 425 |
| D-5S2 | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-5S2 | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-5S2 | 10/26/2023 | Thallium | 0.0017 | 0.002 | mg/l | 7440-28-0 |
| D-8 | 10/27/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-8 | 10/27/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-8 | 02/21/2023 | Barium | 0.094 | 2 | mg/l | 7440-39-3 |
| D-8 | 10/27/2023 | Barium | 0.071 | 2 | mg/l | 7440-39-3 |
| D-8 | 10/27/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-8 | 10/27/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-8 | 02/21/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-8 | 10/27/2023 | Chromium | 0.0057 | 0.1 | mg/l | 7440-47-3 |
| D-8 | 02/21/2023 | Cobalt | 0.00091 | 0.006 | mg/l | 7440-48-4 |
| D-8 | 10/27/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-8 | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-8 | 10/27/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------|------------|----------------|-----------|---------------------------------------|-------|------------|
| D-8 | 02/21/2023 | Lead | 0.00058 | 0.015 | mg/l | 7439-92-1 |
| D-8 | 10/27/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-8 | 10/27/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-8 | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-8 | 10/27/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-8 | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-8 | 02/21/2023 | Radium (226) | 0.172 | -- | pci/l | 13982-63-3 |
| D-8 | 10/27/2023 | Radium (226) | < 0.185 | -- | pci/l | 13982-63-3 |
| D-8 | 02/21/2023 | Radium 228 | < 0.661 | -- | pci/l | 15262-20-1 |
| D-8 | 10/27/2023 | Radium 228 | < 0.670 | -- | pci/l | 15262-20-1 |
| D-8 | 02/21/2023 | Radium-226/228 | < 0.661 | 5 | pci/l | 425 |
| D-8 | 10/27/2023 | Radium-226/228 | < 0.670 | 5 | pci/l | 425 |
| D-8 | 10/27/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-8 | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-8 | 10/27/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-9 | 10/27/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| D-9 | 10/27/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| D-9 | 02/21/2023 | Barium | 0.087 | 2 | mg/l | 7440-39-3 |
| D-9 | 10/27/2023 | Barium | 0.078 | 2 | mg/l | 7440-39-3 |
| D-9 | 10/27/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| D-9 | 10/27/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| D-9 | 02/21/2023 | Chromium | 0.012 | 0.1 | mg/l | 7440-47-3 |
| D-9 | 10/27/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| D-9 | 02/21/2023 | Cobalt | 0.0021 | 0.006 | mg/l | 7440-48-4 |
| D-9 | 10/27/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| D-9 | 02/21/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| D-9 | 10/27/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| D-9 | 02/21/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-9 | 10/27/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| D-9 | 10/27/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| D-9 | 02/21/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-9 | 10/27/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| D-9 | 10/27/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| D-9 | 02/21/2023 | Radium (226) | < 0.158 | -- | pci/l | 13982-63-3 |
| D-9 | 10/27/2023 | Radium (226) | < 0.160 | -- | pci/l | 13982-63-3 |
| D-9 | 02/21/2023 | Radium 228 | < 1.04 | -- | pci/l | 15262-20-1 |
| D-9 | 10/27/2023 | Radium 228 | < 0.630 | -- | pci/l | 15262-20-1 |
| D-9 | 02/21/2023 | Radium-226/228 | < 1.04 | 5 | pci/l | 425 |
| D-9 | 10/27/2023 | Radium-226/228 | < 0.630 | 5 | pci/l | 425 |
| D-9 | 10/27/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| D-9 | 02/21/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| D-9 | 10/27/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-4D | 10/25/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| U-4D | 10/25/2023 | Arsenic | 0.0021 | 0.010 | mg/l | 7440-38-2 |
| U-4D | 02/20/2023 | Barium | 0.041 | 2 | mg/l | 7440-39-3 |
| U-4D | 10/25/2023 | Barium | 0.042 | 2 | mg/l | 7440-39-3 |
| U-4D | 10/25/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------|------------|----------------|-----------|---------------------------------------|-------|------------|
| U-4D | 10/25/2023 | Cadmium | 0.0010 | 0.005 | mg/l | 7440-43-9 |
| U-4D | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-4D | 10/25/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-4D | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-4D | 10/25/2023 | Cobalt | 0.00098 | 0.006 | mg/l | 7440-48-4 |
| U-4D | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| U-4D | 10/25/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| U-4D | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| U-4D | 10/25/2023 | Lead | 0.0020 | 0.015 | mg/l | 7439-92-1 |
| U-4D | 10/25/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| U-4D | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-4D | 10/25/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-4D | 10/25/2023 | MOLYBDENUM | 0.0021 | 0.1 | mg/l | 7439-98-7 |
| U-4D | 02/20/2023 | Radium (226) | < 0.0743 | -- | pci/l | 13982-63-3 |
| U-4D | 10/25/2023 | Radium (226) | < 0.155 | -- | pci/l | 13982-63-3 |
| U-4D | 02/20/2023 | Radium 228 | < 0.504 | -- | pci/l | 15262-20-1 |
| U-4D | 10/25/2023 | Radium 228 | < 0.470 | -- | pci/l | 15262-20-1 |
| U-4D | 02/20/2023 | Radium-226/228 | < 0.504 | 5 | pci/l | 425 |
| U-4D | 10/25/2023 | Radium-226/228 | < 0.470 | 5 | pci/l | 425 |
| U-4D | 10/25/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| U-4D | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-4D | 10/25/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-4S | 10/25/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| U-4S | 10/25/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| U-4S | 02/20/2023 | Barium | 0.040 | 2 | mg/l | 7440-39-3 |
| U-4S | 10/25/2023 | Barium | 0.048 | 2 | mg/l | 7440-39-3 |
| U-4S | 10/25/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| U-4S | 10/25/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| U-4S | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-4S | 10/25/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-4S | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-4S | 10/25/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-4S | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| U-4S | 10/25/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| U-4S | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| U-4S | 10/25/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| U-4S | 10/25/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| U-4S | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-4S | 10/25/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-4S | 10/25/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| U-4S | 02/20/2023 | Radium (226) | 0.0996 | -- | pci/l | 13982-63-3 |
| U-4S | 10/25/2023 | Radium (226) | 0.238 | -- | pci/l | 13982-63-3 |
| U-4S | 02/20/2023 | Radium 228 | < 0.617 | -- | pci/l | 15262-20-1 |
| U-4S | 10/25/2023 | Radium 228 | < 0.562 | -- | pci/l | 15262-20-1 |
| U-4S | 02/20/2023 | Radium-226/228 | < 0.617 | 5 | pci/l | 425 |
| U-4S | 10/25/2023 | Radium-226/228 | < 0.562 | 5 | pci/l | 425 |
| U-4S | 10/25/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|----------|------------|----------------|-----------|---------------------------------------|-------|------------|
| U-4S | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-4S | 10/25/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-5D | 10/25/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| U-5D | 10/25/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| U-5D | 02/20/2023 | Barium | 0.054 | 2 | mg/l | 7440-39-3 |
| U-5D | 10/25/2023 | Barium | 0.053 | 2 | mg/l | 7440-39-3 |
| U-5D | 10/25/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| U-5D | 10/25/2023 | Cadmium | < 0.00020 | 0.005 | mg/l | 7440-43-9 |
| U-5D | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-5D | 10/25/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-5D | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-5D | 10/25/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-5D | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| U-5D | 10/25/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| U-5D | 02/20/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| U-5D | 10/25/2023 | Lead | < 0.00050 | 0.015 | mg/l | 7439-92-1 |
| U-5D | 10/25/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| U-5D | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-5D | 10/25/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-5D | 10/25/2023 | MOLYBDENUM | < 0.0020 | 0.1 | mg/l | 7439-98-7 |
| U-5D | 02/20/2023 | Radium (226) | < 0.0724 | -- | pci/l | 13982-63-3 |
| U-5D | 10/25/2023 | Radium (226) | < 0.139 | -- | pci/l | 13982-63-3 |
| U-5D | 02/20/2023 | Radium 228 | < 0.497 | -- | pci/l | 15262-20-1 |
| U-5D | 10/25/2023 | Radium 228 | < 0.473 | -- | pci/l | 15262-20-1 |
| U-5D | 02/20/2023 | Radium-226/228 | < 0.497 | 5 | pci/l | 425 |
| U-5D | 10/25/2023 | Radium-226/228 | < 0.473 | 5 | pci/l | 425 |
| U-5D | 10/25/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| U-5D | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-5D | 10/25/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-5S | 10/26/2023 | Antimony | < 0.0020 | 0.006 | mg/l | 7440-36-0 |
| U-5S | 10/26/2023 | Arsenic | < 0.0020 | 0.010 | mg/l | 7440-38-2 |
| U-5S | 02/20/2023 | Barium | 0.062 | 2 | mg/l | 7440-39-3 |
| U-5S | 10/26/2023 | Barium | 0.063 | 2 | mg/l | 7440-39-3 |
| U-5S | 10/26/2023 | Beryllium | < 0.0010 | 0.004 | mg/l | 7440-41-7 |
| U-5S | 10/26/2023 | Cadmium | 0.00033 | 0.005 | mg/l | 7440-43-9 |
| U-5S | 02/20/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-5S | 10/26/2023 | Chromium | < 0.0050 | 0.1 | mg/l | 7440-47-3 |
| U-5S | 02/20/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-5S | 10/26/2023 | Cobalt | < 0.00050 | 0.006 | mg/l | 7440-48-4 |
| U-5S | 02/20/2023 | Fluoride | < 0.50 | 4 | mg/l | 16984-48-8 |
| U-5S | 10/26/2023 | Fluoride | < 1.0 | 4 | mg/l | 16984-48-8 |
| U-5S | 02/20/2023 | Lead | 0.0017 | 0.015 | mg/l | 7439-92-1 |
| U-5S | 10/26/2023 | Lead | 0.00087 | 0.015 | mg/l | 7439-92-1 |
| U-5S | 10/26/2023 | Lithium | < 0.010 | 0.04 | mg/l | 7439-93-2 |
| U-5S | 02/20/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-5S | 10/26/2023 | Mercury | < 0.00020 | 0.002 | mg/l | 7439-97-6 |
| U-5S | 10/26/2023 | MOLYBDENUM | 0.0035 | 0.1 | mg/l | 7439-98-7 |

Table 7



**Groundwater Analytical Data
 vs. Groundwater Protection Standards**

| Location | Date | Parameter | Result | Groundwater Protection Standard (GPS) | Units | CAS # |
|-------------|-------------------|-----------------|--------------|---------------------------------------|-------------|------------------|
| U-5S | 02/20/2023 | Radium (226) | 0.120 | -- | pci/l | 13982-63-3 |
| U-5S | 10/26/2023 | Radium (226) | < 0.135 | -- | pci/l | 13982-63-3 |
| U-5S | 02/20/2023 | Radium 228 | < 0.934 | -- | pci/l | 15262-20-1 |
| U-5S | 10/26/2023 | Radium 228 | < 0.462 | -- | pci/l | 15262-20-1 |
| U-5S | 02/20/2023 | Radium-226/228 | < 0.934 | 5 | pci/l | 425 |
| U-5S | 10/26/2023 | Radium-226/228 | < 0.462 | 5 | pci/l | 425 |
| U-5S | 10/26/2023 | Selenium | < 0.0050 | 0.05 | mg/l | 7782-49-2 |
| U-5S | 02/20/2023 | Thallium | < 0.0010 | 0.002 | mg/l | 7440-28-0 |
| U-5S | 10/26/2023 | Thallium | 0.021 | 0.002 | mg/l | 7440-28-0 |

Results in milligrams per liter (mg/l) or picocuries per liter (pci/l)

Bold = Indicates concentration above Background Threshold Value



Appendix A – Field Data Sheets

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-4S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. Schlygel

Casing Length(ft) 34.36

Date/Time Initiated: 2/20/23 9:45

Dedicated Equipment: Yes

Initial Water Level (feet): 12.18' ~~18.29~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 814.58

One Casing Volume (gal): 3.62 ~~2.3~~

Top of Casing (ft, msl) 832.87

Total Volume Purged (gal): 4.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 12.20'

PURGE DATA

Date/Time Completed: 2/20/23 10:05

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 9:48 | 1000 | 0.1 | 9.35 | 10.22 | 804 | 4.3 | 2.14 | 158 |
| 9:50 | 1000 | 1.5 | 9.59 | 8.46 | 773 | 2.1 | 2.08 | 134 |
| 9:53 | 1000 | 3.0 | 9.60 | 7.86 | 767 | 1.5 | 2.11 | 122 |
| 10:00 | 1000 | 4.0 | 9.03 | 7.67 | 787 | 1.1 | 5.54 | 122 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-4S

Water Level @ Sampling (ft): 12.20

Well Collection Sequence 1 of 17

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>10:05 2/20/20</u> | VOCs: <u>-</u> Other: <u>1000</u> | <u>8.20</u> | <u>7.60</u> | <u>792</u> | <u>0.7</u> | <u>4.08</u> | <u>122</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 19°F, cloudy, 10-15 mph SE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/20/20 By: N-Schlagel

Title: Staff env scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-4D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N-Schlage

Date/Time Initiated: 2/20/22 10:10

Casing Length(ft): 89.2

Initial Water Level (feet): 22.49' 24.71

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 812.61

Casing Diameter (inches): 2

Top of Casing (ft, msl): 837.32

One Casing Volume (gal): 10.87 10.8

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 11.0

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 22.51'

PURGE DATA

Date/Time Completed: 2/20/22 10:45

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 10:10 | 1000 | 0.1 | 8.96 | 7.76 | 621 | 10.1 | 6.64 | 115 |
| 10:20 | 1000 | 4.0 | 9.30 | 7.56 | 725 | 6.1 | 9.28 | 109 |
| 10:30 | 1000 | 8.0 | 9.24 | 7.50 | 724 | 4.0 | 9.76 | 107 |
| 10:40 | 1000 | 11.0 | 9.27 | 7.39 | 721 | 5.0 | 9.06 | 108 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-4D

Water Level @ Sampling (ft): 22.51'

Well Collection Sequence 2 of 17

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 2/20/23</u> | VOCs: <u>-</u> Other: <u>1000</u> | <u>9.23</u> | <u>7.40</u> | <u>721</u> | <u>5.9</u> | <u>9.0</u> | <u>109</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 19°F, cloudy, 10-15 mph SE

Sampling Characteristics: clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/20/23 By: P. Schlegel

Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-5S

Location: Rosemount, MN

Duplicate Collected: Yes - NP-1

Sample Matrix: Groundwater

Field Blank Collected: NO

PURGE INFORMATION

Equipment Blank Collected: NO

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: NO

Date/Time Initiated: 2/20/22 13:30

Sampler(s): 2.5 inch dia
Casing Length(ft): 42.5

Initial Water Level (feet): 30.22 31.85

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 816.26

Casing Diameter (inches): 2

Top of Casing (ft, msl): 848.09

One Casing Volume (gal): 2.0 → 2.0

PID (Background): 0.0 (PPM)

Total Volume Purged (gal):

PID (Headspace): 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 30.25'

PURGE DATA

Date/Time Completed: 2/20/22 13:50

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 13:30 | 1000 | 0.1 | 10.56 | 7.49 | 726 | 795 | 6.34 | 110 |
| 13:35 | 1000 | 0.0 | 10.84 | 7.37 | 724 | 441 | 6.27 | 110 |
| 13:40 | 1000 | 1.5 | 10.86 | 7.18 | 724 | 155 | 6.05 | 112 |
| 13:45 | 1000 | 2.0 | 10.88 | 7.09 | 725 | 72.7 | 5.69 | 113 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-5S 17

Water Level @ Sampling (ft): 30.25

Well Collection Sequence 3 of 17

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>12:50</u> <u>2/20/13</u> | VOCs: <u>100</u> Other: <u>1-</u> | <u>10.91</u> | <u>7.67</u> | <u>725</u> | <u>60.4</u> | <u>5.71</u> | <u>114</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

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

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 493018

Date: 2/20/13 By: N. Schlegel

Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-5D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. S. L. L. L.

Casing Length(ft) 101.54

Date/Time Initiated: 2/20/23 13:30

Dedicated Equipment: Yes

Initial Water Level (feet): 31.32 35.82

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 813.85

One Casing Volume (gal): 11.44 ~~10.6~~

Top of Casing (ft, msl) 849.67

Total Volume Purged (gal): 11.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 31.32

PURGE DATA

Date/Time Completed: 14:05 2/20/23

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 13:30 | 1000 | 0.1 | 9.55 | 7.32 | 704 | 12.6 | 5.80 | 143 |
| 13:40 | 1000 | 4.0 | 9.55 | 7.32 | 704 | 12.7 | 5.97 | 143 |
| 13:50 | 1000 | 8.0 | 9.55 | 7.52 | 704 | 13.1 | 5.67 | 143 |
| 14:00 | 1000 | 11.5 | 9.55 | 7.32 | 704 | 12.6 | 5.66 | 144 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-5D

Water Level @ Sampling (ft): 31.33

Well Collection Sequence 4 of 17

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>14:05</u> <u>2/20/20</u> | VOCs: <u>-</u> Other: <u>1000</u> | <u>9.34</u> | <u>7.34</u> | <u>704</u> | <u>12.7</u> | <u>5.76</u> | <u>148</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

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

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 413455

Date: 2/20/20 By: M. Schlager Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-5S2

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

PURGE INFORMATION

Equipment Blank Collected: No

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: No

Date/Time Initiated: 2/20/23 14:35

Sampler(s): M. Schlegel
Casing Length(ft) 121.81

Initial Water Level (feet): 107.04 ~~114.09~~

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 777.63

Casing Diameter (inches): 2

Top of Casing (ft, msl) 891.72

One Casing Volume (gal): 2.4 ~~2.0~~

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 2.5

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes (circle) No

Water Level After Purge (ft): 107.06

PURGE DATA

Date/Time Completed: 2/23/23 14:55

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 14:35 | 1000 | 0.1 | 9.21 | 7.53 | 770 | 7.1 | 9.14 | 126 |
| 14:40 | 1000 | 1.0 | 10.08 | 7.29 | 863 | 13.1 | 2.47 | 119 |
| 14:48 | 1000 | 2.0 | 10.11 | 7.19 | 865 | 9.5 | 2.26 | 114 |
| 14:50 | 1000 | 2.5 | 10.08 | 7.16 | 866 | 5.9 | 2.11 | 113 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-5S2

Water Level @ Sampling (ft): 107.06

Well Collection Sequence 5 of 17

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>14:55</u> <u>2/20/23</u> | VOCs: <u>-</u> Other: <u>1000</u> | <u>10.07</u> | <u>7.15</u> | <u>866</u> | <u>5.4</u> | <u>2.10</u> | <u>112</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 36°F, cloudy, 10-15 mph S

Sampling Characteristics: clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 462778

Date: 2/20/23 By: M. Schlegel Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-5D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): Peristaltic

Casing Length(ft) 157.1

Date/Time Initiated: 2/20/23 14:35

Dedicated Equipment: Yes

Initial Water Level (feet): 116.54 121.35

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): -771.85

One Casing Volume (gal): 6.6 5.7

Top of Casing (ft, msl) 893.2

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): 116.61'

PURGE DATA

Date/Time Completed: 2/20/23 15:10

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 14:35 | 1000 | 0.1 | 9.34 | 7.17 | 860 | 4.3 | 7.92 | 111 |
| 14:45 | 1000 | 2.5 | 9.30 | 7.17 | 865 | 4.3 | 7.90 | 110 |
| 14:55 | 1000 | 5.0 | 9.44 | 7.17 | 864 | 3.8 | 7.87 | 110 |
| 15:05 | 1000 | 7.0 | 9.35 | 7.17 | 865 | 4.1 | 7.76 | 110 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-5D

Water Level @ Sampling (ft): 116.61

Well Collection Sequence 6 of 17

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>15:10 2/20/23</u> | VOCs: _____ Other: <u>1000</u> | <u>9.55</u> | <u>7.16</u> | <u>854</u> | <u>5.2</u> | <u>10.65</u> | <u>110</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 36°F, cloudy, 10-15 mph S

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 102808

Date: 2/20/23 By: M. Schulze Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-1S

Location: Rosemount, MN

Duplicate Collected: Yes DUP-2

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: Yes

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. J. J. J. J.

Casing Length(ft) 135.97

Date/Time Initiated: 2/20/23 15:30

Dedicated Equipment: Yes

Initial Water Level (feet): 123.09 ~~127.67~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 745.08

One Casing Volume (gal): 2.10 ~~1.2~~

Top of Casing (ft, msl) 872.75

Total Volume Purged (gal): 2.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 123.11'

PURGE DATA

Date/Time Completed: 2/20/23 15:50

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 15:30 | 1000 | 0.1 | 11.65 | 7.50 | 652 | 6.2 | 11.44 | 118 |
| 15:35 | 1000 | 1.0 | 11.13 | 7.33 | 687 | 9.8 | 11.02 | 113 |
| 15:40 | 1000 | 2.0 | 11.37 | 7.28 | 686 | 2.9 | 8.56 | 100 |
| 15:45 | 1000 | 2.5 | 11.50 | 7.28 | 686 | 2.8 | 9.53 | 100 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 123.11'

Parameters: Annual _____ Semiannual: _____

Sample Point ID: D-1S

Well Collection Sequence 7 of 17

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>15:56 2/20/14</u> | VOCs: _____ Other: <u>1000</u> | <u>11.60</u> | <u>7.27</u> | <u>605</u> | <u>2.9</u> | <u>8.42</u> | <u>99</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 37°F, cloudy, 10-15 mph S

Sampling Characteristics: clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes: MS/MSD

Minnesota Unique Well ID: 493914

Date: 2/20/14 By: N. E. Lopez Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-1D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. Schabel

Casing Length(ft) 164.5

Date/Time Initiated: 15:30

Dedicated Equipment: Yes

Initial Water Level (feet): 114.92' 124.03

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 747.47

One Casing Volume (gal): 7.27 6.2

Top of Casing (ft, msl) 871.5

Total Volume Purged (gal): 7.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 114.95'

PURGE DATA

Date/Time Completed: 2/20/23 16:40

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 15:30 | 1000 | 0.1 | 10.76 | 7.62 | 602 | 8.4 | 13.19 | 119 |
| 15:40 | 1000 | 2.5 | 10.73 | 7.65 | 674 | 5.9 | 12.89 | 120 |
| 15:50 | 1000 | 5.0 | 10.87 | 7.65 | 674 | 4.3 | 13.14 | 120 |
| 16:00 | 100 | 7.5 | 10.88 | 7.65 | 674 | 4.1 | 12.92 | 120 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-1D

Water Level @ Sampling (ft): 119.95'

Well Collection Sequence 8 of 17

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>2/20/23</u> <u>16:11</u> | VOCs: <u>-</u> Other: <u>1000</u> | <u>10.33</u> | <u>7.05</u> | <u>674</u> | <u>4.1</u> | <u>12.90</u> | <u>120</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 37°F, cloudy, 10-15 mph S

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/20/23 By: M-Schlagel

Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-3S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schlegel

Date/Time Initiated: 2/21/23 10:20

Casing Length(ft): 135.13

Initial Water Level (feet): 109.85 ~~114.87~~

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 771.68

Casing Diameter (inches): 2

Top of Casing (ft, msl): 886.55

One Casing Volume (gal): 4.12 ~~5.0~~

PID (Background): 0.0 (PPM)

Total Volume Purged (gal): 5.0

PID (Headspace): 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 109.87

PURGE DATA

Date/Time Completed: 2/21/23 10:40

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 10:20 | 1000 | 0.1 | 9.89 | 9.00 | 670 | 22.1 | 12.16 | 161 |
| 10:25 | 1000 | 1.5 | 10.84 | 7.98 | 656 | 46.0 | 5.89 | 79 |
| 10:30 | 1000 | 3.0 | 10.83 | 7.32 | 671 | 16.7 | 12.72 | 46 |
| 10:35 | 1000 | 5.0 | 9.89 | 7.28 | 690 | 11.7 | 12.21 | 51 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 109.87

Parameters: Annual _____ Semiannual: _____

Sample Point ID: D-3S

Well Collection Sequence 9 of 17

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>10:40</u> <u>2/21/23</u> | VOCs: _____ Other: <u>100</u> | <u>9.85</u> | <u>7.28</u> | <u>691</u> | <u>11.7</u> | <u>12.17</u> | <u>52</u> |

YSI Serial Number: _____
YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 12°F, cloudy, 0-5 mph W

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes:

Minnesota Unique Well ID: 48-920

Date: 2/21/23 By: M. Sealage Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-3D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: Yes

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Engel

Date/Time Initiated: 2/21/23 10:25

Casing Length(ft): 155.5

Initial Water Level (feet): 111.05 115.29

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 770.48

Casing Diameter (inches): 2

Top of Casing (ft, msl): 885.77

One Casing Volume (gal): 7.25 5.5

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 7.5

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 111.05'

PURGE DATA

Date/Time Completed: 2/21/23 11:00

| 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 | 9.24 | 7.20 | 763 | 23.1 | 12.81 | 52 |
| 10:35 | 1000 | 2.5 | 9.43 | 7.13 | 769 | 20.6 | 11.52 | 38 |
| 10:45 | 1000 | 5.0 | 10.16 | 7.08 | 768 | 16.8 | 4.09 | 39 |
| 10:55 | 1000 | 7.5 | 9.69 | 7.08 | 791 | 14.6 | 4.25 | 39 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-3D

Water Level @ Sampling (ft): 111.05

Well Collection Sequence 10 of 17

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>11:00 2/21/22</u> | VOCs: _____ Other: <u>1000</u> | <u>10-K</u> | <u>7.09</u> | <u>772</u> | <u>12.6</u> | <u>4.06</u> | <u>40</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 12°F, clouds, 0.5 mph W

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/21/22 By: N. Schlegel

Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-2S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): V. Schlegel

Casing Length(ft) 134.78

Date/Time Initiated: 2/22/23 8:55

Dedicated Equipment: Yes

Initial Water Level (feet): 110.38 122.87

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 761.36

One Casing Volume (gal): 7.67 1.5

Top of Casing (ft, msl) 884.23

Total Volume Purged (gal): 3.0

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: 2/22/23 9:15

| 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) |
|------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 8:55 | 1000 | 0.1 | 2.30 | 7.64 | 592 | 39.7 | 15.16 | 135 |
| 9:00 | 1000 | 1.0 | 8.79 | 7.22 | 770 | 74.9 | 12.17 | 145 |
| 9:05 | 1000 | 2.0 | 9.31 | 7.06 | 756 | 72.0 | 12.36 | 144 |
| 9:10 | 1000 | 3.0 | 9.44 | 7.11 | 742 | 54.5 | 11.98 | 136 |
| | | | 9.45 | 7.11 | 746 | 52.2 | 11.97 | 127 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-2S

Water Level @ Sampling (ft): 118.38

Well Collection Sequence 17 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>9:45</u> <u>2/22/23</u> | VOCs: <u>—</u> Other: <u>NO₂</u> | <u>9.45</u> | <u>7.11</u> | <u>7440</u> | <u>52.2</u> | <u>11.89</u> | <u>127</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 17°F, cloudy, 10 mph NE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/22/23 By: N. Schlegel Title: Staff on-call scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-2D

Location: Rosemount, 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-Surtagel

Casing Length(ft) 163.98

Date/Time Initiated: 2/21/24 12:30

Dedicated Equipment: Yes

Initial Water Level (feet): 117.18 ~~121.18~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 762.85

One Casing Volume (gal): 7.63 ~~6.8~~

Top of Casing (ft, msl) 884.03

Total Volume Purged (gal): 9.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 117.20

PURGE DATA

Date/Time Completed: 2/21/24 13:08

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 12:30 | 1000 | 0.1 | 5.39 | 7.36 | 758 | 28.1 | 10.00 | 115 |
| 12:40 | 1000 | 2.5 | 8.51 | 7.29 | 822 | 35.1 | 9.00 | 124 |
| 12:50 | 1000 | 5.0 | 8.74 | 7.29 | 737 | 25.1 | 9.67 | 126 |
| 13:00 | 1000 | 8.0 | 8.85 | 7.29 | 736 | 24.1 | 11.63 | 126 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft):

117.20'

Sample Point ID:

D-2D

Well Collection Sequence

11 of 17

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>13:05</u> | VOCs: _____ Other: <u>1000</u> | <u>10.75</u> | <u>7.28</u> | <u>742</u> | <u>25.4</u> | <u>12.21</u> | <u>125</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling:

12°F, cloudy, 5-10 mph SE

Sampling Characteristics:

clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID:

482882

Date:

2/21/02

By:

N. J. [unclear]

Title:

STAFF ONLY, QUALITY

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-4S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): u. subbed

Casing Length(ft) 120.4

Date/Time Initiated: 2/21/22 13:10

Dedicated Equipment: Yes

Initial Water Level (feet): 105.82 ~~110.27~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 773.43

One Casing Volume (gal): 2.38 ~~0.3~~

Top of Casing (ft, msl) 883.7

Total Volume Purged (gal): 3.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 105.84'

PURGE DATA

Date/Time Completed: 2/21/22 13:20

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 13:10 | 1000 | 0.1 | 6.29 | 7.38 | 717 | 14.2 | 12.52 | 121 |
| 13:05 | 1000 | 1.0 | 8.62 | 7.31 | 725 | 3.4 | 9.72 | 119 |
| 13:10 | 1000 | 2.0 | 8.55 | 7.30 | 730 | 3.1 | 9.83 | 119 |
| 13:15 | 1000 | 3.0 | 8.44 | 7.30 | 745 | 2.9 | 9.79 | 119 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 105.82

Parameters: Annual _____ Semiannual: _____

Sample Point ID: D-4S

Well Collection Sequence 11 of 17

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>13.26</u> | VOCs: _____ Other: <u>1000</u> | <u>8.25</u> | <u>7.30</u> | <u>762</u> | <u>2.7</u> | <u>9.69</u> | <u>114</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 12°F, cloudy, 5-10 mph SE

Sampling Characteristics: clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 5

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 462921

Date: 2/21/22 By: N. Schulz Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-4D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. Sublabel

Casing Length(ft): 138.7

Date/Time Initiated: 2/21/23 13:28

Dedicated Equipment: Yes

Initial Water Level (feet): 106.02' ~~110.05~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 775.16

One Casing Volume (gal): 5.5 ~~3.5~~

Top of Casing (ft, msl): 885.21

Total Volume Purged (gal): 5.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 106.04

PURGE DATA

Date/Time Completed: 2/21/23 13:45

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 13:28 | 1000 | 0.1 | 10.69 | 7.32 | 789 | 12.9 | 11.06 | 121 |
| 13:30 | 1000 | 2.0 | 11.06 | 7.19 | 789 | 15.5 | 11.75 | 119 |
| 13:35 | 1000 | 4.0 | 10.96 | 7.18 | 789 | 9.1 | 8.91 | 119 |
| 13:40 | 1000 | 5.5 | 10.96 | 7.18 | 785 | 6.2 | 11.51 | 119 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-4D

Water Level @ Sampling (ft): 106.04

Well Collection Sequence _____ of _____

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>13.45</u> | VOCs: _____ Other: <u>1000</u> | <u>10.79</u> | <u>7.17</u> | <u>784</u> | <u>4.8</u> | <u>11.98</u> | <u>119</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 12°F cloudy 5-10 mph SE

Sampling Characteristics: degs

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/24/23 By: 10.504/2023 Title: Staff env scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-7

Location: Rosemount, MN

Duplicate Collected: —

Sample Matrix: Groundwater

Field Blank Collected: —

Equipment Blank Collected: —

PURGE INFORMATION

MS/MSD Collected: —

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): —

Casing Length(ft) 107.4

Date/Time Initiated: 2/21/23

Dedicated Equipment: Yes

Initial Water Level (feet): 107.2

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 791.8

One Casing Volume (gal): 0.3

Top of Casing (ft, msl) 899

Total Volume Purged (gal): 0.0

PID (Background) — (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) — (PPM)

Water Level After Purge (ft): —

PURGE DATA

Date/Time Completed: 2/21/23

| 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) |
|------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
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NO SAMPLE
WELL IS DRY

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-8

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): no splash

Casing Length(ft) 130.1

Date/Time Initiated: 2/2/23 14:28

Dedicated Equipment: Yes

Initial Water Level (feet): 109.89 -114.06

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 792.16

One Casing Volume (gal): 3.29 2.7

Top of Casing (ft, msl) 906.22

Total Volume Purged (gal): 7.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 109.91

PURGE DATA

Date/Time Completed: 2/2/23 14:45

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 14:28 | 1000 | 0.1 | 9.40 | 7.56 | 861 | 209 | 11.77 | 114 |
| 14:30 | 1000 | 1.0 | 9.90 | 7.30 | 840 | 229 | 10.60 | 87 |
| 14:35 | 1000 | 2.0 | 9.71 | 7.23 | 840 | 177 | 10.61 | 9 |
| 14:40 | 1000 | 3.5 | 8.84 | 7.24 | 862 | 132 | 12.43 | -8 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-8

Water Level @ Sampling (ft): 109.91

Well Collection Sequence 15 of 17

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>2/21/23</u> <u>14:45</u> | VOCs: <u>-</u> Other: <u>7000</u> | <u>8.56</u> | <u>7.26</u> | <u>869</u> | <u>131</u> | <u>12.57</u> | <u>-8</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 14°F cloudy, 5-10 mph SE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 5

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/21/23 By: M. Schmitt Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-9

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M-Schmidt

Casing Length(ft): 118.5

Date/Time Initiated: 2/21/23 14:50

Dedicated Equipment: Yes

Initial Water Level (feet): 99.58 104.78

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): #VALUE!

One Casing Volume (gal): 3.08 2.3

Top of Casing (ft, msl): ???

Total Volume Purged (gal): 3.0

PID (Background): 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace): 0.0 (PPM)

Water Level After Purge (ft): 99.60

PURGE DATA

Date/Time Completed: 2/21/23 15:10

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 14:50 | 1000 | 0.1 | 9.25 | 7.49 | 748 | 31.4 | 13.69 | 12 |
| 14:55 | 1000 | 1.0 | 9.57 | 7.21 | 801 | 908 | 6.48 | 58 |
| 15:00 | 1000 | 2.0 | 9.40 | 7.21 | 831 | 163 | 6.48 | -17 |
| 15:05 | 1000 | 3.5 | 9.20 | 7.17 | 819 | 67.2 | 10.26 | -67 |
| | | | 9.13 | 7.16 | 817 | 72.0 | 8.97 | -69 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-9
 Water Level @ Sampling (ft): 99.60'
 Well Collection Sequence 16 of 17
 Parameters: Annual _____ Semiannual: _____ Quarterly: 2 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>15:10 2/24/22</u> | VOCs: _____ Other: <u>100</u> | <u>9.13</u> | <u>7.16</u> | <u>0.17</u> | <u>72.0</u> | <u>8.97</u> | <u>-69</u> |

YSI Serial Number: _____
 YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: show 14°F, cloudy, 5-10 mph SE

 Sampling Characteristics: clear - H enough

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 5
 Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: _____

Date: 2/24/22 By: nschubert Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

Groundwater Elevation Measurements
SKB Landfill (Rosemount)

Site: SKB Rosemount

Personnel: N. Senloger

| Well ID | Date | Time | Depth To Water: | Notes: | |
|---------|----------|-------|-----------------|----------------------------|-------------|
| V-43 | 10/25/23 | 10:36 | 11.77' | | |
| V-44 | ↓ | 10:35 | 22.38' | | |
| V-55 | | 8:00 | 30.52' | | |
| V-5D | | 12:55 | 31.25' | | |
| D-15 | | 8:45 | 123.46' | | |
| D-1D | | 8:50 | 120.38' | | |
| D-1VD | | 8:52 | 122.03' | | |
| D-25 | | 9:10 | 116.73' | | |
| D-2D | | 9:15 | 117.60' | | |
| P-2VD | | 9:20 | 117.71' | | |
| P-35 | | 8:37 | 110.58' | | |
| D-3D | | 8:40 | 111.47' | | |
| D-45 | | 9:20 | 106.18' | | |
| P-4D | | 9:25 | 106.41' | | |
| P-552 | | 8:30 | 107.72' | | |
| D-5D | | 8:35 | 117.21' | | |
| P-6 | | 8:20 | 82.16' | | |
| D-7 | | 9:30 | DRY | TD = 101.70' (top of pump) | |
| D-8 | | 9:35 | 110.06' | | |
| D-9 | | 9:40 | 100.00 | | |
| CU4-1 | | ↕ | 9:05 | DRY | TD = 75.40' |
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FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-4S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): 1/4" Schlager

Casing Length(ft) 34.36

Date/Time Initiated: 10/25/23 11:35

Dedicated Equipment: Yes

Initial Water Level (feet): 11.77' 20.32

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): ~~812.55~~

One Casing Volume (gal): 3.7 2.0

Top of Casing (ft, msl) 832.87

Total Volume Purged (gal): 11.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 11.90'

PURGE DATA

Date/Time Completed: 10/25/23 11:25

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 10:35 | 1000 | 0.1 | 12.06 | 8.30 | 747 | 29.8 | 12.88 | 207 |
| 10:50 | 1000 | 4.0 | 11.40 | 7.81 | 863 | 20.5 | 0.00 | 242 |
| 10:05 | 1000 | 8.0 | 11.36 | 7.72 | 862 | 20.4 | 0.00 | 254 |
| 11:20 | 1000 | 11.0 | 11.32 | 7.69 | 861 | 20.1 | 0.00 | 259 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-4S

Water Level @ Sampling (ft): 11.86'

Well Collection Sequence 1 of 17

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) |
|-------------|--|--------------|----------------|--------------------------------------|-----------------|---------------------------------|---|
| 10/25/23 | VOCs: <u>106</u> Other: <u>1060</u> | <u>11.32</u> | <u>7.69</u> | <u>861</u> | <u>20.0</u> | <u>0.00</u> | <u>259</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 52°F, cloudy, 0-5 mph W

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: MPCA LCR P&AS
9/6/2

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 493021

Date: 10/25/23 By: N. Seitzinger Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-4D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): 10.5ch by 49

Date/Time Initiated: 10/25/23 10:35

Casing Length(ft): 89.2

Initial Water Level (feet): 22.36 27.29

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 810.03

Casing Diameter (inches): 2

Top of Casing (ft, msl): 837.32

One Casing Volume (gal): 10.9 10.4

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 33.0

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): ~~10/25/23 22.40~~

PURGE DATA

Date/Time Completed: 10/25/23 12:15

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 10:35 | 1000 | 0.1 | 11.16 | 7.88 | 754 | 20.0 | 10.32 | 254 |
| 11:05 | 1000 | 10.0 | 10.40 | 7.88 | 667 | 20.3 | 9.66 | 261 |
| 11:35 | 1000 | 20.0 | 10.32 | 7.88 | 668 | 19.9 | 7.18 | 263 |
| 12:10 | 1000 | 39.0 | 10.30 | 7.84 | 679 | 19.9 | 7.18 | 260 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-4D
 Water Level @ Sampling (ft): 22.40
 Well Collection Sequence 2 of 17
 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>10/25/23</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>10.32</u> | <u>7.92</u> | <u>660</u> | <u>20.0</u> | <u>7.22</u> | <u>262</u> |

YSI Serial Number: _____
 YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 52°F, cloudy, 0-5 mph N

 Sampling Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/2
 Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 403714
 Date: 10/25/23 By: N. Schlegel Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-5S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): µ-schbeel

Casing Length(ft) 42.5

Date/Time Initiated: 10/25/23 13:00

Dedicated Equipment: Yes

Initial Water Level (feet): 30.52' ~~33.24~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 814.85

One Casing Volume (gal): 2.0 ~~1.8~~

Top of Casing (ft, msl) 848.09

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): 30.55'

PURGE DATA

Date/Time Completed: 10/25/23 13:20

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 13:00 | 1000 | 0.1 | 11.77 | 7.95 | 733 | 259 | 7.47 | 229 |
| 13:05 | 1000 | 2.0 | 11.43 | 7.87 | 738 | 372 | 5.26 | 250 |
| 13:10 | 1000 | 4.0 | 11.45 | 7.85 | 740 | 276 | 5.11 | 258 |
| 13:15 | 1000 | 6.0 | 11.46 | 7.83 | 741 | 241 | 5.10 | 261 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-5S
 Water Level @ Sampling (ft): 30.55'
 Well Collection Sequence 3 of 17
 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>13:20</u> <u>10/25/12</u> | VOCs: <u>100</u> Other: <u>100</u> | <u>11.46</u> | <u>7.03</u> | <u>74</u> | <u>24.2</u> | <u>5.09</u> | <u>262</u> |

YSI Serial Number: _____
 YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 53°F, cloudy, 5-10 mph NE

 Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/12
 Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 493018
 Date: 10/25/12 By: N. Schlegel Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: U-5D

Location: Rosemount, MN

Duplicate Collected: Yes - DUP-1

Sample Matrix: Groundwater

Field Blank Collected: Yes - Field Blank 1

Equipment Blank Collected: NO ~~Yes - Field Blank~~

PURGE INFORMATION

MS/MSD Collected: Yes

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. Schbyel

Date/Time Initiated: 10/25/23 13:00

Casing Length(ft): 101.54

Initial Water Level (feet): 31.25 ~~35.82~~

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 813.85

Casing Diameter (inches): 2

Top of Casing (ft, msl): 849.67

One Casing Volume (gal): 11.5 ~~10.6~~

PID (Background) 0-0 (PPM)

Total Volume Purged (gal): 35

PID (Headspace) 0-0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 31.25'

PURGE DATA

Date/Time Completed: 10/25/23 14:00

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 13:00 | 1000 | 0.1 | 11.07 | 8.08 | 698 | 22.1 | 4.66 | -24 |
| 13:15 | 1000 | 10.0 | 10.86 | 8.24 | 696 | 21.5 | 5.04 | -251 |
| 13:30 | 1000 | 20.0 | 10.85 | 8.25 | 695 | 21.6 | 5.15 | 252 |
| 13:45 | 1000 | 30.0 | 10.85 | 8.25 | 694 | 21.4 | 5.50 | 255 |
| 13:55 | 100 | 35.0 | 10.85 | 8.25 | 694 | 21.3 | 5.70 | 256 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: U-5D

Water Level @ Sampling (ft): 31-26'

Well Collection Sequence 4 of 12

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>14.00</u> <u>10/25/23</u> | VOCs: <u>700</u> Other: <u>1000</u> | <u>10.84</u> | <u>8.25</u> | <u>694</u> | <u>21.7</u> | <u>5.20</u> | <u>258</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 54°F, cloudy, 5-10 mph NE

Sampling Characteristics: clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 49 3018

Date: 10/25/23 By: K. Seelye Title: staff env scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-5S2

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

PURGE INFORMATION

Equipment Blank Collected: No

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: No

Date/Time Initiated: 10/26/23 8:00

Sampler(s): n-skb-log1

Casing Length(ft) 121.81

Initial Water Level (feet): 107.72' 114.09

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 777.63

Casing Diameter (inches): 2

Top of Casing (ft, msl) 891.72

One Casing Volume (gal): 2.3 2.0

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 7.0

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 102.75'

PURGE DATA

Date/Time Completed: 10/26/23 8:30

| 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) |
|------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 8:00 | 1000 | 0.1 | 12.29 | 8.25 | 835 | 28.7 | 6.27 | 181 |
| 8:10 | 1000 | 2.5 | 11.30 | 8.08 | 865 | 15.2 | 2.48 | 247 |
| 8:20 | 1000 | 5.0 | 11.19 | 7.96 | 865 | 15.5 | 1.82 | 274 |
| 8:25 | 1000 | 7.0 | 11.16 | 7.92 | 868 | 16.0 | 1.59 | 282 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-5S2
 Water Level @ Sampling (ft): 102.75
 Well Collection Sequence 5 of 17
 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>10/26/12</u> <u>8:30</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>11.14</u> | <u>7.91</u> | <u>967</u> | <u>16.8</u> | <u>1.54</u> | <u>283</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 55°F, drizzle - lt rain 0-5 mph NE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/12

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 463715

Date: 10/26/12 By: N. Schlager Title: staff env. scien

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-5D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): µ Schlagel

Date/Time Initiated: 10/26/23 8:05

Casing Length(ft): 157.1

Initial Water Level (feet): 117.21' 121.35

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): 771.85

Casing Diameter (inches): 2

Top of Casing (ft, msl) 893.2

One Casing Volume (gal): 6.5 5.7

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 20.0

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 117.23'

PURGE DATA

Date/Time Completed: 10/26/23 9:00

| 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) |
|------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 8:05 | 1000 | 0.1 | 10.963 | 7.95 | 841 | 17.6 | 4.95 | 286 |
| 8:20 | 1000 | 6.5 | 10.94 | 7.95 | 832 | 17.7 | 4.78 | 287 |
| 8:35 | 1000 | 17.0 | 10.89 | 7.93 | 829 | 18.0 | 6.91 | 289 |
| 8:55 | 1000 | 20.0 | 10.91 | 7.93 | 832 | 19.4 | 8.71 | 290 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 117.23'

Parameters: Annual _____ Semiannual: _____

Sample Point ID: D-5D

Well Collection Sequence 6 of 17

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>10/26/23</u> <u>9:00</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>10.89</u> | <u>7.92</u> | <u>825</u> | <u>19.5</u> | <u>8.71</u> | <u>290</u> |

YSI Serial Number: _____
 YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 55°F, drizzle - 11 rain, 0-5 mph NE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/3

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 482985

Date: 10/26/23 By: M. Schloeger Title: Staff Env. Scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-3S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schlegel

Casing Length(ft) 135.13

Date/Time Initiated: 10/26/23 9:30

Dedicated Equipment: Yes

Initial Water Level (feet): 110.58' 114.87

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 771.68

One Casing Volume (gal): 4.0 3.0

Top of Casing (ft, msl) 886.55

Total Volume Purged (gal): 12.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 110.60'

PURGE DATA

Date/Time Completed: 10/26/23 10:05

| 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) |
|------------------|---------------------|-------------------------|------------------|-----------------|--------------------------------------|-----------------|------------------------|---------------|
| 9:30 | 1000 | 0.1 | 11.88 | 7.89 | 1,360 | 21.8 | 0.00 | 13 |
| 9:40 | 1000 | 4.0 | 11.86 | 7.86 | 1,390 | 20.5 | 0.00 | 8 |
| 9:50 | 1000 | 8.0 | 11.84 | 7.84 | 1,390 | 20.3 | 0.00 | 24 |
| 10:00 | 1000 | 12.0 | 11.83 | 7.84 | 1,390 | 20.3 | 0.00 | 24 |
| 9:30 | 1000 | 0.1 | 13.29 | 8.20 | 709 | 24.0 | 7.64 | 238 |
| 9:40 | 1000 | 4.0 | 11.88 | 7.89 | 1,360 | 21.8 | 0.00 | 13 |
| 9:50 | 1000 | 8.0 | 11.86 | 7.86 | 1,390 | 20.5 | 0.00 | 8 |
| 10:00 | 1000 | 12.0 | 11.84 | 7.84 | 1,390 | 20.3 | 0.00 | 24 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-3S

Water Level @ Sampling (ft): 110.60'

Well Collection Sequence 7 of 17

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>10/26/23</u> <u>10:35</u> | VOCs: <u>1000</u> Other: <u>1000</u> | <u>11.83</u> | <u>7.94</u> | <u>1,390</u> | <u>20.3</u> | <u>0.00</u> | <u>24</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 57 °F, drizzle, 0-5 mph NE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 462920

Date: 10/26/23 By: M. Schlegel Title: Staff enviro scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-3D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

PURGE INFORMATION

Equipment Blank Collected: No

Method of Well Purge: Dedicated Bladder Pump

MS/MSD Collected: No

Date/Time Initiated: 10/26/23 9:30

Sampler(s): N. Schlygel

Casing Length(ft) 155.5

Initial Water Level (feet): 111.47' ~~115.29'~~

Dedicated Equipment: Yes

Ground Water Elevation (ft, msl): ~~-770.48~~

Casing Diameter (inches): 2

Top of Casing (ft, msl) 885.77

One Casing Volume (gal): 7.2 5.5

PID (Background) 0.0 (PPM)

Total Volume Purged (gal): 22.0

PID (Headspace) 0.0 (PPM)

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 115.0'

PURGE DATA

Date/Time Completed: 10/26/23 10:20

| 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) |
|-------|---------------------|-------------------------|-----------|-----------------|--------------------------------------|-----------------|------------------------|----------|
| 9:30 | 1000 | 0.1 | 11.49 | 7.96 | 780 | 34.1 | 1.85 | 72 |
| 9:45 | 1000 | 7.0 | 11.49 | 7.96 | 775 | 42.5 | 2.17 | 89 |
| 10:00 | 1000 | 14.0 | 11.46 | 7.93 | 782 | 32.1 | 2.97 | 110 |
| 10:15 | 1000 | 22 | 11.46 | 7.93 | 782 | 32.1 | 2.97 | 110 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 111.50'

Sample Point ID: D-3D

Well Collection Sequence 8 of 17

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>10/26/23</u> <u>10-20</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>11.47</u> | <u>7.95</u> | <u>777</u> | <u>33.1</u> | <u>2.78</u> | <u>116</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 57°F, drizzle, 0-5 mph NE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 40208x

Date: 10/26/23 By: N. Schlegel Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-1S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schloepel

Casing Length(ft): 135.97

Date/Time Initiated: 10/26/23 11:00

Dedicated Equipment: Yes

Initial Water Level (feet): 123.46' ~~127.67~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): ~~745.08~~

One Casing Volume (gal): 2.0 ~~1.2~~

Top of Casing (ft, msl): 872.75

Total Volume Purged (gal): 6.5

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 123.48'

PURGE DATA

Date/Time Completed: 10/26/23 11:40

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 11:00 | 1000 | 0.1 | 13.09 | 8.24 | 610 | 22.5 | 9.32 | 233 |
| 11:10 | 1000 | 2.0 | 12.92 | 7.96 | 686 | 21.1 | 8.58 | 265 |
| 11:20 | 1000 | 4.0 | 12.92 | 7.88 | 688 | 20.1 | 7.74 | 244 |
| 11:35 | 1000 | 6.5 | 12.91 | 7.83 | 685 | 21.9 | 6.44 | 212 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft):

123.48'

Sample Point ID:

D-1S

Well Collection Sequence

9 of 17

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>10/26/23</u> <u>11:40</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>12.91</u> | <u>7.83</u> | <u>685</u> | <u>20.9</u> | <u>6.43</u> | <u>212</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling:

SB of, drizzle-fog, 0-5 mph NE

Sampling Characteristics:

clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected:

9/6/2

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID:

493014

Date:

10/26/23

By:

N-schlager

Title:

staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Location: Rosemount, MN

Sample Matrix: Groundwater

Sample Location: D-1D

Duplicate Collected: No

Field Blank Collected: No

Equipment Blank Collected: No

MS/MSD Collected: No

Sampler(s): M. Schindler

Casing Length(ft): 164.5

Dedicated Equipment: Yes

Casing Diameter (inches): 2

One Casing Volume (gal): 7.2 ~~6.2~~

Total Volume Purged (gal): 22.0

Purged Dry?: Yes No (circle)

Water Level After Purge (ft): 120.40'

Date/Time Completed: 10/26/23 12:05

PURGE INFORMATION

Method of Well Purge: Dedicated Bladder Pump

Date/Time Initiated: 10/26/23 11:00

Initial Water Level (feet): 120.38' ~~124.03~~

Ground Water Elevation (ft, msl): 747.47

Top of Casing (ft, msl): 871.5

PID (Background) 0.0 (PPM)

PID (Headspace) 0.0 (PPM)

PURGE DATA

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 11:00 | 1000 | 0.1 | 12.91 | 7.83 | 685 | 20.9 | 6.43 | 212 |
| 11:20 | 1000 | 7.0 | 12.84 | 8.18 | 678 | 21.5 | 7.01 | 261 |
| 11:40 | 1000 | 14.0 | 12.87 | 8.14 | 678 | 21.3 | 7.43 | 266 |
| 12:00 | 1000 | 22.0 | 12.70 | 8.17 | 676 | 21.7 | 8.16 | 271 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-1D

Water Level @ Sampling (ft): 120.40

Well Collection Sequence 10 of 17

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>10/26/23</u> <u>12:05</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>12.79</u> | <u>8.20</u> | <u>676</u> | <u>21.6</u> | <u>8.08</u> | <u>270</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 60 °F, fog, 0 - 5 mph NE

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 482883

Date: 10/26/23 By: N. Schlegel Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-2S

Location: Rosemount, MN

Duplicate Collected: Yes - Dup-2

Sample Matrix: Groundwater

Field Blank Collected: Yes Field Blank 2

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: Yes

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schlegel

Casing Length(ft) 134.78

Date/Time Initiated: 10/26/2008 12:55

Dedicated Equipment: Yes

Initial Water Level (feet): 118.73 122.87

Casing Diameter (inches): 2

Ground Water Elevation (ft. msl): 761.36

One Casing Volume (gal): 2.6 1.5

Top of Casing (ft. msl) 884.23

Total Volume Purged (gal): 8.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 118.75'

PURGE DATA

Date/Time Completed: 10/26/2008 13:15

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 12:55 | 1000 | 0.1 | 13.12 | 8.27 | 584 | 20.3 | 7.38 | 227 |
| 13:00 | 1000 | 2.5 | 11.31 | 7.94 | 727 | 16.7 | 0.00 | 265 |
| 13:05 | 1000 | 5.0 | 11.22 | 7.85 | 716 | 16.6 | 0.00 | 261 |
| 13:10 | 1000 | 8.0 | 11.14 | 7.83 | 715 | 17.5 | 0.00 | 255 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 118.75'
Sample Point ID: D-2S
 Parameters: Annual _____ Semiannual: _____
 Well Collection Sequence 11 of 17
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>10/26/23</u> <u>13:15</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>11.15</u> | <u>7.83</u> | <u>715</u> | <u>17.7</u> | <u>0.00</u> | <u>255</u> |

YSI Serial Number: _____
 YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: bl of, cloudy, 0-5 mph NE
 Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____
 # of Bottles Collected: 9/6/2
 Well Closed and Locked: Yes No (circle) _____

Notes: _____
 Minnesota Unique Well ID: 493019
 Date: 10/26/23 By: N. Schlegel Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-2D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N-Subsampler

Casing Length(ft) 163.98

Date/Time Initiated: 10/28/23 12:55

Dedicated Equipment: Yes

Initial Water Level (feet): 117.60 ~~421.18~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 762.85

One Casing Volume (gal): 7.6 ~~6.8~~

Top of Casing (ft, msl) 884.03

Total Volume Purged (gal): 23.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 117.62'

PURGE DATA

Date/Time Completed: 10/28/23 14:00

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 12:55 | 1000 | 0.1 | 10.73 | 8.01 | 714 | 19.7 | 5.95 | 270 |
| 13:15 | 1000 | 7.5 | 10.67 | 8.00 | 723 | 23.6 | 5.90 | 283 |
| 13:35 | 1000 | 15.0 | 10.63 | 8.00 | 720 | 20.1 | 5.95 | 297 |
| 13:55 | 1000 | 23.0 | 10.69 | 8.00 | 716 | 19.9 | 5.97 | 288 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-2D

Water Level @ Sampling (ft): 117.62'

Well Collection Sequence 12 of 17

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>10/26/23</u> <u>14:00</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>10.66</u> | <u>7.99</u> | <u>710</u> | <u>20.1</u> | <u>6.05</u> | <u>289</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 61% of, cloudy, 0 - 5 mph NE

Sampling Characteristics: clean

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 482892

Date: 10/2/23 By: N. Schrage

Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-4S

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schwab

Casing Length(ft) 120.4

Date/Time Initiated: 10/27/23 8:35

Dedicated Equipment: Yes

Initial Water Level (feet): 106.18' ~~110.27~~

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): ~~113.43~~

One Casing Volume (gal): 23 ~~0.5~~

Top of Casing (ft, msl) 883.7

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): 106.20'

PURGE DATA

Date/Time Completed: 10/27/23 9:10

| 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) |
|------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 8:35 | 1000 | 0.1 | 11.49 | 7.99 | 820 | 28.2 | 7.98 | 259 |
| 8:45 | 1000 | 2.5 | 12.21 | 7.99 | 792 | 23.9 | 5.76 | 286 |
| 8:55 | 1000 | 5.0 | 12.19 | 7.93 | 788 | 21.6 | 5.26 | 292 |
| 9:05 | 1000 | 7.0 | 12.22 | 7.82 | 786 | 20.8 | 4.79 | 294 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 106.20'

Parameters: Annual _____ Semiannual: _____

Sample Point ID: D-4S

Well Collection Sequence 13 of 17

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>10/27/23</u> <u>9:16</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>12.22</u> | <u>7.82</u> | <u>786</u> | <u>20.5</u> | <u>4.90</u> | <u>294</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 40°F, cloudy, 15-20 mph w

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 462921

Date: 10/27/23 By: N. Schlapfer Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-4D

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schlegel

Casing Length(ft): 138.7

Date/Time Initiated: 10/27/23 8:35

Dedicated Equipment: Yes

Initial Water Level (feet): 106.41' 110.05

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 775.16

One Casing Volume (gal): 5.3 3.5

Top of Casing (ft, msl): 885.21

Total Volume Purged (gal): 16.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 106.43'

PURGE DATA

Date/Time Completed: 10/27/23 9:25

| 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) |
|------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 8:35 | 1000 | 0.1 | 12.11 | 7.85 | 790 | 20.1 | 5.17 | 295 |
| 8:50 | 1000 | 5.0 | 12.07 | 7.89 | 778 | 20.0 | 5.64 | 299 |
| 9:05 | 1000 | 10.0 | 12.09 | 7.90 | 779 | 20.8 | 5.83 | 299 |
| 9:20 | 1000 | 16.0 | 12.09 | 7.90 | 778 | 20.2 | 5.80 | 300 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 106.43'

Parameters: Annual _____ Semiannual: _____

Sample Point ID: D-4D

Well Collection Sequence 14 of 17

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>10/27/23</u> <u>9:25</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>12.09</u> | <u>7.88</u> | <u>778</u> | <u>20.0</u> | <u>5.75</u> | <u>300</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 40°F, cloudy, 15-20 mph w

Sampling Characteristics: clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle) _____ # of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: -

Date: 10/27/23 By: N. Schloegel Title: staff env. scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-7

Location: Rosemount, MN

Duplicate Collected: -

Sample Matrix: Groundwater

Field Blank Collected: -

Equipment Blank Collected: -

PURGE INFORMATION

MS/MSD Collected: -

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N-Sub 100

Casing Length(ft) 107.4

Date/Time Initiated: 10/27/23 5

Dedicated Equipment: Yes

Initial Water Level (feet): DRY 107.2

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): -791.8

One Casing Volume (gal): 0.3

Top of Casing (ft, msl) 899

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: 10/27/23

| 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) |
|---|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| <p>INSUFFICIENT WATER IN WELL NO SAMPLE COLLECTED</p> | | | | | | | | |

FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-7

Water Level @ Sampling (ft): _____

Well Collection Sequence 15 of 17

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.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-8

Location: Rosemount, MN

Duplicate Collected: No

Sample Matrix: Groundwater

Field Blank Collected: No

Equipment Blank Collected: No

PURGE INFORMATION

MS/MSD Collected: No

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): M. Schlage

Date/Time Initiated: 10/27/23 9:45

Casing Length(ft) 130.1

Dedicated Equipment: Yes

Initial Water Level (feet): 110.06' 114.06

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): 792.16

One Casing Volume (gal): 3.3 2.7

Top of Casing (ft, msl) 906.22

Total Volume Purged (gal): 10.0

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 110.09'

PURGE DATA

Date/Time Completed: 10/27/23 10:20

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 9:45 | 1000 | 0.1 | 12.24 | 8.05 | 794 | 24.5 | 9.34 | 283 |
| 9:55 | 1000 | 3.0 | 10.90 | 7.95 | 786 | 24.5 | 7.31 | 294 |
| 10:05 | 1000 | 6.0 | 10.89 | 7.88 | 796 | 26.0 | 7.04 | -30 |
| 10:15 | 1000 | 10.0 | 10.91 | 7.88 | 788 | 28.7 | 7.20 | -49 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Water Level @ Sampling (ft): 110.08'

Sample Point ID: D-8

Well Collection Sequence 16 of 17

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>10/27/23</u> <u>10-20</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>10.88</u> | <u>7.87</u> | <u>789</u> | <u>29.6</u> | <u>7.24</u> | <u>-45</u> |

YSI Serial Number: _____

YSI Sonde Serial Number: _____

GENERAL INFORMATION:

Weather Conditions @ sampling: 39°F, cloudy, 15 - 20 mph W

Sampling Characteristics: Clear

COMMENTS AND OBSERVATIONS:

Full Bottle Set Collected: Yes No (circle)

of Bottles Collected: 9/6/2

Well Closed and Locked: Yes No (circle)

Notes: _____

Minnesota Unique Well ID: 27735

Date: 10/27/23

By: N. Schlapfer

Title: staff env scientist

Company: Groundwater and Environmental Services, Inc.

FIELD INFORMATION LOG Part 1

Facility: SKB Landfill (Rosemount)

Sample Location: D-9

Location: Rosemount, MN

Duplicate Collected: NO

Sample Matrix: Groundwater

Field Blank Collected: NO

Equipment Blank Collected: YES

PURGE INFORMATION

MS/MSD Collected: NO

Method of Well Purge: Dedicated Bladder Pump

Sampler(s): N. Schroyer

Casing Length(ft) 118.5

Date/Time Initiated: 10/27/23 10:35

Dedicated Equipment: Yes

Initial Water Level (feet): 100.00 -104.78

Casing Diameter (inches): 2

Ground Water Elevation (ft, msl): #VALUE!

One Casing Volume (gal): 3.0 2.5

Top of Casing (ft, msl): ???

Total Volume Purged (gal): 9.0 slow recharge

PID (Background) 0.0 (PPM)

Purged Dry?: Yes No (circle)

PID (Headspace) 0.0 (PPM)

Water Level After Purge (ft): 100.02'

PURGE DATA

Date/Time Completed: 10/27/23 11:15

| 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) |
|-------|---------------------|-------------------------|-----------|----------------|--------------------------------------|-----------------|------------------------|----------|
| 10:35 | 1000 | 0.0 | 12.49 | 7.44 | 125 | 73.7 | 11.82 | 89 |
| 10:50 | 1000 | 3.0 | 11.89 | 7.64 | 849 | 36.8 | 8.00 | -149 |
| 11:00 | 1000 | 6.0 | 11.85 | 7.67 | 847 | 34.7 | 6.24 | -122 |
| 11:10 | 1000 | 9.0 | 11.85 | 7.67 | 852 | 24.3 | 6.27 | -105 |
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FIELD INFORMATION LOG Part 2

SAMPLING INFORMATION:

Sample Point ID: D-9
 Water Level @ Sampling (ft): 100.02'
 Well Collection Sequence 17 of 17
 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>10/27/23</u> <u>11:35</u> | VOCs: <u>100</u> Other: <u>1000</u> | <u>11.82</u> | <u>7.72</u> | <u>854</u> | <u>29.2</u> | <u>6.29</u> | <u>-102</u> |

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: 9/6/2
 Well Closed and Locked: Yes No (circle) _____

Notes: _____

Minnesota Unique Well ID: 760141
 Date: 10/27/23 By: N. Schroyer Title: Staff env. scientist

Company: Groundwater and Environmental Services, Inc.



Appendix B – Laboratory Analytical Reports



ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/28/2023 3:59:42 PM

JOB DESCRIPTION

SKB Rosemount - CCR Monitoring
SDG NUMBER 3502371/40/870
CCR Groundwater (FALL)

JOB NUMBER

310-250316-1

Eurofins Cedar Falls

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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
3/28/2023 3:59:42 PM

Authorized for release by
Zach Bindert, Project Manager I
Zach.Bindert@et.eurofinsus.com
(319)277-2401



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Case Narrative

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Job ID: 310-250316-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-250316-1

Comments

No additional comments.

Receipt

The samples were received on 2/24/2023 3:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were -0.6° C, -0.1° C, 0.5° C, 0.7° C, 0.9° C, 1.3° C, 3.5° C and 5.4° C.

HPLC/IC

Method 9056A: The following samples were diluted due to the nature of the sample matrix: D-1D - CCR (310-250316-1), D-2D - CCR (310-250316-2), D-3D - CCR (310-250316-3), D-4D - CCR (310-250316-4), D-5D - CCR (310-250316-5), D-9 - CCR (310-250316-6), U-4D - CCR (310-250316-7), U-4S - CCR (310-250316-8), U-5D - CCR (310-250316-9), U-5S - CCR (310-250316-10) and D-1S - CCR (310-250316-11). Elevated reporting limits (RLs) are provided.

Method 9056A: The following samples were diluted due to the nature of the sample matrix: D-2S - CCR (310-250316-12), D-3S - CCR (310-250316-13), D-5S2 - CCR (310-250316-14), D-4S - CCR (310-250316-15), D-8 - CCR (310-250316-16), DUP-1 - CCR (310-250316-17) and DUP-2 - CCR (310-250316-18). Elevated reporting limits (RLs) are provided for fluoride.

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

Metals

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

General Chemistry

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

Job ID: 310-250316-2

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-250316-2

Comments

No additional comments.

Receipt

The samples were received on 2/24/2023 3:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were -0.6° C, -0.1° C, 0.5° C, 0.7° C, 0.9° C, 1.3° C, 3.5° C and 5.4° C.

RAD

Methods 903.0, 9315: Radium-226 batch 602196

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

D-1S - CCR (310-250316-11), D-1S - CCR (310-250316-11[MS]), D-1S - CCR (310-250316-11[MSD]), D-2S - CCR (310-250316-12), D-3S - CCR (310-250316-13), D-5S2 - CCR (310-250316-14), D-4S - CCR (310-250316-15), D-8 - CCR (310-250316-16), DUP-1 - CCR (310-250316-17), DUP-2 - CCR (310-250316-18), Equipment Blank - CCR (310-250316-19), Field Blank 1 - CCR (310-250316-20), (LCS 160-602196/2-A) and (MB 160-602196/1-A)

Case Narrative

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Job ID: 310-250316-2 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

Methods 903.0, 9315: Radium-226 batch 602183

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

D-1D - CCR (310-250316-1), D-2D - CCR (310-250316-2), D-3D - CCR (310-250316-3), D-3D - CCR (310-250316-3[MS]), D-3D - CCR (310-250316-3[MSD]), D-4D - CCR (310-250316-4), D-5D - CCR (310-250316-5), D-9 - CCR (310-250316-6), U-4D - CCR (310-250316-7), U-4S - CCR (310-250316-8), U-5D - CCR (310-250316-9), U-5S - CCR (310-250316-10), (LCS 160-602183/2-A) and (MB 160-602183/1-A)

Methods 904.0, 9320: Radium-228 batch 602199

The LCS recovered at (144%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS passes, no further action is required

(LCS 160-602199/2-A)

Methods 904.0, 9320: Radium-228 batch 602199

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

D-1S - CCR (310-250316-11), D-1S - CCR (310-250316-11[MS]), D-1S - CCR (310-250316-11[MSD]), D-2S - CCR (310-250316-12), D-3S - CCR (310-250316-13), D-5S2 - CCR (310-250316-14), D-4S - CCR (310-250316-15), D-8 - CCR (310-250316-16), DUP-1 - CCR (310-250316-17), DUP-2 - CCR (310-250316-18), Equipment Blank - CCR (310-250316-19), Field Blank 1 - CCR (310-250316-20), (LCS 160-602199/2-A) and (MB 160-602199/1-A)

Methods 904.0, 9320: Radium-228 batch 602192

The LCS recovered at (130%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (62-148%) per method requirements. The LCS passes, no further action is required

(LCS 160-602192/2-A)

Methods 904.0, 9320: Radium-228 batch 602192

The matrix spike duplicate (MSD) recoveries were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

D-3D - CCR (310-250316-3[MSD])

Method 9320: Radium-228 batch 602192

The detection goal was not met for the following sample(s). Sample was prepped at a reduced volume due to the presence of matrix interferences: D-9 - CCR (310-250316-6). Analytical results are reported with the detection limit achieved.

Methods 904.0, 9320: Radium-228 batch 602192

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

D-1D - CCR (310-250316-1), D-2D - CCR (310-250316-2), D-3D - CCR (310-250316-3), D-3D - CCR (310-250316-3[MS]), D-3D - CCR (310-250316-3[MSD]), D-4D - CCR (310-250316-4), D-5D - CCR (310-250316-5), D-9 - CCR (310-250316-6), U-4D - CCR (310-250316-7), U-4S - CCR (310-250316-8), U-5D - CCR (310-250316-9), U-5S - CCR (310-250316-10), (LCS 160-602192/2-A) and (MB 160-602192/1-A)

Method PrecSep_0:

Method PrecSep_0:

Method PrecSep-21:

Case Narrative

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Job ID: 310-250316-2 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

Method PrecSep-21:

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

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Sample Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-----------------------|--------------|----------------|----------------|
| 310-250316-1 | D-1D - CCR | Ground Water | 02/20/23 16:16 | 02/24/23 15:50 |
| 310-250316-2 | D-2D - CCR | Ground Water | 02/21/23 13:05 | 02/24/23 15:50 |
| 310-250316-3 | D-3D - CCR | Ground Water | 02/21/23 11:00 | 02/24/23 15:50 |
| 310-250316-4 | D-4D - CCR | Ground Water | 02/21/23 13:45 | 02/24/23 15:50 |
| 310-250316-5 | D-5D - CCR | Ground Water | 02/20/23 15:10 | 02/24/23 15:50 |
| 310-250316-6 | D-9 - CCR | Ground Water | 02/21/23 15:10 | 02/24/23 15:50 |
| 310-250316-7 | U-4D - CCR | Ground Water | 02/20/23 10:45 | 02/24/23 15:50 |
| 310-250316-8 | U-4S - CCR | Ground Water | 02/20/23 10:05 | 02/24/23 15:50 |
| 310-250316-9 | U-5D - CCR | Ground Water | 02/20/23 14:05 | 02/24/23 15:50 |
| 310-250316-10 | U-5S - CCR | Ground Water | 02/20/23 13:50 | 02/24/23 15:50 |
| 310-250316-11 | D-1S - CCR | Ground Water | 02/20/23 15:56 | 02/24/23 15:50 |
| 310-250316-12 | D-2S - CCR | Ground Water | 02/22/23 09:15 | 02/24/23 15:50 |
| 310-250316-13 | D-3S - CCR | Ground Water | 02/21/23 10:40 | 02/24/23 15:50 |
| 310-250316-14 | D-5S2 - CCR | Ground Water | 02/20/23 14:55 | 02/24/23 15:50 |
| 310-250316-15 | D-4S - CCR | Ground Water | 02/21/23 13:20 | 02/24/23 15:50 |
| 310-250316-16 | D-8 - CCR | Ground Water | 02/21/23 14:45 | 02/24/23 15:50 |
| 310-250316-17 | DUP-1 - CCR | Ground Water | 02/20/23 00:00 | 02/24/23 15:50 |
| 310-250316-18 | DUP-2 - CCR | Ground Water | 02/20/23 00:00 | 02/24/23 15:50 |
| 310-250316-19 | Equipment Blank - CCR | Water | 02/21/23 15:20 | 02/24/23 15:50 |
| 310-250316-20 | Field Blank 1 - CCR | Water | 02/21/23 15:15 | 02/24/23 15:50 |

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Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-1D - CCR

Lab Sample ID: 310-250316-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 31 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 25 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.043 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 80.4 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 394 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.9 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-2D - CCR

Lab Sample ID: 310-250316-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 31 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 22 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.051 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 90.1 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 394 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-3D - CCR

Lab Sample ID: 310-250316-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 63 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 27 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.054 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 89.7 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.065 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 464 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-250316-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 47 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 22 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.069 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 101 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 468 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.6 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-5D - CCR

Lab Sample ID: 310-250316-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 68 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 31 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.058 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 108 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 468 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-9 - CCR

Lab Sample ID: 310-250316-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-----|-----|------|---------|---|--------|-----------|
| Chloride | 54 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 8.4 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-9 - CCR (Continued)

Lab Sample ID: 310-250316-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Barium | 0.087 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 93.9 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.012 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Cobalt | 0.0021 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 512 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.3 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-4D - CCR

Lab Sample ID: 310-250316-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 31 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 24 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.041 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 90.3 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 406 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-250316-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 45 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 24 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.040 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 95.6 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 488 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-250316-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 26 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 27 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.054 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 83.8 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 386 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.6 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-5S - CCR

Lab Sample ID: 310-250316-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 38 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 23 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.062 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 86.8 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.0017 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 460 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-1S - CCR

Lab Sample ID: 310-250316-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|-----|-----|------|---------|---|--------|-----------|
| Chloride | 45 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 14 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-1S - CCR (Continued)

Lab Sample ID: 310-250316-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Barium | 0.046 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 89.1 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 366 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-2S - CCR

Lab Sample ID: 310-250316-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 48 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 18 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.050 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 90.7 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 452 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-250316-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 51 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 22 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.042 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Boron | 0.13 | | 0.10 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 77.8 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.020 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 376 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.8 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-5S2 - CCR

Lab Sample ID: 310-250316-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 89 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 47 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.059 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 100 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 520 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.6 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-4S - CCR

Lab Sample ID: 310-250316-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|---------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 48 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 23 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.094 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 108 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.072 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Cobalt | 0.00072 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.0050 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 458 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | 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 Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-8 - CCR

Lab Sample ID: 310-250316-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|---------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 36 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 26 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.094 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 116 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Cobalt | 0.00091 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.00058 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 524 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: DUP-1 - CCR

Lab Sample ID: 310-250316-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 38 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 23 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.061 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 84.9 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.0012 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 436 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: DUP-2 - CCR

Lab Sample ID: 310-250316-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 45 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 14 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.046 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 87.7 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 418 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.6 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-250316-19

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-----|----|------|---------|---|--------------|-----------|
| pH | 5.7 | HF | 0.1 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-250316-20

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-----|----|------|---------|---|--------------|-----------|
| pH | 5.7 | HF | 0.1 | | 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 Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-1D - CCR

Lab Sample ID: 310-250316-1

Date Collected: 02/20/23 16:16

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 31 | | 5.0 | | mg/L | | | 03/02/23 12:12 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 12:12 | 5 |
| Sulfate | 25 | | 5.0 | | mg/L | | | 03/02/23 12:12 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.043 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |
| Calcium | 80.4 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:42 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:09 | 03/06/23 12:10 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 394 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.9 | HF | 0.1 | | SU | | | 02/24/23 16:34 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.113 | U | 0.0755 | 0.0760 | 1.00 | 0.113 | pCi/L | 03/02/23 09:21 | 03/27/23 10:07 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.3 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 10:07 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.590 | U | 0.355 | 0.356 | 1.00 | 0.590 | pCi/L | 03/02/23 09:53 | 03/13/23 12:03 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.3 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:03 | 1 |
| Y Carrier | 83.7 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:03 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.590 | U | 0.363 | 0.364 | 5.00 | 0.590 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-2D - CCR

Lab Sample ID: 310-250316-2

Date Collected: 02/21/23 13:05

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 31 | | 5.0 | | mg/L | | | 03/02/23 12:26 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 12:26 | 5 |
| Sulfate | 22 | | 5.0 | | mg/L | | | 03/02/23 12:26 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.051 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |
| Calcium | 90.1 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:46 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:09 | 03/06/23 12:17 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 394 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/24/23 16:35 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | 0.0947 | | 0.0641 | 0.0647 | 1.00 | 0.0853 | pCi/L | 03/02/23 09:21 | 03/27/23 10:07 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 90.4 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 10:07 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 0.612 | | 0.337 | 0.342 | 1.00 | 0.472 | pCi/L | 03/02/23 09:53 | 03/13/23 12:03 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 90.4 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:03 | 1 |
| Y Carrier | 86.0 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:03 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.707 | | 0.343 | 0.348 | 5.00 | 0.472 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-3D - CCR

Lab Sample ID: 310-250316-3

Date Collected: 02/21/23 11:00

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 63 | | 5.0 | | mg/L | | | 03/02/23 12:40 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 12:40 | 5 |
| Sulfate | 27 | | 5.0 | | mg/L | | | 03/02/23 12:40 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.054 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |
| Boron | <0.10 | F1 | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |
| Calcium | 89.7 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |
| Chromium | 0.065 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:49 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:09 | 03/06/23 12:19 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 464 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 0.1 | | SU | | | 02/24/23 16:32 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.101 | U | 0.0689 | 0.0694 | 1.00 | 0.101 | pCi/L | 03/02/23 09:21 | 03/27/23 10:08 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 94.1 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 10:08 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.461 | U | 0.222 | 0.223 | 1.00 | 0.461 | pCi/L | 03/02/23 09:53 | 03/13/23 12:03 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 94.1 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:03 | 1 |
| Y Carrier | 86.4 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:03 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.461 | U | 0.232 | 0.234 | 5.00 | 0.461 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-250316-4

Date Collected: 02/21/23 13:45

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 47 | | 5.0 | | mg/L | | | 03/02/23 13:50 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 13:50 | 5 |
| Sulfate | 22 | | 5.0 | | mg/L | | | 03/02/23 13:50 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.069 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |
| Calcium | 101 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:29 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:09 | 03/06/23 12:25 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 468 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 0.1 | | SU | | | 02/24/23 16:36 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0811 | U | 0.0437 | 0.0437 | 1.00 | 0.0811 | pCi/L | 03/02/23 09:21 | 03/27/23 16:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 94.6 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:12 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.456 | U | 0.285 | 0.286 | 1.00 | 0.456 | pCi/L | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 94.6 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Y Carrier | 81.9 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.456 | U | 0.288 | 0.289 | 5.00 | 0.456 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-5D - CCR

Lab Sample ID: 310-250316-5

Date Collected: 02/20/23 15:10

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 68 | | 5.0 | | mg/L | | | 03/02/23 14:04 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 14:04 | 5 |
| Sulfate | 31 | | 5.0 | | mg/L | | | 03/02/23 14:04 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.058 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |
| Calcium | 108 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:33 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:09 | 03/06/23 12:27 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 468 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 0.1 | | SU | | | 02/24/23 16:37 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.124 | U | 0.0700 | 0.0700 | 1.00 | 0.124 | pCi/L | 03/02/23 09:21 | 03/27/23 16:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.8 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:12 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.496 | U | 0.299 | 0.300 | 1.00 | 0.496 | pCi/L | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.8 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Y Carrier | 83.4 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.496 | U | 0.307 | 0.308 | 5.00 | 0.496 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: D-9 - CCR

Lab Sample ID: 310-250316-6

Date Collected: 02/21/23 15:10

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 54 | | 5.0 | | mg/L | | | 03/02/23 14:18 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 14:18 | 5 |
| Sulfate | 8.4 | | 5.0 | | mg/L | | | 03/02/23 14:18 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.087 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |
| Calcium | 93.9 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |
| Chromium | 0.012 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |
| Cobalt | 0.0021 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:36 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:34 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 512 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.3 | HF | 0.1 | | SU | | | 02/24/23 16:38 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.158 | U | 0.111 | 0.112 | 1.00 | 0.158 | pCi/L | 03/02/23 09:21 | 03/27/23 16:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.0 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|------|-------|----------------|----------------|---------|
| Radium-228 | <1.04 | U G | 0.600 | 0.601 | 1.00 | 1.04 | pCi/L | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.0 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Y Carrier | 85.2 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <1.04 | U | 0.610 | 0.611 | 5.00 | 1.04 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: U-4D - CCR

Lab Sample ID: 310-250316-7

Date Collected: 02/20/23 10:45

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 31 | | 5.0 | | mg/L | | | 03/02/23 14:33 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 14:33 | 5 |
| Sulfate | 24 | | 5.0 | | mg/L | | | 03/02/23 14:33 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.041 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |
| Calcium | 90.3 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:39 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:36 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 406 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/24/23 16:39 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0743 | U | 0.0490 | 0.0492 | 1.00 | 0.0743 | pCi/L | 03/02/23 09:21 | 03/27/23 16:14 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.5 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:14 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.504 | U | 0.300 | 0.301 | 1.00 | 0.504 | pCi/L | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.5 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |
| Y Carrier | 83.7 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:04 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.504 | U | 0.304 | 0.305 | 5.00 | 0.504 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-250316-8

Date Collected: 02/20/23 10:05

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 45 | | 5.0 | | mg/L | | | 03/02/23 14:47 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 14:47 | 5 |
| Sulfate | 24 | | 5.0 | | mg/L | | | 03/02/23 14:47 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.040 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |
| Calcium | 95.6 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:43 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:42 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 488 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 0.1 | | SU | | | 02/24/23 16:40 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|-------------------|---------------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | 0.0996 | | 0.0682 | 0.0688 | 1.00 | 0.0933 | pCi/L | 03/02/23 09:21 | 03/27/23 16:14 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.3 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:14 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.617 | U | 0.373 | 0.374 | 1.00 | 0.617 | pCi/L | 03/02/23 09:53 | 03/13/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.3 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:05 | 1 |
| Y Carrier | 85.2 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:05 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.617 | U | 0.379 | 0.380 | 5.00 | 0.617 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-250316-9

Date Collected: 02/20/23 14:05

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 26 | | 5.0 | | mg/L | | | 03/02/23 15:01 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 15:01 | 5 |
| Sulfate | 27 | | 5.0 | | mg/L | | | 03/02/23 15:01 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.054 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |
| Calcium | 83.8 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:46 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:44 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 386 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 0.1 | | SU | | | 02/24/23 16:41 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0724 | U | 0.0431 | 0.0432 | 1.00 | 0.0724 | pCi/L | 03/02/23 09:21 | 03/27/23 16:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 87.0 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.497 | U | 0.286 | 0.286 | 1.00 | 0.497 | pCi/L | 03/02/23 09:53 | 03/13/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 87.0 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:05 | 1 |
| Y Carrier | 84.5 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:05 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.497 | U | 0.289 | 0.289 | 5.00 | 0.497 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: U-5S - CCR

Lab Sample ID: 310-250316-10

Date Collected: 02/20/23 13:50

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 38 | | 5.0 | | mg/L | | | 03/02/23 15:15 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 15:15 | 5 |
| Sulfate | 23 | | 5.0 | | mg/L | | | 03/02/23 15:15 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.062 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |
| Calcium | 86.8 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |
| Lead | 0.0017 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 16:50 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:47 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 460 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/27/23 09:39 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | 0.120 | | 0.0789 | 0.0797 | 1.00 | 0.0990 | pCi/L | 03/02/23 09:21 | 03/27/23 16:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.8 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 16:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.934 | U | 0.523 | 0.523 | 1.00 | 0.934 | pCi/L | 03/02/23 09:53 | 03/13/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.8 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:05 | 1 |
| Y Carrier | 79.6 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:05 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.934 | U | 0.529 | 0.529 | 5.00 | 0.934 | pCi/L | | 03/28/23 13:07 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: D-1S - CCR

Lab Sample ID: 310-250316-11

Date Collected: 02/20/23 15:56

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 45 | | 5.0 | | mg/L | | | 03/02/23 15:29 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/02/23 15:29 | 5 |
| Sulfate | 14 | | 5.0 | | mg/L | | | 03/02/23 15:29 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.046 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |
| Calcium | 89.1 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:17 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:49 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 366 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/27/23 09:37 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|----------|---------|------|--------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.0909 | U | 0.0634 | 0.0639 | 1.00 | 0.0909 | pCi/L | 03/02/23 10:13 | 03/24/23 07:10 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:10 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.526 | U | 0.330 | 0.332 | 1.00 | 0.526 | pCi/L | 03/02/23 10:35 | 03/10/23 11:54 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 11:54 | 1 |
| Y Carrier | 83.4 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 11:54 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|---------|---------|------|-------|-------|----------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Combined Radium 226 + 228 | <0.526 | U | 0.336 | 0.338 | 5.00 | 0.526 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-2S - CCR

Lab Sample ID: 310-250316-12

Date Collected: 02/22/23 09:15

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 48 | | 5.0 | | mg/L | | | 03/07/23 16:35 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 16:35 | 5 |
| Sulfate | 18 | | 5.0 | | mg/L | | | 03/07/23 16:35 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.050 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |
| Calcium | 90.7 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:26 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:55 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 452 | | 50.0 | | mg/L | | | 02/27/23 13:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 0.1 | | SU | | | 02/27/23 09:40 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0798 | U | 0.0497 | 0.0498 | 1.00 | 0.0798 | pCi/L | 03/02/23 10:13 | 03/24/23 07:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.8 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:12 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|-------------------|--------------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 0.578 | | 0.366 | 0.370 | 1.00 | 0.544 | pCi/L | 03/02/23 10:35 | 03/10/23 11:57 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.8 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 11:57 | 1 |
| Y Carrier | 88.2 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 11:57 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.621 | | 0.369 | 0.373 | 5.00 | 0.544 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-250316-13

Date Collected: 02/21/23 10:40

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 51 | | 5.0 | | mg/L | | | 03/07/23 16:49 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 16:49 | 5 |
| Sulfate | 22 | | 5.0 | | mg/L | | | 03/07/23 16:49 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.042 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |
| Boron | 0.13 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |
| Calcium | 77.8 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |
| Chromium | 0.020 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:30 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:57 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 376 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.8 | HF | 0.1 | | SU | | | 02/27/23 09:41 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0864 | U | 0.0469 | 0.0470 | 1.00 | 0.0864 | pCi/L | 03/02/23 10:13 | 03/24/23 07:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 86.7 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.520 | U | 0.303 | 0.304 | 1.00 | 0.520 | pCi/L | 03/02/23 10:35 | 03/10/23 11:59 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 86.7 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 11:59 | 1 |
| Y Carrier | 88.2 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 11:59 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.520 | U | 0.307 | 0.308 | 5.00 | 0.520 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-5S2 - CCR

Lab Sample ID: 310-250316-14

Date Collected: 02/20/23 14:55

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 89 | | 5.0 | | mg/L | | | 03/07/23 17:31 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 17:31 | 5 |
| Sulfate | 47 | | 5.0 | | mg/L | | | 03/07/23 17:31 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.059 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |
| Calcium | 100 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:33 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:59 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 520 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 0.1 | | SU | | | 02/27/23 09:42 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0766 | U | 0.0523 | 0.0526 | 1.00 | 0.0766 | pCi/L | 03/02/23 10:13 | 03/24/23 07:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 81.6 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|-------------------|--------------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 0.548 | | 0.363 | 0.367 | 1.00 | 0.536 | pCi/L | 03/02/23 10:35 | 03/10/23 12:00 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 81.6 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:00 | 1 |
| Y Carrier | 87.1 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:00 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.603 | | 0.367 | 0.371 | 5.00 | 0.536 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-4S - CCR

Lab Sample ID: 310-250316-15

Date Collected: 02/21/23 13:20

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 48 | | 5.0 | | mg/L | | | 03/07/23 17:45 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 17:45 | 5 |
| Sulfate | 23 | | 5.0 | | mg/L | | | 03/07/23 17:45 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.094 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |
| Calcium | 108 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |
| Chromium | 0.072 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |
| Cobalt | 0.00072 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |
| Lead | 0.0050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:36 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 13:02 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 458 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/27/23 09:43 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.106 | U | 0.0743 | 0.0747 | 1.00 | 0.106 | pCi/L | 03/02/23 10:13 | 03/24/23 07:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 84.2 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.747 | U | 0.449 | 0.450 | 1.00 | 0.747 | pCi/L | 03/02/23 10:35 | 03/10/23 12:10 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 84.2 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:10 | 1 |
| Y Carrier | 87.5 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:10 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.747 | U | 0.455 | 0.456 | 5.00 | 0.747 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-8 - CCR

Lab Sample ID: 310-250316-16

Date Collected: 02/21/23 14:45

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 36 | | 5.0 | | mg/L | | | 03/07/23 17:59 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 17:59 | 5 |
| Sulfate | 26 | | 5.0 | | mg/L | | | 03/07/23 17:59 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|---------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.094 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |
| Calcium | 116 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |
| Cobalt | 0.00091 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |
| Lead | 0.00058 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:40 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 13:08 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 524 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/27/23 09:44 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | 0.172 | | 0.101 | 0.102 | 1.00 | 0.124 | pCi/L | 03/02/23 10:13 | 03/24/23 07:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 82.2 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.661 | U | 0.425 | 0.427 | 1.00 | 0.661 | pCi/L | 03/02/23 10:35 | 03/10/23 12:10 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 82.2 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:10 | 1 |
| Y Carrier | 85.6 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:10 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.661 | U | 0.437 | 0.439 | 5.00 | 0.661 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: DUP-1 - CCR

Lab Sample ID: 310-250316-17

Date Collected: 02/20/23 00:00

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 38 | | 5.0 | | mg/L | | | 03/07/23 18:13 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 18:13 | 5 |
| Sulfate | 23 | | 5.0 | | mg/L | | | 03/07/23 18:13 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.061 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |
| Calcium | 84.9 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |
| Lead | 0.0012 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:43 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 13:10 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 436 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 0.1 | | SU | | | 02/27/23 09:45 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.142 | U | 0.0955 | 0.0961 | 1.00 | 0.142 | pCi/L | 03/02/23 10:13 | 03/24/23 07:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 85.6 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 1.08 | | 0.591 | 0.599 | 1.00 | 0.854 | pCi/L | 03/02/23 10:35 | 03/10/23 12:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 85.6 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:12 | 1 |
| Y Carrier | 87.5 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:12 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 1.19 | | 0.599 | 0.607 | 5.00 | 0.854 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: DUP-2 - CCR

Lab Sample ID: 310-250316-18

Date Collected: 02/20/23 00:00

Matrix: Ground Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | 45 | | 5.0 | | mg/L | | | 03/07/23 18:27 | 5 |
| Fluoride | <0.50 | | 0.50 | | mg/L | | | 03/07/23 18:27 | 5 |
| Sulfate | 14 | | 5.0 | | mg/L | | | 03/07/23 18:27 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | 0.046 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |
| Calcium | 87.7 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:47 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 13:12 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 418 | | 50.0 | | mg/L | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 0.1 | | SU | | | 02/27/23 09:46 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0833 | U | 0.0577 | 0.0580 | 1.00 | 0.0833 | pCi/L | 03/02/23 10:13 | 03/24/23 07:13 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.2 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:13 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.647 | U | 0.420 | 0.423 | 1.00 | 0.647 | pCi/L | 03/02/23 10:35 | 03/10/23 12:12 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.2 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:12 | 1 |
| Y Carrier | 87.9 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:12 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.662 | | 0.424 | 0.427 | 5.00 | 0.647 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-250316-19

Date Collected: 02/21/23 15:20

Matrix: Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 03/08/23 10:05 | 1 |
| Fluoride | <0.10 | | 0.10 | | mg/L | | | 03/08/23 10:05 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 03/08/23 10:05 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | <0.0020 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |
| Calcium | <0.50 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:32 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 13:14 | 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 | | | 02/27/23 10:17 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 5.7 | HF | 0.1 | | SU | | | 02/27/23 09:47 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------|-----------|-----------------------------|-----------------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0768 | U | 0.0381 | 0.0381 | 1.00 | 0.0768 | pCi/L | 03/02/23 10:13 | 03/24/23 07:14 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:14 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.548 | U | 0.318 | 0.318 | 1.00 | 0.548 | pCi/L | 03/02/23 10:35 | 03/10/23 12:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:16 | 1 |
| Y Carrier | 85.2 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:16 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.548 | U | 0.320 | 0.320 | 5.00 | 0.548 | pCi/L | | 03/28/23 14:22 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-250316-20

Date Collected: 02/21/23 15:15

Matrix: Water

Date Received: 02/24/23 15:50

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 03/08/23 10:19 | 1 |
| Fluoride | <0.10 | | 0.10 | | mg/L | | | 03/08/23 10:19 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 03/08/23 10:19 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Barium | <0.0020 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |
| Calcium | <0.50 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 19:35 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 13:17 | 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 | | | 02/27/23 10:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|--------|-----------|-----|----|------|---|----------|----------------|---------|
| pH (SM 4500 H+ B) | 5.7 | HF | 0.1 | | SU | | | 02/27/23 09:48 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|----------------|---------------|------------------|-----------------------------|-----------------------------|------|-------|-------|-----------------|-----------------|----------------|
| Radium-226 | <0.104 | U | 0.0552 | 0.0552 | 1.00 | 0.104 | pCi/L | 03/02/23 10:13 | 03/24/23 07:17 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 76.8 | | 30 - 110 | | | | | 03/02/23 10:13 | 03/24/23 07:17 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|----------------|---------------|------------------|-----------------------------|-----------------------------|------|-------|-------|-----------------|-----------------|----------------|
| Radium-228 | <0.638 | U | 0.359 | 0.359 | 1.00 | 0.638 | pCi/L | 03/02/23 10:35 | 03/10/23 12:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 76.8 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:16 | 1 |
| Y Carrier | 92.7 | | 30 - 110 | | | | | 03/02/23 10:35 | 03/10/23 12:16 | 1 |

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|---------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.638 | U | 0.363 | 0.363 | 5.00 | 0.638 | pCi/L | | 03/28/23 14:22 | 1 |

Definitions/Glossary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

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 | Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. |

Rad

| Qualifier | Qualifier Description |
|-----------|--|
| F1 | MS and/or MSD recovery exceeds control limits. |
| G | The Sample MDC is greater than the requested RL. |
| U | Result is less than the sample detection limit. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | 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 Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-380430/3
Matrix: Water
Analysis Batch: 380430

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 03/02/23 11:44 | 1 |
| Fluoride | <0.10 | | 0.10 | | mg/L | | | 03/02/23 11:44 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 03/02/23 11:44 | 1 |

Lab Sample ID: LCS 310-380430/4
Matrix: Water
Analysis Batch: 380430

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 | 9.64 | | mg/L | | 96 | 90 - 110 |
| Fluoride | 2.00 | 2.08 | | mg/L | | 104 | 90 - 110 |
| Sulfate | 10.0 | 10.1 | | mg/L | | 101 | 90 - 110 |

Lab Sample ID: 310-250316-3 MS
Matrix: Ground Water
Analysis Batch: 380430

Client Sample ID: D-3D - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Chloride | 63 | | 25.0 | 86.6 | | mg/L | | 92 | 80 - 120 |
| Fluoride | <0.50 | | 5.00 | 4.90 | | mg/L | | 98 | 80 - 120 |
| Sulfate | 27 | | 25.0 | 50.2 | | mg/L | | 94 | 80 - 120 |

Lab Sample ID: 310-250316-3 MSD
Matrix: Ground Water
Analysis Batch: 380430

Client Sample ID: D-3D - 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 | 63 | | 25.0 | 88.1 | | mg/L | | 98 | 80 - 120 | 2 | 15 |
| Fluoride | <0.50 | | 5.00 | 5.21 | | mg/L | | 104 | 80 - 120 | 6 | 15 |
| Sulfate | 27 | | 25.0 | 50.5 | | mg/L | | 95 | 80 - 120 | 1 | 15 |

Lab Sample ID: 310-250316-11 MS
Matrix: Ground Water
Analysis Batch: 380430

Client Sample ID: D-1S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Chloride | 45 | | 25.0 | 68.6 | | mg/L | | 94 | 80 - 120 |
| Fluoride | <0.50 | | 5.00 | 4.95 | | mg/L | | 99 | 80 - 120 |
| Sulfate | 14 | | 25.0 | 38.2 | | mg/L | | 96 | 80 - 120 |

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 380430

Client Sample ID: D-1S - 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 | 45 | | 25.0 | 68.7 | | mg/L | | 94 | 80 - 120 | 0 | 15 |
| Fluoride | <0.50 | | 5.00 | 5.02 | | mg/L | | 100 | 80 - 120 | 1 | 15 |
| Sulfate | 14 | | 25.0 | 38.2 | | mg/L | | 97 | 80 - 120 | 0 | 15 |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

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

Lab Sample ID: MB 310-380812/3
Matrix: Water
Analysis Batch: 380812

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 03/07/23 15:24 | 1 |
| Fluoride | <0.10 | | 0.10 | | mg/L | | | 03/07/23 15:24 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 03/07/23 15:24 | 1 |

Lab Sample ID: LCS 310-380812/4
Matrix: Water
Analysis Batch: 380812

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 | 9.69 | | mg/L | | 97 | 90 - 110 |
| Fluoride | 2.00 | 2.11 | | mg/L | | 105 | 90 - 110 |
| Sulfate | 10.0 | 10.1 | | mg/L | | 101 | 90 - 110 |

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-380280/1-A
Matrix: Water
Analysis Batch: 380418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Barium | <0.0020 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |
| Calcium | <0.50 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 15:36 | 1 |

Lab Sample ID: LCS 310-380280/2-A
Matrix: Water
Analysis Batch: 380418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|------|---|------|-------------|
| Barium | 0.100 | 0.0989 | | mg/L | | 99 | 80 - 120 |
| Boron | 0.200 | 0.186 | | mg/L | | 93 | 80 - 120 |
| Calcium | 2.00 | 2.09 | | mg/L | | 105 | 80 - 120 |
| Chromium | 0.100 | 0.102 | | mg/L | | 102 | 80 - 120 |
| Cobalt | 0.100 | 0.100 | | mg/L | | 100 | 80 - 120 |
| Lead | 0.200 | 0.203 | | mg/L | | 101 | 80 - 120 |
| Thallium | 0.200 | 0.209 | | mg/L | | 105 | 80 - 120 |

Lab Sample ID: 310-250316-3 MS
Matrix: Ground Water
Analysis Batch: 380418

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Barium | 0.054 | | 0.100 | 0.160 | | mg/L | | 106 | 75 - 125 |
| Boron | <0.10 | F1 | 0.200 | 0.259 | F1 | mg/L | | 129 | 75 - 125 |
| Calcium | 89.7 | | 2.00 | 91.42 | 4 | mg/L | | 84 | 75 - 125 |
| Chromium | 0.065 | | 0.100 | 0.154 | | mg/L | | 89 | 75 - 125 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

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

Lab Sample ID: 310-250316-3 MS
Matrix: Ground Water
Analysis Batch: 380418

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | Sample | Sample Qualifier | Spike Added | MS | | Unit | D | %Rec | %Rec | |
|----------|----------|------------------|-------------|--------|-----------|------|---|------|----------|--------|
| | Result | | | Result | Qualifier | | | | Limits | Limits |
| Cobalt | <0.00050 | | 0.100 | 0.100 | | mg/L | | 100 | 75 - 125 | |
| Lead | <0.00050 | | 0.200 | 0.204 | | mg/L | | 102 | 75 - 125 | |
| Thallium | <0.0010 | | 0.200 | 0.212 | | mg/L | | 106 | 75 - 125 | |

Lab Sample ID: 310-250316-3 MSD
Matrix: Ground Water
Analysis Batch: 380418

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | Sample | Sample Qualifier | Spike Added | MSD | | Unit | D | %Rec | %Rec | | RPD | |
|----------|----------|------------------|-------------|--------|-----------|------|---|------|----------|--------|-----|-------|
| | Result | | | Result | Qualifier | | | | Limits | Limits | RPD | Limit |
| Barium | 0.054 | | 0.100 | 0.158 | | mg/L | | 104 | 75 - 125 | 1 | 20 | |
| Boron | <0.10 | F1 | 0.200 | 0.262 | F1 | mg/L | | 131 | 75 - 125 | 1 | 20 | |
| Calcium | 89.7 | | 2.00 | 91.05 | 4 | mg/L | | 66 | 75 - 125 | 0 | 20 | |
| Chromium | 0.065 | | 0.100 | 0.154 | | mg/L | | 89 | 75 - 125 | 0 | 20 | |
| Cobalt | <0.00050 | | 0.100 | 0.0993 | | mg/L | | 99 | 75 - 125 | 1 | 20 | |
| Lead | <0.00050 | | 0.200 | 0.207 | | mg/L | | 103 | 75 - 125 | 1 | 20 | |
| Thallium | <0.0010 | | 0.200 | 0.215 | | mg/L | | 107 | 75 - 125 | 1 | 20 | |

Lab Sample ID: 310-250316-11 MS
Matrix: Ground Water
Analysis Batch: 380418

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | Sample | Sample Qualifier | Spike Added | MS | | Unit | D | %Rec | %Rec | |
|----------|----------|------------------|-------------|--------|-----------|------|---|------|----------|--------|
| | Result | | | Result | Qualifier | | | | Limits | Limits |
| Barium | 0.046 | | 0.100 | 0.149 | | mg/L | | 103 | 75 - 125 | |
| Boron | <0.10 | | 0.200 | 0.228 | | mg/L | | 114 | 75 - 125 | |
| Calcium | 89.1 | | 2.00 | 86.57 | 4 | mg/L | | -124 | 75 - 125 | |
| Chromium | <0.0050 | | 0.100 | 0.102 | | mg/L | | 102 | 75 - 125 | |
| Cobalt | <0.00050 | | 0.100 | 0.0976 | | mg/L | | 98 | 75 - 125 | |
| Lead | <0.00050 | | 0.200 | 0.205 | | mg/L | | 103 | 75 - 125 | |
| Thallium | <0.0010 | | 0.200 | 0.217 | | mg/L | | 108 | 75 - 125 | |

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 380418

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 380280

| Analyte | Sample | Sample Qualifier | Spike Added | MSD | | Unit | D | %Rec | %Rec | | RPD | |
|----------|----------|------------------|-------------|--------|-----------|------|---|------|----------|--------|-----|-------|
| | Result | | | Result | Qualifier | | | | Limits | Limits | RPD | Limit |
| Barium | 0.046 | | 0.100 | 0.148 | | mg/L | | 102 | 75 - 125 | 1 | 20 | |
| Boron | <0.10 | | 0.200 | 0.222 | | mg/L | | 111 | 75 - 125 | 3 | 20 | |
| Calcium | 89.1 | | 2.00 | 88.44 | 4 | mg/L | | -31 | 75 - 125 | 2 | 20 | |
| Chromium | <0.0050 | | 0.100 | 0.0991 | | mg/L | | 99 | 75 - 125 | 3 | 20 | |
| Cobalt | <0.00050 | | 0.100 | 0.0959 | | mg/L | | 96 | 75 - 125 | 2 | 20 | |
| Lead | <0.00050 | | 0.200 | 0.199 | | mg/L | | 99 | 75 - 125 | 3 | 20 | |
| Thallium | <0.0010 | | 0.200 | 0.211 | | mg/L | | 105 | 75 - 125 | 3 | 20 | |

Lab Sample ID: MB 310-380281/1-A
Matrix: Water
Analysis Batch: 380418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380281

| Analyte | MB | | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|---------|-----------|--------|-----|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Barium | <0.0020 | | 0.0020 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

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

Lab Sample ID: MB 310-380281/1-A
Matrix: Water
Analysis Batch: 380418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380281

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Calcium | <0.50 | | 0.50 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 03/02/23 09:15 | 03/02/23 17:54 | 1 |

Lab Sample ID: LCS 310-380281/2-A
Matrix: Water
Analysis Batch: 380418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380281

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|------|---|------|-------------|
| Barium | 0.100 | 0.101 | | mg/L | | 101 | 80 - 120 |
| Boron | 0.200 | 0.187 | | mg/L | | 94 | 80 - 120 |
| Calcium | 2.00 | 1.99 | | mg/L | | 99 | 80 - 120 |
| Chromium | 0.100 | 0.0973 | | mg/L | | 97 | 80 - 120 |
| Cobalt | 0.100 | 0.0964 | | mg/L | | 96 | 80 - 120 |
| Lead | 0.200 | 0.202 | | mg/L | | 101 | 80 - 120 |
| Thallium | 0.200 | 0.205 | | mg/L | | 103 | 80 - 120 |

Lab Sample ID: 310-250316-20 DU
Matrix: Water
Analysis Batch: 380418

Client Sample ID: Field Blank 1 - CCR
Prep Type: Total/NA
Prep Batch: 380281

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|----------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Barium | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |
| Boron | <0.10 | | <0.10 | | mg/L | | NC | 20 |
| Calcium | <0.50 | | <0.50 | | mg/L | | NC | 20 |
| Chromium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Cobalt | <0.00050 | | <0.00050 | | mg/L | | NC | 20 |
| Lead | <0.00050 | | <0.00050 | | mg/L | | NC | 20 |
| Thallium | <0.0010 | | <0.0010 | | mg/L | | NC | 20 |

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-380436/1-A
Matrix: Water
Analysis Batch: 380598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380436

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:09 | 03/06/23 11:30 | 1 |

Lab Sample ID: LCS 310-380436/2-A
Matrix: Water
Analysis Batch: 380598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380436

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167 | 0.00170 | | mg/L | | 102 | 80 - 120 |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 310-250316-3 MS
Matrix: Ground Water
Analysis Batch: 380598

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 380436

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Mercury | <0.00020 | | 0.00167 | 0.00179 | | mg/L | | 108 | 80 - 120 |

Lab Sample ID: 310-250316-3 MSD
Matrix: Ground Water
Analysis Batch: 380598

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 380436

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| Mercury | <0.00020 | | 0.00167 | 0.00172 | | mg/L | | 103 | 80 - 120 | 4 | 20 |

Lab Sample ID: MB 310-380437/1-A
Matrix: Water
Analysis Batch: 380598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 380437

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 03/03/23 12:12 | 03/06/23 12:30 | 1 |

Lab Sample ID: LCS 310-380437/2-A
Matrix: Water
Analysis Batch: 380598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 380437

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167 | 0.00175 | | mg/L | | 105 | 80 - 120 |

Lab Sample ID: 310-250316-11 MS
Matrix: Ground Water
Analysis Batch: 380598

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 380437

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Mercury | <0.00020 | | 0.00167 | 0.00170 | | mg/L | | 102 | 80 - 120 |

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 380598

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 380437

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| Mercury | <0.00020 | | 0.00167 | 0.00169 | | mg/L | | 101 | 80 - 120 | 1 | 20 |

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

Lab Sample ID: MB 310-380035/1
Matrix: Water
Analysis Batch: 380035

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 | | | 02/27/23 10:17 | 1 |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

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

Lab Sample ID: LCS 310-380035/2
Matrix: Water
Analysis Batch: 380035

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 | 986.0 | | mg/L | | 99 | 90 - 110 |

Lab Sample ID: 310-250316-3 DU
Matrix: Ground Water
Analysis Batch: 380035

Client Sample ID: D-3D - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Total Dissolved Solids | 464 | | 426.0 | | mg/L | | 9 | 20 |

Lab Sample ID: 310-250316-11 DU
Matrix: Ground Water
Analysis Batch: 380035

Client Sample ID: D-1S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Total Dissolved Solids | 366 | | 406.0 | | mg/L | | 10 | 20 |

Lab Sample ID: MB 310-380073/1
Matrix: Water
Analysis Batch: 380073

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 | | | 02/27/23 13:41 | 1 |

Lab Sample ID: LCS 310-380073/2
Matrix: Water
Analysis Batch: 380073

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 | 1012 | | mg/L | | 101 | 90 - 110 |

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-379968/1
Matrix: Water
Analysis Batch: 379968

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 | 7.1 | | SU | | 101 | 98 - 102 |

Lab Sample ID: 310-250316-3 DU
Matrix: Ground Water
Analysis Batch: 379968

Client Sample ID: D-3D - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 7.5 | HF | 7.5 | | SU | | 0 | 20 |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: LCS 310-380025/1
Matrix: Water
Analysis Batch: 380025

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 | 7.1 | | SU | | 101 | 98 - 102 |

Lab Sample ID: 310-250316-11 DU
Matrix: Ground Water
Analysis Batch: 380025

Client Sample ID: D-1S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 7.7 | HF | 7.7 | | SU | | 0.1 | 20 |

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-602183/1-A
Matrix: Water
Analysis Batch: 605096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602183

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|-----------|--------------|-----------------------|-----------------------|------|--------|-------|----------------|----------------|---------|
| Radium-226 | <0.0873 | U | 0.0446 | 0.0446 | 1.00 | 0.0873 | pCi/L | 03/02/23 09:21 | 03/27/23 10:07 | 1 |
| Carrier | MB %Yield | MB Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 94.4 | | 30 - 110 | | | | | 03/02/23 09:21 | 03/27/23 10:07 | 1 |

Lab Sample ID: LCS 160-602183/2-A
Matrix: Water
Analysis Batch: 605096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602183

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|-------------|---------------|----------|-----------------------|------|-------|-------|------|-------------|
| Radium-226 | 11.3 | 12.27 | | 1.26 | 1.00 | 0.132 | pCi/L | 108 | 75 - 125 |
| Carrier | LCS %Yield | LCS Qualifier | Limits | | | | | | |
| Barium | 85.6 | | 30 - 110 | | | | | | |

Lab Sample ID: 310-250316-3 MS
Matrix: Ground Water
Analysis Batch: 605096

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 602183

| Analyte | Sample Result | Sample Qual | Spike Added | MS Result | MS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|---------------|--------------|-------------|-----------|---------|-----------------------|------|-------|-------|------|-------------|
| Radium-226 | <0.101 | U | 11.3 | 11.66 | | 1.20 | 1.00 | 0.125 | pCi/L | 103 | 60 - 140 |
| Carrier | MS %Yield | MS Qualifier | Limits | | | | | | | | |
| Barium | 92.9 | | 30 - 110 | | | | | | | | |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 310-250316-3 MSD
Matrix: Ground Water
Analysis Batch: 605094

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 602183

| Analyte | Sample | Sample | Spike | MSD | MSD | Total | RL | MDC | Unit | %Rec | %Rec | RER | RER |
|----------------|---------------|------------------|---------------|--------|------|-------|------|--------|-------|------|----------|------|-----|
| | Result | Qual | | Result | Qual | | | | | | | | |
| Radium-226 | <0.101 | U | 11.4 | 12.32 | | 1.25 | 1.00 | 0.0815 | pCi/L | 107 | 60 - 140 | 0.27 | 1 |
| | | <i>MSD</i> | <i>MSD</i> | | | | | | | | | | |
| <i>Carrier</i> | <i>%Yield</i> | <i>Qualifier</i> | <i>Limits</i> | | | | | | | | | | |
| Barium | 91.8 | | 30 - 110 | | | | | | | | | | |

Lab Sample ID: MB 160-602196/1-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602196

| Analyte | MB | MB | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|----------------|---------------|------------------|---------------|-----------------|-----------------|----------------|-------|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | | |
| Radium-226 | <0.0784 | U | 0.0488 | 0.0490 | 1.00 | 0.0784 | pCi/L | 03/02/23 10:13 | 03/24/23 07:10 | 1 |
| | | <i>MB</i> | <i>MB</i> | | | | | | | |
| <i>Carrier</i> | <i>%Yield</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> | | | | |
| Barium | 92.4 | | 30 - 110 | 03/02/23 10:13 | 03/24/23 07:10 | 1 | | | | |

Lab Sample ID: LCS 160-602196/2-A
Matrix: Water
Analysis Batch: 604973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602196

| Analyte | Spike | LCS | LCS | Total | RL | MDC | Unit | %Rec | %Rec |
|----------------|---------------|------------------|---------------|-------|------|--------|-------|------|----------|
| | | Added | Result | | | | | | |
| Radium-226 | 11.3 | 11.79 | | 1.20 | 1.00 | 0.0792 | pCi/L | 104 | 75 - 125 |
| | | <i>LCS</i> | <i>LCS</i> | | | | | | |
| <i>Carrier</i> | <i>%Yield</i> | <i>Qualifier</i> | <i>Limits</i> | | | | | | |
| Barium | 88.7 | | 30 - 110 | | | | | | |

Lab Sample ID: 310-250316-11 MS
Matrix: Ground Water
Analysis Batch: 604973

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 602196

| Analyte | Sample | Sample | Spike | MS | MS | Total | RL | MDC | Unit | %Rec | %Rec |
|----------------|---------------|------------------|---------------|--------|------|-------|------|--------|-------|------|----------|
| | Result | Qual | | Result | Qual | | | | | | |
| Radium-226 | <0.0909 | U | 11.3 | 10.98 | | 1.13 | 1.00 | 0.0926 | pCi/L | 96 | 60 - 140 |
| | | <i>MS</i> | <i>MS</i> | | | | | | | | |
| <i>Carrier</i> | <i>%Yield</i> | <i>Qualifier</i> | <i>Limits</i> | | | | | | | | |
| Barium | 90.4 | | 30 - 110 | | | | | | | | |

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 604973

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 602196

| Analyte | Sample | Sample | Spike | MSD | MSD | Total | RL | MDC | Unit | %Rec | %Rec | RER | RER |
|------------|---------|--------|-------|--------|------|-------|------|--------|-------|------|----------|------|-----|
| | Result | Qual | | Result | Qual | | | | | | | | |
| Radium-226 | <0.0909 | U | 11.3 | 11.42 | | 1.17 | 1.00 | 0.0869 | pCi/L | 100 | 60 - 140 | 0.19 | 1 |

Eurofins Cedar Falls

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 604973

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 602196

| Carrier | MSD %Yield | MSD Qualifier | Limits |
|---------|---------------|------------------|----------|
| Barium | 88.4 | | 30 - 110 |

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-602192/1-A
Matrix: Water
Analysis Batch: 603500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602192

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------------|-----------------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.530 | U | 0.285 | 0.285 | 1.00 | 0.530 | pCi/L | 03/02/23 09:53 | 03/13/23 12:02 | 1 |
| Carrier | MB %Yield | MB Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 94.4 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:02 | 1 |
| Y Carrier | 85.2 | | 30 - 110 | | | | | 03/02/23 09:53 | 03/13/23 12:02 | 1 |

Lab Sample ID: LCS 160-602192/2-A
Matrix: Water
Analysis Batch: 603500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602192

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|----------------|------------------|-------------|-----------------------------|------|-------|-------|------|----------------|
| Radium-228 | 8.12 | 10.59 | | 1.41 | 1.00 | 0.496 | pCi/L | 130 | 75 - 125 |
| Carrier | LCS %Yield | LCS Qualifier | Limits | | | | | | |
| Barium | 85.6 | | 30 - 110 | | | | | | |
| Y Carrier | 86.0 | | 30 - 110 | | | | | | |

Lab Sample ID: 310-250316-3 MS
Matrix: Ground Water
Analysis Batch: 603500

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 602192

| Analyte | Sample Result | Sample Qual | Spike Added | MS Result | MS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|------------------|-----------------|----------------|--------------|------------|-----------------------------|------|-------|-------|------|----------------|
| Radium-228 | <0.461 | U | 8.08 | 10.35 | | 1.35 | 1.00 | 0.430 | pCi/L | 128 | 60 - 140 |
| Carrier | MS %Yield | MS Qualifier | Limits | | | | | | | | |
| Barium | 92.9 | | 30 - 110 | | | | | | | | |
| Y Carrier | 84.9 | | 30 - 110 | | | | | | | | |

Lab Sample ID: 310-250316-3 MSD
Matrix: Ground Water
Analysis Batch: 603500

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 602192

| Analyte | Sample Result | Sample Qual | Spike Added | MSD Result | MSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | RER | RER Limit |
|------------|------------------|----------------|----------------|---------------|-------------|-----------------------------|------|-------|-------|------|----------------|------|--------------|
| Radium-228 | <0.461 | U | 8.16 | 11.98 | F1 | 1.54 | 1.00 | 0.535 | pCi/L | 147 | 60 - 140 | 0.56 | 1 |

Eurofins Cedar Falls

QC Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 310-250316-3 MSD
Matrix: Ground Water
Analysis Batch: 603500

Client Sample ID: D-3D - CCR
Prep Type: Total/NA
Prep Batch: 602192

| | MSD | MSD | |
|-----------|--------|-----------|----------|
| Carrier | %Yield | Qualifier | Limits |
| Barium | 91.8 | | 30 - 110 |
| Y Carrier | 84.1 | | 30 - 110 |

Lab Sample ID: MB 160-602199/1-A
Matrix: Water
Analysis Batch: 603187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 602199

| Analyte | MB MB | | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | | |
| Radium-228 | <0.429 | U | 0.213 | 0.213 | 1.00 | 0.429 | pCi/L | 03/02/23 10:35 | 03/10/23 11:53 | 1 |

| Carrier | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|-----------|--------|-----------|----------|----------------|----------------|---------|
| | %Yield | Qualifier | | | | |
| Barium | 92.4 | | 30 - 110 | 03/02/23 10:35 | 03/10/23 11:53 | 1 |
| Y Carrier | 89.3 | | 30 - 110 | 03/02/23 10:35 | 03/10/23 11:53 | 1 |

Lab Sample ID: LCS 160-602199/2-A
Matrix: Water
Analysis Batch: 603187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 602199

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|---------|----------------|---------------|-------------|-----------------------------|----|-----|------|------|----------------|
| | | | | | | | | | |

| Carrier | LCS | LCS | Limits |
|-----------|--------|-----------|----------|
| | %Yield | Qualifier | |
| Barium | 88.7 | | 30 - 110 |
| Y Carrier | 87.1 | | 30 - 110 |

Lab Sample ID: 310-250316-11 MS
Matrix: Ground Water
Analysis Batch: 603187

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 602199

| Analyte | Sample Result | Sample Qual | Spike Added | MS Result | MS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|---------|------------------|----------------|----------------|--------------|------------|-----------------------------|----|-----|------|------|----------------|
| | | | | | | | | | | | |

| Carrier | MS | MS | Limits |
|-----------|--------|-----------|----------|
| | %Yield | Qualifier | |
| Barium | 90.4 | | 30 - 110 |
| Y Carrier | 87.9 | | 30 - 110 |

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 603187

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 602199

| Analyte | Sample Result | Sample Qual | Spike Added | MSD Result | MSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | RER | Limit |
|------------|------------------|----------------|----------------|---------------|-------------|-----------------------------|------|-------|-------|------|----------------|------|-------|
| | | | | | | | | | | | | | |
| Radium-228 | <0.526 | U | 8.10 | 9.140 | | 1.24 | 1.00 | 0.487 | pCi/L | 109 | 60 - 140 | 0.38 | 1 |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 310-250316-11 MSD
Matrix: Ground Water
Analysis Batch: 603187

Client Sample ID: D-1S - CCR
Prep Type: Total/NA
Prep Batch: 602199

| <i>Carrier</i> | <i>MSD</i> | <i>MSD</i> | <i>Limits</i> |
|----------------|---------------|------------------|---------------|
| | <i>%Yield</i> | <i>Qualifier</i> | |
| Barium | 88.4 | | 30 - 110 |
| Y Carrier | 88.6 | | 30 - 110 |

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QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

HPLC/IC

Analysis Batch: 380430

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|--------------------|-----------|--------------|--------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | 9056A | |
| MB 310-380430/3 | Method Blank | Total/NA | Water | 9056A | |
| LCS 310-380430/4 | Lab Control Sample | Total/NA | Water | 9056A | |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | 9056A | |

Analysis Batch: 380812

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------------|--------|------------|
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | 9056A | |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | 9056A | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | 9056A | |
| MB 310-380812/3 | Method Blank | Total/NA | Water | 9056A | |
| LCS 310-380812/4 | Lab Control Sample | Total/NA | Water | 9056A | |

Metals

Prep Batch: 380280

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | 3005A | |

QC Association Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Metals (Continued)

Prep Batch: 380280 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | 3005A | |
| MB 310-380280/1-A | Method Blank | Total/NA | Water | 3005A | |
| LCS 310-380280/2-A | Lab Control Sample | Total/NA | Water | 3005A | |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | 3005A | |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | 3005A | |

Prep Batch: 380281

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------|--------|------------|
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | 3005A | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | 3005A | |
| MB 310-380281/1-A | Method Blank | Total/NA | Water | 3005A | |
| LCS 310-380281/2-A | Lab Control Sample | Total/NA | Water | 3005A | |
| 310-250316-20 DU | Field Blank 1 - CCR | Total/NA | Water | 3005A | |

Analysis Batch: 380418

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | 6020B | 380281 |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | 6020B | 380281 |
| MB 310-380280/1-A | Method Blank | Total/NA | Water | 6020B | 380280 |
| MB 310-380281/1-A | Method Blank | Total/NA | Water | 6020B | 380281 |
| LCS 310-380280/2-A | Lab Control Sample | Total/NA | Water | 6020B | 380280 |
| LCS 310-380281/2-A | Lab Control Sample | Total/NA | Water | 6020B | 380281 |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | 6020B | 380280 |
| 310-250316-20 DU | Field Blank 1 - CCR | Total/NA | Water | 6020B | 380281 |

QC Association Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Metals

Prep Batch: 380436

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | 7470A | |
| MB 310-380436/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 310-380436/2-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | 7470A | |

Prep Batch: 380437

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | 7470A | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | 7470A | |
| MB 310-380437/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 310-380437/2-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | 7470A | |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | 7470A | |

Analysis Batch: 380598

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | 7470A | 380437 |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Metals (Continued)

Analysis Batch: 380598 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | 7470A | 380437 |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | 7470A | 380437 |
| MB 310-380436/1-A | Method Blank | Total/NA | Water | 7470A | 380436 |
| MB 310-380437/1-A | Method Blank | Total/NA | Water | 7470A | 380437 |
| LCS 310-380436/2-A | Lab Control Sample | Total/NA | Water | 7470A | 380436 |
| LCS 310-380437/2-A | Lab Control Sample | Total/NA | Water | 7470A | 380437 |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | 7470A | 380436 |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | 7470A | 380437 |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | 7470A | 380437 |

General Chemistry

Analysis Batch: 379968

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| LCS 310-379968/1 | Lab Control Sample | Total/NA | Water | SM 4500 H+ B | |
| 310-250316-3 DU | D-3D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |

Analysis Batch: 380025

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------------|--------------|------------|
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | SM 4500 H+ B | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | SM 4500 H+ B | |
| LCS 310-380025/1 | Lab Control Sample | Total/NA | Water | SM 4500 H+ B | |
| 310-250316-11 DU | D-1S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |

Analysis Batch: 380035

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|----------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | SM 2540C | |

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

General Chemistry (Continued)

Analysis Batch: 380035 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------------|----------|------------|
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | SM 2540C | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | SM 2540C | |
| MB 310-380035/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 310-380035/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 310-250316-3 DU | D-3D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-250316-11 DU | D-1S - CCR | Total/NA | Ground Water | SM 2540C | |

Analysis Batch: 380073

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|----------|------------|
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | SM 2540C | |
| MB 310-380073/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 310-380073/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |

Rad

Prep Batch: 602183

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|------------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| MB 160-602183/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-602183/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | PrecSep-21 | |

Prep Batch: 602192

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|-----------|------------|
| 310-250316-1 | D-1D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-2 | D-2D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-3 | D-3D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-4 | D-4D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-5 | D-5D - CCR | Total/NA | Ground Water | PrecSep_0 | |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Rad (Continued)

Prep Batch: 602192 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|-----------|------------|
| 310-250316-6 | D-9 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-7 | U-4D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-8 | U-4S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-9 | U-5D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-10 | U-5S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| MB 160-602192/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-602192/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 310-250316-3 MS | D-3D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-3 MSD | D-3D - CCR | Total/NA | Ground Water | PrecSep_0 | |

Prep Batch: 602196

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|------------|------------|
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | PrecSep-21 | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | PrecSep-21 | |
| MB 160-602196/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-602196/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | PrecSep-21 | |

Prep Batch: 602199

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|-----------|------------|
| 310-250316-11 | D-1S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-12 | D-2S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-13 | D-3S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-14 | D-5S2 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-15 | D-4S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-16 | D-8 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-17 | DUP-1 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-18 | DUP-2 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-19 | Equipment Blank - CCR | Total/NA | Water | PrecSep_0 | |
| 310-250316-20 | Field Blank 1 - CCR | Total/NA | Water | PrecSep_0 | |
| MB 160-602199/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-602199/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 310-250316-11 MS | D-1S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-250316-11 MSD | D-1S - CCR | Total/NA | Ground Water | PrecSep_0 | |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: D-1D - CCR

Date Collected: 02/20/23 16:16

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-1

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 12:12 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 15:42 |
| Total/NA | Prep | 7470A | | | 380436 | XXW3 | EET CF | 03/03/23 12:09 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:10 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:34 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605096 | FLC | EET SL | 03/27/23 10:07 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:03 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: D-2D - CCR

Date Collected: 02/21/23 13:05

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-2

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 12:26 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 15:46 |
| Total/NA | Prep | 7470A | | | 380436 | XXW3 | EET CF | 03/03/23 12:09 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:17 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:35 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605096 | FLC | EET SL | 03/27/23 10:07 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:03 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: D-3D - CCR

Date Collected: 02/21/23 11:00

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-3

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 12:40 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 15:49 |
| Total/NA | Prep | 7470A | | | 380436 | XXW3 | EET CF | 03/03/23 12:09 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:19 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:32 |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: D-3D - CCR

Lab Sample ID: 310-250316-3

Date Collected: 02/21/23 11:00

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605096 | FLC | EET SL | 03/27/23 10:08 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:03 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-250316-4

Date Collected: 02/21/23 13:45

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 13:50 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:29 |
| Total/NA | Prep | 7470A | | | 380436 | XXW3 | EET CF | 03/03/23 12:09 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:25 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:36 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:12 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: D-5D - CCR

Lab Sample ID: 310-250316-5

Date Collected: 02/20/23 15:10

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 14:04 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:33 |
| Total/NA | Prep | 7470A | | | 380436 | XXW3 | EET CF | 03/03/23 12:09 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:27 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:37 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:12 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: D-9 - CCR

Date Collected: 02/21/23 15:10

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-6

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 14:18 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:36 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:34 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:38 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:13 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: U-4D - CCR

Date Collected: 02/20/23 10:45

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-7

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 14:33 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:39 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:36 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:39 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:14 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:04 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: U-4S - CCR

Date Collected: 02/20/23 10:05

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-8

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 14:47 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:43 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:42 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:40 |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-250316-8

Date Collected: 02/20/23 10:05

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:14 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-250316-9

Date Collected: 02/20/23 14:05

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 15:01 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:46 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:44 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 379968 | A3GU | EET CF | 02/24/23 16:41 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:15 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Client Sample ID: U-5S - CCR

Lab Sample ID: 310-250316-10

Date Collected: 02/20/23 13:50

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 15:15 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 16:50 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:47 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:39 |
| Total/NA | Prep | PrecSep-21 | | | 602183 | DJP | EET SL | 03/02/23 09:21 |
| Total/NA | Analysis | 9315 | | 1 | 605094 | FLC | EET SL | 03/27/23 16:15 |
| Total/NA | Prep | PrecSep_0 | | | 602192 | DJP | EET SL | 03/02/23 09:53 |
| Total/NA | Analysis | 9320 | | 1 | 603500 | FLC | EET SL | 03/13/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605252 | EMH | EET SL | 03/28/23 13:07 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-1S - CCR

Date Collected: 02/20/23 15:56

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-11

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380430 | QTZ5 | EET CF | 03/02/23 15:29 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:17 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:49 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:37 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:10 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603187 | FLC | EET SL | 03/10/23 11:54 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: D-2S - CCR

Date Collected: 02/22/23 09:15

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-12

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 16:35 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:26 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:55 |
| Total/NA | Analysis | SM 2540C | | 1 | 380073 | ENB7 | EET CF | 02/27/23 13:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:40 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:12 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603187 | FLC | EET SL | 03/10/23 11:57 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: D-3S - CCR

Date Collected: 02/21/23 10:40

Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-13

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 16:49 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:30 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:57 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:41 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-250316-13

Date Collected: 02/21/23 10:40

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:13 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603187 | FLC | EET SL | 03/10/23 11:59 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: D-5S2 - CCR

Lab Sample ID: 310-250316-14

Date Collected: 02/20/23 14:55

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 17:31 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:33 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 12:59 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:42 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:13 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603187 | FLC | EET SL | 03/10/23 12:00 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: D-4S - CCR

Lab Sample ID: 310-250316-15

Date Collected: 02/21/23 13:20

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 17:45 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:36 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 13:02 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:43 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:13 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603188 | FLC | EET SL | 03/10/23 12:10 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Client Sample ID: D-8 - CCR

Lab Sample ID: 310-250316-16

Date Collected: 02/21/23 14:45

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 17:59 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:40 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 13:08 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:44 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:13 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603188 | FLC | EET SL | 03/10/23 12:10 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: DUP-1 - CCR

Lab Sample ID: 310-250316-17

Date Collected: 02/20/23 00:00

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 18:13 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:43 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 13:10 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:45 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:13 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603188 | FLC | EET SL | 03/10/23 12:12 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: DUP-2 - CCR

Lab Sample ID: 310-250316-18

Date Collected: 02/20/23 00:00

Matrix: Ground Water

Date Received: 02/24/23 15:50

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 380812 | QTZ5 | EET CF | 03/07/23 18:27 |
| Total/NA | Prep | 3005A | | | 380280 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 17:47 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 13:12 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:46 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Client Sample ID: DUP-2 - CCR
Date Collected: 02/20/23 00:00
Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-18
Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:13 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603188 | FLC | EET SL | 03/10/23 12:12 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: Equipment Blank - CCR
Date Collected: 02/21/23 15:20
Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-19
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 1 | 380812 | QTZ5 | EET CF | 03/08/23 10:05 |
| Total/NA | Prep | 3005A | | | 380281 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 19:32 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 13:14 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:47 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604973 | FLC | EET SL | 03/24/23 07:14 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603186 | FLC | EET SL | 03/10/23 12:16 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Client Sample ID: Field Blank 1 - CCR
Date Collected: 02/21/23 15:15
Date Received: 02/24/23 15:50

Lab Sample ID: 310-250316-20
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 1 | 380812 | QTZ5 | EET CF | 03/08/23 10:19 |
| Total/NA | Prep | 3005A | | | 380281 | KCK5 | EET CF | 03/02/23 09:15 |
| Total/NA | Analysis | 6020B | | 1 | 380418 | A6US | EET CF | 03/02/23 19:35 |
| Total/NA | Prep | 7470A | | | 380437 | XXW3 | EET CF | 03/03/23 12:12 |
| Total/NA | Analysis | 7470A | | 1 | 380598 | DHM5 | EET CF | 03/06/23 13:17 |
| Total/NA | Analysis | SM 2540C | | 1 | 380035 | ENB7 | EET CF | 02/27/23 10:17 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 380025 | W9YR | EET CF | 02/27/23 09:48 |
| Total/NA | Prep | PrecSep-21 | | | 602196 | DJP | EET SL | 03/02/23 10:13 |
| Total/NA | Analysis | 9315 | | 1 | 604975 | FLC | EET SL | 03/24/23 07:17 |
| Total/NA | Prep | PrecSep_0 | | | 602199 | DJP | EET SL | 03/02/23 10:35 |
| Total/NA | Analysis | 9320 | | 1 | 603186 | FLC | EET SL | 03/10/23 12:16 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 605268 | EMH | EET SL | 03/28/23 14:22 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

Laboratory References:

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

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

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Accreditation/Certification Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

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 | 12-31-23 |

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|--------------------------|---|----------------------------|-----------------|
| Alaska (UST) | State | 20-001 | 05-06-25 |
| ANAB | Dept. of Defense ELAP | L2305 | 04-06-25 |
| ANAB | Dept. of Energy | L2305.01 | 04-06-25 |
| ANAB | ISO/IEC 17025 | L2305 | 04-06-25 |
| Arizona | State | AZ0813 | 12-08-23 |
| California | Los Angeles County Sanitation Districts | 10259 | 06-30-22 * |
| California | State | 2886 | 06-30-23 |
| Connecticut | State | PH-0241 | 03-31-23 |
| Florida | NELAP | E87689 | 06-30-23 |
| HI - RadChem Recognition | State | n/a | 06-30-23 |
| Illinois | NELAP | 200023 | 11-30-23 |
| Iowa | State | 373 | 12-01-24 |
| Kansas | NELAP | E-10236 | 10-31-23 |
| Kentucky (DW) | State | KY90125 | 12-31-23 |
| Kentucky (WW) | State | KY90125 (Permit KY0004049) | 12-31-23 |
| Louisiana (All) | NELAP | 04080 | 06-30-23 |
| Louisiana (DW) | State | LA011 | 12-31-23 |
| Maryland | State | 310 | 09-30-23 |
| MI - RadChem Recognition | State | 9005 | 06-30-23 |
| Missouri | State | 780 | 06-30-25 |
| Nevada | State | MO000542020-1 | 07-31-23 |
| New Jersey | NELAP | MO002 | 06-30-23 |
| New York | NELAP | 11616 | 04-01-23 |
| North Carolina (DW) | State | 29700 | 07-31-23 |
| North Dakota | State | R-207 | 06-30-23 |
| Oklahoma | NELAP | 9997 | 08-31-23 |
| Oregon | NELAP | 4157 | 09-01-23 |
| Pennsylvania | NELAP | 68-00540 | 02-28-24 |
| South Carolina | State | 85002001 | 06-30-23 |
| Texas | NELAP | T104704193 | 07-31-23 |
| US Fish & Wildlife | US Federal Programs | 058448 | 07-31-23 |
| USDA | US Federal Programs | P330-17-00028 | 06-11-23 |
| Utah | NELAP | MO000542021-14 | 07-31-23 |
| Virginia | NELAP | 10310 | 06-14-24 |
| Washington | State | C592 | 08-30-23 |
| West Virginia DEP | State | 381 | 10-31-23 |

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

Method Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
SDG: 3502371/40/870

| Method | Method Description | Protocol | Laboratory |
|--------------|--|----------|------------|
| 9056A | Anions, Ion Chromatography | SW846 | EET CF |
| 6020B | Metals (ICP/MS) | SW846 | EET CF |
| 7470A | Mercury (CVAA) | SW846 | EET CF |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | EET CF |
| SM 4500 H+ B | pH | SM | EET CF |
| 9315 | Radium-226 (GFPC) | SW846 | EET SL |
| 9320 | Radium-228 (GFPC) | SW846 | EET SL |
| Ra226_Ra228 | Combined Radium-226 and Radium-228 | TAL-STL | EET SL |
| 3005A | Preparation, Total Metals | SW846 | EET CF |
| 7470A | Preparation, Mercury | SW846 | EET CF |
| PrecSep_0 | Preparation, Precipitate Separation | None | EET SL |
| PrecSep-21 | Preparation, Precipitate Separation (21-Day In-Growth) | None | EET SL |

Protocol References:

None = None

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.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



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310-250316 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|---|--|---------------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE <u>MN</u> | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>2/24/23</u> | TIME <u>1550</u> | Received By: <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>1</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>T</u> | | Correction Factor (°C): <u>±0.1</u> | |
| *Temp Blank Temperature: If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature | | | |
| Uncorrected Temp (°C): <u>0.4</u> | | Corrected Temp (°C): <u>0.5</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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|---|--|---------------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE <u>MN</u> | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>2/24/23</u> | TIME <u>1550</u> | Received By: <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>2</u> of <u>4</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>T</u> | | Correction Factor (°C): <u>+0.1</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>0.7</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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|---|--|---------------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE <u>MN</u> | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>2/24/23</u> | TIME <u>1550</u> | Received By: <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>3</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>T</u> | | Correction Factor (°C): <u>0.1</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>0.9</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|---|--|---------------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE <u>MN</u> | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>2/24/23</u> | TIME <u>1550</u> | Received By: <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>4</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>T</u> | | Correction Factor (°C): <u>+0.1</u> | |
| * Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature | | | |
| Uncorrected Temp (°C): | | Corrected Temp (°C): | |
| Sample Container Temperature | | | |
| Container(s) used: | CONTAINER 1 <u>250 mL plastic</u> | CONTAINER 2 | |
| Uncorrected Temp (°C): | <u>5.3</u> | | |
| Corrected Temp (°C): | <u>5.4</u> | | |
| Exceptions Noted | | | |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|---|--|---------------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE <u>MN</u> | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>2/24/23</u> | TIME <u>1550</u> | Received By: <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>5</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>T</u> | | Correction Factor (°C): <u>+0.1</u> | |
| Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature | | | |
| Uncorrected Temp (°C): <u>-0.7</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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|--|--|--|--------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| | | <u>MN</u> | |
| Receipt Information | | | |
| Date/Time Received: | DATE | TIME | Received By: |
| | <u>2/24/23</u> | <u>1550</u> | <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee | | | |
| <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>6</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: | <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | |
| Thermometer ID: | <u>T</u> | Correction Factor (°C): | <u>+0.1</u> |
| Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature | | | |
| Uncorrected Temp (°C): | | Corrected Temp (°C): | |
| Sample Container Temperature | | | |
| Container(s) used: | CONTAINER 1 | CONTAINER 2 | |
| | <u>250 mL plastic</u> | | |
| Uncorrected Temp (°C): | <u>-0.2</u> | | |
| Corrected Temp (°C): | <u>-0.1</u> | | |
| Exceptions Noted | | | |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|--|--|--|--------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| | | <u>MN</u> | |
| Receipt Information | | | |
| Date/Time Received: | DATE | TIME | Received By: |
| | <u>2/24/23</u> | <u>1550</u> | <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee | | | |
| <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>7</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: | <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | |
| Thermometer ID: | <u>T</u> | Correction Factor (°C): | <u>+0.1</u> |
| * Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature | | | |
| Uncorrected Temp (°C): | | Corrected Temp (°C): | |
| Sample Container Temperature | | | |
| Container(s) used: | CONTAINER 1 | CONTAINER 2 | |
| | <u>250 mL plastic</u> | | |
| Uncorrected Temp (°C): | <u>3.4</u> | | |
| Corrected Temp (°C): | <u>3.5</u> | | |
| Exceptions Noted | | | |
| 1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> 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 | STATE <u>MN</u> | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>2/24/23</u> | TIME <u>1550</u> | Received By: <u>[Signature]</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>8</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>T</u> | | Correction Factor (°C): <u>±0.1</u> | |
| • Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature | | | |
| Uncorrected Temp (°C): <u>1.2</u> | | Corrected Temp (°C): <u>1.3</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
| | | | |
| | | | |
| | | | |



Chain of Custody Record



| | | | | |
|---|---|-----------------------------------|------------------------------------|---|
| Client Information | | Lab PM: Bindert, Zach T | Carrier Tracking No(s): | COC No: 310-68363-19638.1 |
| Client Contact: Nicholas Schlagel | | E-Mail: Zach.Bindert@Eurofins.com | State of Origin: MN | Page: Page 1 of 2 |
| Company: Groundwater & Environmental Services Inc | | PWSID: | Job #: 3502371/40/870 | |
| Address: 1301 Corporate Center Drive Suite 190 | | Analysis Requested | | |
| City: Esgan | TAT Requested (days): 3/23/2023 | 9315_Raz26 - Standard Target List | 920_Raz28 - Standard Target List | 9056A_ORGM_28D - Chloride, Fluoride, Sulfate |
| State, Zip: MN, 55121-1562 | Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Raz26Raz28_GFC - Local Method | TDS - 2540C_Calc'd, pH - SM4500_H+ | Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - NaHSO4 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify) Other |
| Phone: | PO #: Purchase Order not required | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | Total Number of Containers |
| Email: nschlagel@gesonline.com | WO #: | Sample Date | Sample Time | Sample Type (C=comp, G=grab) |
| Project #: SKB Rosemount - CCR Monitoring | Project #: 31013948 | Sample Date | Sample Time | Matrix (W=water, S=solid, O=wastefill, BT=BIOSIDE, AS=ALT) |
| Site: Minnesota | SSOW#: | Sample Date | Sample Time | Preservation Code |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=wastefill, BT=BIOSIDE, AS=ALT) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 9315_Raz26 - Standard Target List | Raz26Raz28_GFC - Local Method | 920_Raz28 - Standard Target List | 9056A_ORGM_28D - Chloride, Fluoride, Sulfate | CR Metals (Ba, B, Ca, Cr, Co, Pb and Ti) | TDS - 2540C_Calc'd, pH - SM4500_H+ | Special Instructions/Note: |
|-----------------------|-------------|-------------|------------------------------|--|-----------------------------------|----------------------------|-----------------------------------|-------------------------------|----------------------------------|--|--|------------------------------------|-------------------------------------|
| D-1D CCR | 2/20/23 | 16:16 | C | Water | X | X | X | X | X | X | X | X | PLEASE LOGIN USING SITES AND EVENTS |
| D-2D CCR | 2/21/23 | 13:05 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| D-3D CCR | 2/21/23 | 11:00 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| D-4D CCR | 2/21/23 | 13:45 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| D-5D CCR | 2/20/23 | 15:10 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| D-9 CCR | 2/21/23 | 15:10 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| U-4D CCR | 2/20/23 | 10:45 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| U-4S CCR | 2/20/23 | 0:05 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| U-5D CCR | 2/20/23 | 14:15 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| U-5S CCR | 2/20/23 | 13:50 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |
| D-1S CCR | 2/20/23 | 15:56 | 6 | Water | X | X | X | X | X | X | X | X | MS/MSD |

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant 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:

| Reinquired by | Date | Time | Company | Method of Shipment |
|----------------------------|---------|-------|---------|--------------------|
| Reinquired by: [Signature] | 2/28/23 | 9:30 | Company | |
| Reinquired by: [Signature] | 2/24/23 | 11:00 | Company | |
| Reinquired by: [Signature] | 2/24/23 | 15:50 | Company | |

Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record

| | | | | | |
|--|---|--|---|--|----------------------------------|
| Client Information | | Sampler: <u>N. Schlage</u> | Lab PW: <u>Bindert, Zach T</u> | Carrier Tracking No(s): <u>310-68363-19638.2</u> | COC No: <u>310-68363-19638.2</u> |
| Client Contact: <u>Nicholas Schlage</u> | | Phone: <u>651-792-6063</u> | E-Mail: <u>Zach.Bindert@Eurofins.com</u> | State of Origin: <u>MN</u> | Page: <u>Page 2 of 2</u> |
| Company: <u>Groundwater & Environmental Services Inc</u> | | Job #: <u>3502371/40/870</u> | | | |
| Address: <u>1301 Corporate Center Drive Suite 190</u> | | Analysis Requested | | | |
| City: <u>Eagan</u> | TAT Requested (days): <u>4</u> | Total Number of Containers: <u>5</u> | | | |
| State Zip: <u>MN, 55121-1562</u> | Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice J - DI Water U - Acetone K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other: _____ | | | |
| PO #: _____ | Purchase Order not required | Special Instructions/Note: PLEASE LOGIN USING SITES AND EVENTS | | | |
| WO #: _____ | | | | | |
| Project #: <u>31013948</u> | | | | | |
| SSOW#: _____ | | | | | |
| Due Date Requested: | | | | | |
| Sample Identification | | | | | |
| Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=wastewat, BT=Tissue, ADU) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) |
| <u>2/22/23</u> | <u>9:15</u> | <u>6</u> | <u>Water</u> | <u>N</u> | <u>N</u> |
| <u>2/21/23</u> | <u>10:46</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/21/23</u> | <u>14:55</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/21/23</u> | <u>17:20</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/21/23</u> | <u>14:04</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/20/23</u> | <u>-</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/20/23</u> | <u>-</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/21/23</u> | <u>15:20</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| <u>2/21/23</u> | <u>15:11</u> | <u>6</u> | <u>Water</u> | <u>X</u> | <u>X</u> |
| Possible Hazard Identification | | Special Instructions/QC Requirements | | | |
| <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological | | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months | | | |
| Deliverable Requested I, II, III, IV, Other (specify) | | Special Instructions/QC Requirements | | | |
| Empty Kit Relinquished by | | Method of Shipment: | | | |
| Relinquished by: _____ | Date/Time: <u>2/24/23 9:30</u> | Company: <u>GES</u> | Received by: <u>[Signature]</u> Date/Time: <u>2/24/23 11:00</u> Company: <u>[Signature]</u> | | |
| Relinquished by: _____ | Date/Time: <u>2/24/23 17:00</u> | Company: _____ | Received by: <u>[Signature]</u> Date/Time: <u>2/24/23 15:50</u> Company: <u>[Signature]</u> | | |
| Relinquished by: _____ | Date/Time: _____ | Company: _____ | Received by: _____ Date/Time: _____ Company: _____ | | |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No | | Cooler Temperature(s) °C and Other Remarks: | | | |



Login Sample Receipt Checklist

Client: Waste Connections, Inc.

Job Number: 310-250316-1
SDG Number: 3502371/40/870

Login Number: 250316

List Number: 1

Creator: Muehling, Angela C

List Source: Eurofins Cedar Falls

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

Tracer/Carrier Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Method: 9315 - Radium-226 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Yield (Acceptance Limits) | |
|-------------------|------------------|-----------------------------------|--|
| | | Ba (30-110) | |
| 310-250316-1 | D-1D - CCR | 89.3 | |
| 310-250316-2 | D-2D - CCR | 90.4 | |
| 310-250316-3 | D-3D - CCR | 94.1 | |
| 310-250316-3 MS | D-3D - CCR | 92.9 | |
| 310-250316-3 MSD | D-3D - CCR | 91.8 | |
| 310-250316-4 | D-4D - CCR | 94.6 | |
| 310-250316-5 | D-5D - CCR | 95.8 | |
| 310-250316-6 | D-9 - CCR | 91.0 | |
| 310-250316-7 | U-4D - CCR | 95.5 | |
| 310-250316-8 | U-4S - CCR | 89.3 | |
| 310-250316-9 | U-5D - CCR | 87.0 | |
| 310-250316-10 | U-5S - CCR | 91.8 | |
| 310-250316-11 | D-1S - CCR | 88.1 | |
| 310-250316-11 MS | D-1S - CCR | 90.4 | |
| 310-250316-11 MSD | D-1S - CCR | 88.4 | |
| 310-250316-12 | D-2S - CCR | 89.8 | |
| 310-250316-13 | D-3S - CCR | 86.7 | |
| 310-250316-14 | D-5S2 - CCR | 81.6 | |
| 310-250316-15 | D-4S - CCR | 84.2 | |
| 310-250316-16 | D-8 - CCR | 82.2 | |
| 310-250316-17 | DUP-1 - CCR | 85.6 | |
| 310-250316-18 | DUP-2 - CCR | 91.2 | |

Tracer/Carrier Legend

Ba = Barium

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Yield (Acceptance Limits) | |
|--------------------|-----------------------|-----------------------------------|--|
| | | Ba (30-110) | |
| 310-250316-19 | Equipment Blank - CCR | 88.1 | |
| 310-250316-20 | Field Blank 1 - CCR | 76.8 | |
| LCS 160-602183/2-A | Lab Control Sample | 85.6 | |
| LCS 160-602196/2-A | Lab Control Sample | 88.7 | |
| MB 160-602183/1-A | Method Blank | 94.4 | |
| MB 160-602196/1-A | Method Blank | 92.4 | |

Tracer/Carrier Legend

Ba = Barium

Method: 9320 - Radium-228 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Yield (Acceptance Limits) | |
|---------------|------------------|-----------------------------------|---------------|
| | | Ba (30-110) | Y (30-110) |
| 310-250316-1 | D-1D - CCR | 89.3 | 83.7 |
| 310-250316-2 | D-2D - CCR | 90.4 | 86.0 |
| 310-250316-3 | D-3D - CCR | 94.1 | 86.4 |

Eurofins Cedar Falls

Tracer/Carrier Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-250316-1
 SDG: 3502371/40/870

Method: 9320 - Radium-228 (GFPC) (Continued)

Matrix: Ground Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Yield (Acceptance Limits) | |
|-------------------|------------------|-----------------------------------|---------------|
| | | Ba (30-110) | Y (30-110) |
| 310-250316-3 MS | D-3D - CCR | 92.9 | 84.9 |
| 310-250316-3 MSD | D-3D - CCR | 91.8 | 84.1 |
| 310-250316-4 | D-4D - CCR | 94.6 | 81.9 |
| 310-250316-5 | D-5D - CCR | 95.8 | 83.4 |
| 310-250316-6 | D-9 - CCR | 91.0 | 85.2 |
| 310-250316-7 | U-4D - CCR | 95.5 | 83.7 |
| 310-250316-8 | U-4S - CCR | 89.3 | 85.2 |
| 310-250316-9 | U-5D - CCR | 87.0 | 84.5 |
| 310-250316-10 | U-5S - CCR | 91.8 | 79.6 |
| 310-250316-11 | D-1S - CCR | 88.1 | 83.4 |
| 310-250316-11 MS | D-1S - CCR | 90.4 | 87.9 |
| 310-250316-11 MSD | D-1S - CCR | 88.4 | 88.6 |
| 310-250316-12 | D-2S - CCR | 89.8 | 88.2 |
| 310-250316-13 | D-3S - CCR | 86.7 | 88.2 |
| 310-250316-14 | D-5S2 - CCR | 81.6 | 87.1 |
| 310-250316-15 | D-4S - CCR | 84.2 | 87.5 |
| 310-250316-16 | D-8 - CCR | 82.2 | 85.6 |
| 310-250316-17 | DUP-1 - CCR | 85.6 | 87.5 |
| 310-250316-18 | DUP-2 - CCR | 91.2 | 87.9 |

Tracer/Carrier Legend

Ba = Barium
 Y = Y Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Yield (Acceptance Limits) | |
|--------------------|-----------------------|-----------------------------------|---------------|
| | | Ba (30-110) | Y (30-110) |
| 310-250316-19 | Equipment Blank - CCR | 88.1 | 85.2 |
| 310-250316-20 | Field Blank 1 - CCR | 76.8 | 92.7 |
| LCS 160-602192/2-A | Lab Control Sample | 85.6 | 86.0 |
| LCS 160-602199/2-A | Lab Control Sample | 88.7 | 87.1 |
| MB 160-602192/1-A | Method Blank | 94.4 | 85.2 |
| MB 160-602199/1-A | Method Blank | 92.4 | 89.3 |

Tracer/Carrier Legend

Ba = Barium
 Y = Y Carrier



ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/5/2023 8:15:55 AM

JOB DESCRIPTION

SKB Rosemount - CCR Monitoring
CCR Groundwater (FALL)

JOB NUMBER

310-268442-1

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
12/5/2023 8:15:55 AM

Authorized for release by
Zach Bindert, Client Service Manager
Zach.Bindert@et.eurofinsus.com
(319)277-2401



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Case Narrative

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Job ID: 310-268442-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-268442-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt

The samples were received on 10/28/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 0.6°C, 0.9°C, 1.7°C, 1.7°C, 1.8°C, 1.9°C, 2.8°C and 3.1°C

HPLC/IC

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: D-1D - CCR (310-268442-1), D-2D - CCR (310-268442-2), D-3D - CCR (310-268442-3), D-4D - CCR (310-268442-4), D-5D - CCR (310-268442-5), D-9 - CCR (310-268442-6), U-4D - CCR (310-268442-7), U-4S - CCR (310-268442-8) and U-5D - CCR (310-268442-9). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: U-5S - CCR (310-268442-10), D-1S - CCR (310-268442-11), D-2S - CCR (310-268442-12), D-3S - CCR (310-268442-13), D-5S2 - CCR (310-268442-14), D-4S - CCR (310-268442-15), D-8 - CCR (310-268442-16), DUP-1 - CCR (310-268442-17) and DUP-2 - CCR (310-268442-18). 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.

Job ID: 310-268442-2

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative 310-268442-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

Case Narrative

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Job ID: 310-268442-2 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

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 10/28/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 0.6°C, 0.9°C, 1.7°C, 1.7°C, 1.8°C, 1.9°C, 2.8°C and 3.1°C

Gas Flow Proportional Counter

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

Rad

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

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Sample Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|-----------------------|--------------|----------------|----------------|
| 310-268442-1 | D-1D - CCR | Ground Water | 10/26/23 12:05 | 10/28/23 10:20 |
| 310-268442-2 | D-2D - CCR | Ground Water | 10/26/23 14:00 | 10/28/23 10:20 |
| 310-268442-3 | D-3D - CCR | Ground Water | 10/26/23 10:20 | 10/28/23 10:20 |
| 310-268442-4 | D-4D - CCR | Ground Water | 10/27/23 09:25 | 10/28/23 10:20 |
| 310-268442-5 | D-5D - CCR | Ground Water | 10/26/23 09:00 | 10/28/23 10:20 |
| 310-268442-6 | D-9 - CCR | Ground Water | 10/27/23 11:15 | 10/28/23 10:20 |
| 310-268442-7 | U-4D - CCR | Ground Water | 10/25/23 12:15 | 10/28/23 10:20 |
| 310-268442-8 | U-4S - CCR | Ground Water | 10/25/23 11:25 | 10/28/23 10:20 |
| 310-268442-9 | U-5D - CCR | Ground Water | 10/25/23 14:00 | 10/28/23 10:20 |
| 310-268442-10 | U-5S - CCR | Ground Water | 10/26/23 13:20 | 10/28/23 10:20 |
| 310-268442-11 | D-1S - CCR | Ground Water | 10/26/23 11:40 | 10/28/23 10:20 |
| 310-268442-12 | D-2S - CCR | Ground Water | 10/26/23 13:15 | 10/28/23 10:20 |
| 310-268442-13 | D-3S - CCR | Ground Water | 10/26/23 10:05 | 10/28/23 10:20 |
| 310-268442-14 | D-5S2 - CCR | Ground Water | 10/26/23 08:30 | 10/28/23 10:20 |
| 310-268442-15 | D-4S - CCR | Ground Water | 10/27/23 09:10 | 10/28/23 10:20 |
| 310-268442-16 | D-8 - CCR | Ground Water | 10/27/23 12:00 | 10/28/23 10:20 |
| 310-268442-17 | DUP-1 - CCR | Ground Water | 10/25/23 00:00 | 10/28/23 10:20 |
| 310-268442-18 | DUP-2 - CCR | Ground Water | 10/26/23 00:00 | 10/28/23 10:20 |
| 310-268442-19 | Equipment Blank - CCR | Water | 10/27/23 12:00 | 10/28/23 10:20 |
| 310-268442-20 | Field Blank 1 - CCR | Water | 10/26/23 15:00 | 10/28/23 10:20 |

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1D - CCR

Lab Sample ID: 310-268442-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|---------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 30 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 25 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.047 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Cadmium | 0.00025 | | 0.00020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 75.2 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.00084 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Thallium | 0.014 | | 0.0010 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 376 | | 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: D-2D - CCR

Lab Sample ID: 310-268442-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 28 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 21 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.052 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 82.2 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 418 | | 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: D-3D - CCR

Lab Sample ID: 310-268442-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 67 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 26 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.055 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 81.2 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.064 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 440 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-268442-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 46 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 22 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.068 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 88.4 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 404 | | 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: D-5D - CCR

Lab Sample ID: 310-268442-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 65 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 29 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.055 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 90.0 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 478 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.6 | 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 Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-9 - CCR

Lab Sample ID: 310-268442-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 43 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 12 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.078 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 101 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 484 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-4D - CCR

Lab Sample ID: 310-268442-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|---------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 30 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 23 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Arsenic | 0.0021 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Barium | 0.042 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Cadmium | 0.0010 | | 0.00020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 80.2 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Cobalt | 0.00098 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.0020 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Molybdenum | 0.0021 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 472 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.7 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-268442-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 51 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 58 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.048 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 102 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 524 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-268442-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 26 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 25 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.053 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 73.7 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 388 | | 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: U-5S - CCR

Lab Sample ID: 310-268442-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------|---------|-----------|---------|-----|------|---------|---|--------|-----------|
| Chloride | 43 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 24 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.063 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Cadmium | 0.00033 | | 0.00020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 79.7 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.00087 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Molybdenum | 0.0035 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Thallium | 0.021 | | 0.0010 | | mg/L | 1 | | 6020B | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-5S - CCR (Continued)

Lab Sample ID: 310-268442-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|------|-----|------|---------|---|--------------|-----------|
| Total Dissolved Solids | 432 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-1S - CCR

Lab Sample ID: 310-268442-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 46 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 16 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.043 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 74.5 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.013 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Thallium | 0.0019 | | 0.0010 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 378 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-2S - CCR

Lab Sample ID: 310-268442-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|---------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 50 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 16 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.046 | F1 F2 | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Cadmium | 0.00026 | F1 F2 | 0.00020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 84.5 | F2 | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.0012 | F1 F2 | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Thallium | 0.014 | F1 F2 | 0.0010 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 380 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-268442-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|---------|-----------|---------|-----|------|---------|---|--------------|-----------|
| Chloride | 330 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 44 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.081 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Cadmium | 0.00030 | | 0.00020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 150 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Lead | 0.00081 | | 0.00050 | | mg/L | 1 | | 6020B | Total/NA |
| Molybdenum | 0.0032 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Thallium | 0.022 | | 0.0010 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 790 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-5S2 - CCR

Lab Sample ID: 310-268442-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 86 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 51 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.060 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 94.0 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Thallium | 0.0017 | | 0.0010 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 474 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.6 | 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 Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-4S - CCR

Lab Sample ID: 310-268442-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 49 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 25 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.079 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 93.4 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 446 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: D-8 - CCR

Lab Sample ID: 310-268442-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 32 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 28 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.071 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 92.1 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Chromium | 0.0057 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 450 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.5 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: DUP-1 - CCR

Lab Sample ID: 310-268442-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Sulfate | 27 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.054 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 77.2 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 388 | | 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: DUP-2 - CCR

Lab Sample ID: 310-268442-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chloride | 50 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Sulfate | 16 | | 5.0 | | mg/L | 5 | | 9056A | Total/NA |
| Barium | 0.044 | | 0.0020 | | mg/L | 1 | | 6020B | Total/NA |
| Calcium | 82.6 | | 0.50 | | mg/L | 1 | | 6020B | Total/NA |
| Total Dissolved Solids | 374 | | 50.0 | | mg/L | 1 | | SM 2540C | Total/NA |
| pH | 7.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-268442-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|--------|-----|------|---------|---|--------------|-----------|
| Chromium | 0.013 | | 0.0050 | | mg/L | 1 | | 6020B | Total/NA |
| pH | 6.4 | HF | 1.0 | | SU | 1 | | SM 4500 H+ B | Total/NA |

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-268442-20

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---------|--------|-----------|-----|-----|------|---------|---|--------------|-----------|
| pH | 6.5 | 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 Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1D - CCR

Lab Sample ID: 310-268442-1

Date Collected: 10/26/23 12:05

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 30 | | 5.0 | | mg/L | | | 11/08/23 17:10 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 17:10 | 5 |
| Sulfate | 25 | | 5.0 | | mg/L | | | 11/08/23 17:10 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Barium | 0.047 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Cadmium | 0.00025 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Calcium | 75.2 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Lead | 0.00084 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |
| Thallium | 0.014 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:10 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 12:54 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 376 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.8 | HF | 1.0 | | SU | | | 10/28/23 12:09 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | 0.232 | | 0.117 | 0.119 | 1.00 | 0.138 | pCi/L | 11/02/23 06:21 | 12/01/23 22:31 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 85.2 | | 30 - 110 | | | | | 11/02/23 06:21 | 12/01/23 22:31 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 0.600 | | 0.367 | 0.371 | 1.00 | 0.531 | pCi/L | 11/02/23 06:55 | 11/27/23 16:10 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 85.2 | | 30 - 110 | | | | | 11/02/23 06:55 | 11/27/23 16:10 | 1 |
| Y Carrier | 84.5 | | 30 - 110 | | | | | 11/02/23 06:55 | 11/27/23 16:10 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1D - CCR

Lab Sample ID: 310-268442-1

Date Collected: 10/26/23 12:05

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.832 | | 0.385 | 0.390 | 5.00 | 0.531 | pCi/L | | 12/04/23 22:20 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-2D - CCR

Lab Sample ID: 310-268442-2

Date Collected: 10/26/23 14:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 28 | | 5.0 | | mg/L | | | 11/08/23 17:47 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 17:47 | 5 |
| Sulfate | 21 | | 5.0 | | mg/L | | | 11/08/23 17:47 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Barium | 0.052 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Calcium | 82.2 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:17 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 12:56 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 418 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 1.0 | | SU | | | 10/28/23 12:10 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|-------------------|--------------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | 0.148 | | 0.0921 | 0.0930 | 1.00 | 0.114 | pCi/L | 11/02/23 06:21 | 12/01/23 22:31 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 90.6 | | 30 - 110 | | | | | 11/02/23 06:21 | 12/01/23 22:31 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|-------------------|--------------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 0.502 | | 0.337 | 0.340 | 1.00 | 0.495 | pCi/L | 11/02/23 06:55 | 11/27/23 16:10 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 90.6 | | 30 - 110 | | | | | 11/02/23 06:55 | 11/27/23 16:10 | 1 |
| Y Carrier | 82.6 | | 30 - 110 | | | | | 11/02/23 06:55 | 11/27/23 16:10 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-2D - CCR

Lab Sample ID: 310-268442-2

Date Collected: 10/26/23 14:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.649 | | 0.349 | 0.352 | 5.00 | 0.495 | pCi/L | | 12/04/23 22:20 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-3D - CCR

Lab Sample ID: 310-268442-3

Date Collected: 10/26/23 10:20

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 67 | | 5.0 | | mg/L | | | 11/08/23 18:00 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 18:00 | 5 |
| Sulfate | 26 | | 5.0 | | mg/L | | | 11/08/23 18:00 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Barium | 0.055 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Calcium | 81.2 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Chromium | 0.064 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:20 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 12:58 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 440 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 1.0 | | SU | | | 10/28/23 12:20 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | 0.209 | | 0.106 | 0.108 | 1.00 | 0.120 | pCi/L | 11/02/23 06:21 | 12/01/23 22:31 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 11/02/23 06:21 | 12/01/23 22:31 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | 0.666 | | 0.388 | 0.393 | 1.00 | 0.557 | pCi/L | 11/02/23 06:55 | 11/27/23 16:10 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 11/02/23 06:55 | 11/27/23 16:10 | 1 |
| Y Carrier | 82.2 | | 30 - 110 | | | | | 11/02/23 06:55 | 11/27/23 16:10 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-3D - CCR

Lab Sample ID: 310-268442-3

Date Collected: 10/26/23 10:20

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | 0.875 | | 0.402 | 0.408 | 5.00 | 0.557 | pCi/L | | 12/04/23 22:20 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-268442-4

Date Collected: 10/27/23 09:25

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 46 | | 5.0 | | mg/L | | | 11/08/23 18:12 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 18:12 | 5 |
| Sulfate | 22 | | 5.0 | | mg/L | | | 11/08/23 18:12 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Barium | 0.068 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Calcium | 88.4 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:23 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 13:05 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 404 | | 50.0 | | mg/L | | | 10/31/23 14:51 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 1.0 | | SU | | | 10/28/23 12:32 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.136 | U | 0.0885 | 0.0888 | 1.00 | 0.136 | pCi/L | 11/02/23 06:58 | 12/01/23 07:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.8 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.508 | U | 0.295 | 0.296 | 1.00 | 0.508 | pCi/L | 11/02/23 07:19 | 11/28/23 11:56 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.8 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 11:56 | 1 |
| Y Carrier | 83.4 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 11:56 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-268442-4

Date Collected: 10/27/23 09:25

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.508 | U | 0.308 | 0.309 | 5.00 | 0.508 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-5D - CCR

Lab Sample ID: 310-268442-5

Date Collected: 10/26/23 09:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 65 | | 5.0 | | mg/L | | | 11/08/23 18:25 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 18:25 | 5 |
| Sulfate | 29 | | 5.0 | | mg/L | | | 11/08/23 18:25 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Barium | 0.055 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Calcium | 90.0 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:27 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 13:07 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 478 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 1.0 | | SU | | | 10/28/23 12:24 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.139 | U | 0.0966 | 0.0972 | 1.00 | 0.139 | pCi/L | 11/02/23 06:58 | 12/01/23 07:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.1 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.556 | U | 0.280 | 0.281 | 1.00 | 0.556 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 95.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 83.0 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-5D - CCR

Lab Sample ID: 310-268442-5

Date Collected: 10/26/23 09:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.556 | U | 0.296 | 0.297 | 5.00 | 0.556 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-9 - CCR

Lab Sample ID: 310-268442-6

Date Collected: 10/27/23 11:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 43 | | 5.0 | | mg/L | | | 11/08/23 18:38 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 18:38 | 5 |
| Sulfate | 12 | | 5.0 | | mg/L | | | 11/08/23 18:38 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Barium | 0.078 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Calcium | 101 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:30 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 13:09 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 484 | | 50.0 | | mg/L | | | 11/01/23 16:48 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 1.0 | | SU | | | 10/28/23 12:14 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.160 | U | 0.0890 | 0.0891 | 1.00 | 0.160 | pCi/L | 11/02/23 06:58 | 12/01/23 07:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.4 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.630 | U | 0.281 | 0.283 | 1.00 | 0.630 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.4 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 81.9 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-9 - CCR

Lab Sample ID: 310-268442-6

Date Collected: 10/27/23 11:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.630 | U | 0.295 | 0.297 | 5.00 | 0.630 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-4D - CCR

Lab Sample ID: 310-268442-7

Date Collected: 10/25/23 12:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 30 | | 5.0 | | mg/L | | | 11/08/23 18:50 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 18:50 | 5 |
| Sulfate | 23 | | 5.0 | | mg/L | | | 11/08/23 18:50 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------|----------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Arsenic | 0.0021 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Barium | 0.042 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Cadmium | 0.0010 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Calcium | 80.2 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Cobalt | 0.00098 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Lead | 0.0020 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Molybdenum | 0.0021 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:33 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 13:11 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 472 | | 50.0 | | mg/L | | | 10/30/23 15:35 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.7 | HF | 1.0 | | SU | | | 10/28/23 12:31 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.155 | U | 0.0960 | 0.0963 | 1.00 | 0.155 | pCi/L | 11/02/23 06:58 | 12/01/23 07:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.8 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.470 | U | 0.291 | 0.292 | 1.00 | 0.470 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.8 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 87.5 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-4D - CCR

Lab Sample ID: 310-268442-7

Date Collected: 10/25/23 12:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.470 | U | 0.306 | 0.307 | 5.00 | 0.470 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-268442-8

Date Collected: 10/25/23 11:25

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 51 | | 5.0 | | mg/L | | | 11/08/23 19:03 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 19:03 | 5 |
| Sulfate | 58 | | 5.0 | | mg/L | | | 11/08/23 19:03 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Barium | 0.048 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Calcium | 102 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:50 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 13:13 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 524 | | 50.0 | | mg/L | | | 10/30/23 15:35 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 1.0 | | SU | | | 10/28/23 12:29 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | 0.238 | | 0.130 | 0.132 | 1.00 | 0.160 | pCi/L | 11/02/23 06:58 | 12/01/23 07:15 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:15 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.562 | U | 0.341 | 0.342 | 1.00 | 0.562 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 88.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 86.4 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-268442-8

Date Collected: 10/25/23 11:25

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.562 | U | 0.365 | 0.367 | 5.00 | 0.562 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-268442-9

Date Collected: 10/25/23 14:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 26 | | 5.0 | | mg/L | | | 11/08/23 19:15 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 19:15 | 5 |
| Sulfate | 25 | | 5.0 | | mg/L | | | 11/08/23 19:15 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Barium | 0.053 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Calcium | 73.7 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Lithium | <0.010 | F1 | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |
| Thallium | <0.0010 | F1 F2 | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:53 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:22 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 388 | | 50.0 | | mg/L | | | 10/30/23 15:35 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 1.0 | | SU | | | 10/28/23 12:30 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.139 | U | 0.0751 | 0.0751 | 1.00 | 0.139 | pCi/L | 11/02/23 06:58 | 12/01/23 07:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 90.1 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:16 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.473 | U | 0.312 | 0.314 | 1.00 | 0.473 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 90.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 87.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-268442-9

Date Collected: 10/25/23 14:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.473 | U | 0.321 | 0.323 | 5.00 | 0.473 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-5S - CCR

Lab Sample ID: 310-268442-10

Date Collected: 10/26/23 13:20

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 43 | | 5.0 | | mg/L | | | 11/08/23 17:59 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 10:50 | 5 |
| Sulfate | 24 | | 5.0 | | mg/L | | | 11/08/23 17:59 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Barium | 0.063 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Cadmium | 0.00033 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Calcium | 79.7 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Lead | 0.00087 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Molybdenum | 0.0035 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |
| Thallium | 0.021 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:10 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 13:16 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 432 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 1.0 | | SU | | | 10/28/23 12:19 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.135 | U | 0.0764 | 0.0765 | 1.00 | 0.135 | pCi/L | 11/02/23 06:58 | 12/01/23 07:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.1 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:16 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.462 | U | 0.268 | 0.269 | 1.00 | 0.462 | pCi/L | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Y Carrier | 93.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-5S - CCR

Lab Sample ID: 310-268442-10

Date Collected: 10/26/23 13:20

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|--------------------|--------------------|------|-------|-------|----------|----------------|---------|
| | | | Uncert. (2σ+/-) | Uncert. (2σ+/-) | | | | | | |
| Combined Radium 226 + 228 | <0.462 | U | 0.279 | 0.280 | 5.00 | 0.462 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1S - CCR

Lab Sample ID: 310-268442-11

Date Collected: 10/26/23 11:40

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 46 | | 5.0 | | mg/L | | | 11/08/23 18:13 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 11:04 | 5 |
| Sulfate | 16 | | 5.0 | | mg/L | | | 11/08/23 18:13 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Barium | 0.043 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Calcium | 74.5 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Chromium | 0.013 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |
| Thallium | 0.0019 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/07/23 00:13 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:33 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 378 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 1.0 | | SU | | | 10/28/23 12:25 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.183 | U | 0.101 | 0.101 | 1.00 | 0.183 | pCi/L | 11/02/23 06:58 | 12/01/23 07:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.1 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:16 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.497 | U | 0.285 | 0.285 | 1.00 | 0.497 | pCi/L | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 89.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Y Carrier | 87.5 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1S - CCR

Lab Sample ID: 310-268442-11

Date Collected: 10/26/23 11:40

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.497 | U | 0.302 | 0.302 | 5.00 | 0.497 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-2S - CCR

Lab Sample ID: 310-268442-12

Date Collected: 10/26/23 13:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 50 | | 5.0 | | mg/L | | | 11/08/23 18:27 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 11:18 | 5 |
| Sulfate | 16 | | 5.0 | | mg/L | | | 11/08/23 18:27 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|----------------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | F1 F2 | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Arsenic | <0.0020 | F1 F2 | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Barium | 0.046 | F1 F2 | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Beryllium | <0.0010 | F1 F2 | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Boron | <0.10 | F1 F2 | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Cadmium | 0.00026 | F1 F2 | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Calcium | 84.5 | F2 | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Chromium | <0.0050 | F1 F2 | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Cobalt | <0.00050 | F1 F2 | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Lead | 0.0012 | F1 F2 | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Lithium | <0.010 | F1 F2 | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Molybdenum | <0.0020 | F1 F2 | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Selenium | <0.0050 | F1 F2 | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |
| Thallium | 0.014 | F1 F2 | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:08 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:10 | 11/10/23 11:05 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 380 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 1.0 | | SU | | | 10/28/23 12:17 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.143 | U | 0.0946 | 0.0950 | 1.00 | 0.143 | pCi/L | 11/02/23 07:22 | 12/01/23 16:02 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 83.0 | | 30 - 110 | | | | | 11/02/23 07:22 | 12/01/23 16:02 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.587 | U | 0.333 | 0.333 | 1.00 | 0.587 | pCi/L | 11/02/23 07:46 | 11/28/23 15:52 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 83.0 | | 30 - 110 | | | | | 11/02/23 07:46 | 11/28/23 15:52 | 1 |
| Y Carrier | 80.7 | | 30 - 110 | | | | | 11/02/23 07:46 | 11/28/23 15:52 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-2S - CCR

Lab Sample ID: 310-268442-12

Date Collected: 10/26/23 13:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.587 | U | 0.346 | 0.346 | 5.00 | 0.587 | pCi/L | | 12/01/23 21:30 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-268442-13

Date Collected: 10/26/23 10:05

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 330 | | 5.0 | | mg/L | | | 11/08/23 19:10 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 12:01 | 5 |
| Sulfate | 44 | | 5.0 | | mg/L | | | 11/08/23 19:10 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Barium | 0.081 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Cadmium | 0.00030 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Calcium | 150 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Lead | 0.00081 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Molybdenum | 0.0032 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |
| Thallium | 0.022 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:56 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:35 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 790 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 1.0 | | SU | | | 10/28/23 12:27 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.146 | U | 0.0871 | 0.0873 | 1.00 | 0.146 | pCi/L | 11/02/23 07:22 | 12/01/23 16:03 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.6 | | 30 - 110 | | | | | 11/02/23 07:22 | 12/01/23 16:03 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.434 | U | 0.248 | 0.249 | 1.00 | 0.434 | pCi/L | 11/02/23 07:46 | 11/28/23 15:53 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.6 | | 30 - 110 | | | | | 11/02/23 07:46 | 11/28/23 15:53 | 1 |
| Y Carrier | 87.5 | | 30 - 110 | | | | | 11/02/23 07:46 | 11/28/23 15:53 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-268442-13

Date Collected: 10/26/23 10:05

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.434 | U | 0.263 | 0.264 | 5.00 | 0.434 | pCi/L | | 12/01/23 21:30 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-5S2 - CCR

Lab Sample ID: 310-268442-14

Date Collected: 10/26/23 08:30

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 86 | | 5.0 | | mg/L | | | 11/08/23 19:24 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 12:16 | 5 |
| Sulfate | 51 | | 5.0 | | mg/L | | | 11/08/23 19:24 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|---------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Barium | 0.060 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Calcium | 94.0 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |
| Thallium | 0.0017 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:59 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:37 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 474 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 1.0 | | SU | | | 10/28/23 12:26 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.153 | U | 0.0721 | 0.0721 | 1.00 | 0.153 | pCi/L | 11/02/23 06:58 | 12/01/23 07:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.9 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:16 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.542 | U | 0.298 | 0.298 | 1.00 | 0.542 | pCi/L | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 91.9 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Y Carrier | 83.7 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-5S2 - CCR

Lab Sample ID: 310-268442-14

Date Collected: 10/26/23 08:30

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.542 | U | 0.307 | 0.307 | 5.00 | 0.542 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-4S - CCR

Lab Sample ID: 310-268442-15

Date Collected: 10/27/23 09:10

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 49 | | 5.0 | | mg/L | | | 11/08/23 19:38 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 12:58 | 5 |
| Sulfate | 25 | | 5.0 | | mg/L | | | 11/08/23 19:38 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Barium | 0.079 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Calcium | 93.4 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:02 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:39 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 446 | | 50.0 | | mg/L | | | 11/01/23 16:48 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 1.0 | | SU | | | 10/28/23 12:35 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.145 | U | 0.0840 | 0.0841 | 1.00 | 0.145 | pCi/L | 11/02/23 06:58 | 12/01/23 07:16 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 85.2 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:16 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.525 | U | 0.246 | 0.246 | 1.00 | 0.525 | pCi/L | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 85.2 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Y Carrier | 88.6 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-4S - CCR

Lab Sample ID: 310-268442-15

Date Collected: 10/27/23 09:10

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.525 | U | 0.260 | 0.260 | 5.00 | 0.525 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-8 - CCR

Lab Sample ID: 310-268442-16

Date Collected: 10/27/23 12:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 32 | | 5.0 | | mg/L | | | 11/08/23 19:52 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 13:14 | 5 |
| Sulfate | 28 | | 5.0 | | mg/L | | | 11/08/23 19:52 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|---------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Barium | 0.071 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Calcium | 92.1 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Chromium | 0.0057 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:19 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:41 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 450 | | 50.0 | | mg/L | | | 11/01/23 16:48 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.5 | HF | 1.0 | | SU | | | 10/28/23 12:33 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-226 | <0.185 | U | 0.119 | 0.120 | 1.00 | 0.185 | pCi/L | 11/02/23 06:58 | 12/01/23 07:24 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 92.1 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:24 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|----------|---------|------|-------|-------|----------------|----------------|---------|
| | | | Uncert. | Uncert. | | | | | | |
| | | | (2σ+/-) | (2σ+/-) | | | | | | |
| Radium-228 | <0.670 | U | 0.336 | 0.337 | 1.00 | 0.670 | pCi/L | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 92.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |
| Y Carrier | 84.9 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:06 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-8 - CCR

Lab Sample ID: 310-268442-16

Date Collected: 10/27/23 12:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.670 | U | 0.356 | 0.358 | 5.00 | 0.670 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: DUP-1 - CCR

Lab Sample ID: 310-268442-17

Date Collected: 10/25/23 00:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | <5.0 | | 5.0 | | mg/L | | | 11/08/23 20:06 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 13:28 | 5 |
| Sulfate | 27 | | 5.0 | | mg/L | | | 11/08/23 20:06 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Barium | 0.054 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Calcium | 77.2 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:22 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:43 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 388 | | 50.0 | | mg/L | | | 10/30/23 15:41 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.6 | HF | 1.0 | | SU | | | 10/28/23 12:11 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.180 | U | 0.103 | 0.103 | 1.00 | 0.180 | pCi/L | 11/02/23 06:58 | 12/01/23 07:24 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 92.3 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:24 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.531 | U | 0.287 | 0.287 | 1.00 | 0.531 | pCi/L | 11/02/23 07:19 | 11/28/23 12:07 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 92.3 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:07 | 1 |
| Y Carrier | 86.7 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:07 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: DUP-1 - CCR

Lab Sample ID: 310-268442-17

Date Collected: 10/25/23 00:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|--------------------|--------------------|------|-------|-------|----------|----------------|---------|
| | | | Uncert. (2σ+/-) | Uncert. (2σ+/-) | | | | | | |
| Combined Radium 226 + 228 | <0.531 | U | 0.305 | 0.305 | 5.00 | 0.531 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: DUP-2 - CCR

Lab Sample ID: 310-268442-18

Date Collected: 10/26/23 00:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Chloride | 50 | | 5.0 | | mg/L | | | 11/08/23 20:48 | 5 |
| Fluoride | <1.0 | | 1.0 | | mg/L | | | 11/09/23 13:42 | 5 |
| Sulfate | 16 | | 5.0 | | mg/L | | | 11/08/23 20:48 | 5 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Barium | 0.044 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Calcium | 82.6 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:26 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:46 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Total Dissolved Solids (SM 2540C) | 374 | | 50.0 | | mg/L | | | 10/31/23 14:51 | 1 |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 7.4 | HF | 1.0 | | SU | | | 10/28/23 12:18 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.278 | U | 0.138 | 0.138 | 1.00 | 0.278 | pCi/L | 11/02/23 06:58 | 12/01/23 07:24 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 84.7 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:24 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.733 | U | 0.395 | 0.395 | 1.00 | 0.733 | pCi/L | 11/02/23 07:19 | 11/28/23 12:07 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 84.7 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:07 | 1 |
| Y Carrier | 88.2 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:07 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: DUP-2 - CCR

Lab Sample ID: 310-268442-18

Date Collected: 10/26/23 00:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|--------------------|--------------------|------|-------|-------|----------|----------------|---------|
| | | | Uncert. (2σ+/-) | Uncert. (2σ+/-) | | | | | | |
| Combined Radium 226 + 228 | <0.733 | U | 0.418 | 0.418 | 5.00 | 0.733 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-268442-19

Date Collected: 10/27/23 12:00

Matrix: Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 21:02 | 1 |
| Fluoride | <0.20 | | 0.20 | | mg/L | | | 11/09/23 13:56 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 11/08/23 21:02 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------|--------------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Barium | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Calcium | <0.50 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Chromium | 0.013 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:29 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:48 | 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 | | | 11/01/23 16:48 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 6.4 | HF | 1.0 | | SU | | | 10/28/23 12:16 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.186 | U | 0.103 | 0.103 | 1.00 | 0.186 | pCi/L | 11/02/23 06:58 | 12/01/23 07:24 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.3 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:24 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.566 | U | 0.309 | 0.309 | 1.00 | 0.566 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 93.3 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 87.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-268442-19

Date Collected: 10/27/23 12:00

Matrix: Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|-----------------------------|-----------------------------|------|-------|-------|----------|----------------|---------|
| Combined Radium 226 + 228 | <0.566 | U | 0.326 | 0.326 | 5.00 | 0.566 | pCi/L | | 12/01/23 21:33 | 1 |

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Client Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-268442-20

Date Collected: 10/26/23 15:00

Matrix: Water

Date Received: 10/28/23 10:20

Method: SW846 9056A - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 21:16 | 1 |
| Fluoride | <0.20 | | 0.20 | | mg/L | | | 11/09/23 14:10 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 11/08/23 21:16 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Barium | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Calcium | <0.50 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 21:32 | 1 |

Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|----------|-----------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:50 | 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 | | | 10/31/23 14:51 | 1 |
| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
| pH (SM 4500 H+ B) | 6.5 | HF | 1.0 | | SU | | | 10/28/23 12:21 | 1 |

Method: SW846 9315 - Radium-226 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.192 | U | 0.0963 | 0.0963 | 1.00 | 0.192 | pCi/L | 11/02/23 06:58 | 12/01/23 07:24 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 97.3 | | 30 - 110 | | | | | 11/02/23 06:58 | 12/01/23 07:24 | 1 |

Method: SW846 9320 - Radium-228 (GFPC)

| Analyte | Result | Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|--------|-----------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-228 | <0.487 | U | 0.263 | 0.263 | 1.00 | 0.487 | pCi/L | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Carrier | %Yield | Qualifier | Limits | | | | | Prepared | Analyzed | Dil Fac |
| Barium | 97.3 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |
| Y Carrier | 90.1 | | 30 - 110 | | | | | 11/02/23 07:19 | 11/28/23 12:05 | 1 |

Eurofins Cedar Falls

Client Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-268442-20

Date Collected: 10/26/23 15:00

Matrix: Water

Date Received: 10/28/23 10:20

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

| Analyte | Result | Qualifier | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------------------------|--------|-----------|--------------------|--------------------|------|-------|-------|----------|----------------|---------|
| | | | Uncert. (2σ+/-) | Uncert. (2σ+/-) | | | | | | |
| Combined Radium 226 + 228 | <0.487 | U | 0.280 | 0.280 | 5.00 | 0.487 | pCi/L | | 12/01/23 21:33 | 1 |

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Definitions/Glossary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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. |
| F2 | MS/MSD RPD exceeds control limits |
| F3 | Duplicate RPD exceeds the control limit |

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. |

Rad

| Qualifier | Qualifier Description |
|-----------|---|
| U | Result is less than the sample detection limit. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | 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 Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-405486/3
Matrix: Water
Analysis Batch: 405486

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 16:44 | 1 |
| Fluoride | <0.20 | | 0.20 | | mg/L | | | 11/08/23 16:44 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 11/08/23 16:44 | 1 |

Lab Sample ID: LCS 310-405486/4
Matrix: Water
Analysis Batch: 405486

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 | 9.75 | | mg/L | | 98 | 90 - 110 |
| Fluoride | 2.00 | 2.11 | | mg/L | | 106 | 90 - 110 |
| Sulfate | 10.0 | 10.3 | | mg/L | | 103 | 90 - 110 |

Lab Sample ID: 310-268442-9 MS
Matrix: Ground Water
Analysis Batch: 405486

Client Sample ID: U-5D - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Chloride | 26 | | 25.0 | 49.2 | | mg/L | | 93 | 80 - 120 |
| Fluoride | <1.0 | | 5.00 | 5.39 | | mg/L | | 108 | 80 - 120 |
| Sulfate | 25 | | 25.0 | 49.9 | | mg/L | | 98 | 80 - 120 |

Lab Sample ID: 310-268442-9 MSD
Matrix: Ground Water
Analysis Batch: 405486

Client Sample ID: U-5D - 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 | 26 | | 25.0 | 49.2 | | mg/L | | 93 | 80 - 120 | 0 | 15 |
| Fluoride | <1.0 | | 5.00 | 5.06 | | mg/L | | 101 | 80 - 120 | 6 | 15 |
| Sulfate | 25 | | 25.0 | 50.0 | | mg/L | | 99 | 80 - 120 | 0 | 15 |

Lab Sample ID: MB 310-405626/3
Matrix: Water
Analysis Batch: 405626

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-----|------|---|----------|----------------|---------|
| Chloride | <1.0 | | 1.0 | | mg/L | | | 11/08/23 17:03 | 1 |
| Fluoride | <0.20 | | 0.20 | | mg/L | | | 11/08/23 17:03 | 1 |
| Sulfate | <1.0 | | 1.0 | | mg/L | | | 11/08/23 17:03 | 1 |

Lab Sample ID: LCS 310-405626/37
Matrix: Water
Analysis Batch: 405626

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 | 10.2 | | mg/L | | 102 | 90 - 110 |
| Fluoride | 2.00 | 2.17 | | mg/L | | 109 | 90 - 110 |
| Sulfate | 10.0 | 10.8 | | mg/L | | 108 | 90 - 110 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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

Lab Sample ID: 310-268442-12 MS
Matrix: Ground Water
Analysis Batch: 405626

Client Sample ID: D-2S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Chloride | 51 | | 25.0 | 74.9 | | mg/L | | 96 | 80 - 120 |
| Sulfate | 17 | | 25.0 | 43.3 | | mg/L | | 106 | 80 - 120 |

Lab Sample ID: 310-268442-12 MS
Matrix: Ground Water
Analysis Batch: 405626

Client Sample ID: D-2S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Fluoride | <1.0 | | 5.00 | 5.28 | | mg/L | | 106 | 80 - 120 |

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 405626

Client Sample ID: D-2S - 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 | 51 | | 25.0 | 75.3 | | mg/L | | 98 | 80 - 120 | 1 | 15 |
| Sulfate | 17 | | 25.0 | 43.6 | | mg/L | | 108 | 80 - 120 | 1 | 15 |

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 405626

Client Sample ID: D-2S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| Fluoride | <1.0 | | 5.00 | 5.44 | | mg/L | | 109 | 80 - 120 | 3 | 15 |

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-404270/1-A
Matrix: Water
Analysis Batch: 405090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 404270

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Barium | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Calcium | <0.50 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 20:01 | 1 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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

Lab Sample ID: LCS 310-404270/2-A
Matrix: Water
Analysis Batch: 405090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 404270

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|------------|-------------|------------|---------------|------|---|------|----------|
| Antimony | 0.200 | 0.207 | | mg/L | | 104 | 80 - 120 |
| Arsenic | 0.200 | 0.199 | | mg/L | | 100 | 80 - 120 |
| Barium | 0.100 | 0.0963 | | mg/L | | 96 | 80 - 120 |
| Beryllium | 0.100 | 0.0849 | | mg/L | | 85 | 80 - 120 |
| Boron | 0.200 | 0.190 | | mg/L | | 95 | 80 - 120 |
| Cadmium | 0.100 | 0.0918 | | mg/L | | 92 | 80 - 120 |
| Calcium | 2.00 | 1.69 | | mg/L | | 85 | 80 - 120 |
| Chromium | 0.100 | 0.0924 | | mg/L | | 92 | 80 - 120 |
| Cobalt | 0.100 | 0.0968 | | mg/L | | 97 | 80 - 120 |
| Lead | 0.200 | 0.198 | | mg/L | | 99 | 80 - 120 |
| Lithium | 0.200 | 0.178 | | mg/L | | 89 | 80 - 120 |
| Molybdenum | 0.200 | 0.188 | | mg/L | | 94 | 80 - 120 |
| Selenium | 0.400 | 0.346 | | mg/L | | 86 | 80 - 120 |
| Thallium | 0.200 | 0.184 | | mg/L | | 92 | 80 - 120 |

Lab Sample ID: 310-268442-12 MS
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 404270

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | Limits |
|------------|---------------|------------------|-------------|-----------|--------------|------|---|-------|----------|
| Antimony | <0.0020 | F1 F2 | 0.200 | 0.134 | F1 | mg/L | | 66 | 75 - 125 |
| Arsenic | <0.0020 | F1 F2 | 0.200 | 0.133 | F1 | mg/L | | 66 | 75 - 125 |
| Barium | 0.046 | F1 F2 | 0.100 | 0.0898 | F1 | mg/L | | 44 | 75 - 125 |
| Beryllium | <0.0010 | F1 F2 | 0.100 | 0.0577 | F1 | mg/L | | 58 | 75 - 125 |
| Boron | <0.10 | F1 F2 | 0.200 | 0.107 | F1 | mg/L | | 53 | 75 - 125 |
| Cadmium | 0.00026 | F1 F2 | 0.100 | 0.0619 | F1 | mg/L | | 62 | 75 - 125 |
| Calcium | 84.5 | F2 | 2.00 | 53.55 | 4 | mg/L | | -1547 | 75 - 125 |
| Chromium | <0.0050 | F1 F2 | 0.100 | 0.0594 | F1 | mg/L | | 57 | 75 - 125 |
| Cobalt | <0.00050 | F1 F2 | 0.100 | 0.0608 | F1 | mg/L | | 60 | 75 - 125 |
| Lead | 0.0012 | F1 F2 | 0.200 | 0.127 | F1 | mg/L | | 63 | 75 - 125 |
| Lithium | <0.010 | F1 F2 | 0.200 | 0.103 | F1 | mg/L | | 52 | 75 - 125 |
| Molybdenum | <0.0020 | F1 F2 | 0.200 | 0.123 | F1 | mg/L | | 61 | 75 - 125 |
| Selenium | <0.0050 | F1 F2 | 0.400 | 0.241 | F1 | mg/L | | 60 | 75 - 125 |
| Thallium | 0.014 | F1 F2 | 0.200 | 0.0426 | F1 | mg/L | | 14 | 75 - 125 |

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 404270

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
|-----------|---------------|------------------|-------------|------------|---------------|------|---|------|----------|-----|-------|
| Antimony | <0.0020 | F1 F2 | 0.200 | 0.216 | F2 | mg/L | | 107 | 75 - 125 | 47 | 20 |
| Arsenic | <0.0020 | F1 F2 | 0.200 | 0.216 | F2 | mg/L | | 107 | 75 - 125 | 47 | 20 |
| Barium | 0.046 | F1 F2 | 0.100 | 0.143 | F2 | mg/L | | 97 | 75 - 125 | 46 | 20 |
| Beryllium | <0.0010 | F1 F2 | 0.100 | 0.0965 | F2 | mg/L | | 96 | 75 - 125 | 50 | 20 |
| Boron | <0.10 | F1 F2 | 0.200 | 0.193 | F2 | mg/L | | 96 | 75 - 125 | 57 | 20 |
| Cadmium | 0.00026 | F1 F2 | 0.100 | 0.0994 | F2 | mg/L | | 99 | 75 - 125 | 47 | 20 |
| Calcium | 84.5 | F2 | 2.00 | 83.44 | 4 F2 | mg/L | | -52 | 75 - 125 | 44 | 20 |
| Chromium | <0.0050 | F1 F2 | 0.100 | 0.0948 | F2 | mg/L | | 93 | 75 - 125 | 46 | 20 |
| Cobalt | <0.00050 | F1 F2 | 0.100 | 0.0973 | F2 | mg/L | | 97 | 75 - 125 | 46 | 20 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 404270

| Analyte | Sample | Sample | Spike | MSD | | Unit | D | %Rec | %Rec | | RPD | Limit |
|------------|---------|-----------|-------|--------|-----------|------|---|------|----------|-----|-----|-------|
| | Result | Qualifier | | Result | Qualifier | | | | Limits | RPD | | |
| Lead | 0.0012 | F1 F2 | 0.200 | 0.202 | F2 | mg/L | | 101 | 75 - 125 | 46 | 20 | |
| Lithium | <0.010 | F1 F2 | 0.200 | 0.165 | F2 | mg/L | | 82 | 75 - 125 | 46 | 20 | |
| Molybdenum | <0.0020 | F1 F2 | 0.200 | 0.202 | F2 | mg/L | | 100 | 75 - 125 | 48 | 20 | |
| Selenium | <0.0050 | F1 F2 | 0.400 | 0.389 | F2 | mg/L | | 97 | 75 - 125 | 47 | 20 | |
| Thallium | 0.014 | F1 F2 | 0.200 | 0.112 | F1 F2 | mg/L | | 49 | 75 - 125 | 90 | 20 | |

Lab Sample ID: MB 310-404271/1-A
Matrix: Water
Analysis Batch: 405090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 404271

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | | Analyzed | | Dil Fac |
|------------|----------|-----------|---------|-----|------|---|----------------|----------------|----------|------|---------|
| | Result | Qualifier | | | | | Time | Time | Time | Time | |
| Antimony | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Arsenic | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Barium | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Beryllium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Boron | <0.10 | | 0.10 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Cadmium | <0.00020 | | 0.00020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Calcium | <0.50 | | 0.50 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Chromium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Cobalt | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Lead | <0.00050 | | 0.00050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Lithium | <0.010 | | 0.010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Molybdenum | <0.0020 | | 0.0020 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Selenium | <0.0050 | | 0.0050 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |
| Thallium | <0.0010 | | 0.0010 | | mg/L | | 10/31/23 10:40 | 11/06/23 23:03 | | 1 | |

Lab Sample ID: LCS 310-404271/2-A
Matrix: Water
Analysis Batch: 405090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 404271

| Analyte | Spike | LCS | | Unit | D | %Rec | %Rec | |
|------------|-------|--------|--------|------|---|------|-----------|--------|
| | | Added | Result | | | | Qualifier | Limits |
| Antimony | 0.200 | 0.197 | | mg/L | | 99 | 80 - 120 | |
| Arsenic | 0.200 | 0.190 | | mg/L | | 95 | 80 - 120 | |
| Barium | 0.100 | 0.0913 | | mg/L | | 91 | 80 - 120 | |
| Beryllium | 0.100 | 0.101 | | mg/L | | 101 | 80 - 120 | |
| Boron | 0.200 | 0.181 | | mg/L | | 90 | 80 - 120 | |
| Cadmium | 0.100 | 0.0903 | | mg/L | | 90 | 80 - 120 | |
| Calcium | 2.00 | 1.70 | | mg/L | | 85 | 80 - 120 | |
| Chromium | 0.100 | 0.0887 | | mg/L | | 89 | 80 - 120 | |
| Cobalt | 0.100 | 0.0914 | | mg/L | | 91 | 80 - 120 | |
| Lead | 0.200 | 0.194 | | mg/L | | 97 | 80 - 120 | |
| Lithium | 0.200 | 0.179 | | mg/L | | 90 | 80 - 120 | |
| Molybdenum | 0.200 | 0.183 | | mg/L | | 92 | 80 - 120 | |
| Selenium | 0.400 | 0.410 | | mg/L | | 102 | 80 - 120 | |
| Thallium | 0.200 | 0.179 | | mg/L | | 89 | 80 - 120 | |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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

Lab Sample ID: 310-268442-9 MS
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 404271

| Analyte | Sample | Sample Qualifier | Spike Added | MS | MS | Unit | D | %Rec | %Rec | |
|------------|----------|------------------|-------------|--------|-----------|------|---|------|----------|-------|
| | Result | | | Result | Qualifier | | | | Limits | Limit |
| Antimony | <0.0020 | | 0.200 | 0.191 | | mg/L | | 95 | 75 - 125 | |
| Arsenic | <0.0020 | | 0.200 | 0.192 | | mg/L | | 96 | 75 - 125 | |
| Barium | 0.053 | | 0.100 | 0.136 | | mg/L | | 82 | 75 - 125 | |
| Beryllium | <0.0010 | | 0.100 | 0.0833 | | mg/L | | 83 | 75 - 125 | |
| Boron | <0.10 | | 0.200 | 0.158 | | mg/L | | 79 | 75 - 125 | |
| Cadmium | <0.00020 | | 0.100 | 0.0887 | | mg/L | | 89 | 75 - 125 | |
| Calcium | 73.7 | | 2.00 | 69.66 | 4 | mg/L | | -203 | 75 - 125 | |
| Chromium | <0.0050 | | 0.100 | 0.0832 | | mg/L | | 83 | 75 - 125 | |
| Cobalt | <0.00050 | | 0.100 | 0.0863 | | mg/L | | 86 | 75 - 125 | |
| Lead | <0.00050 | | 0.200 | 0.180 | | mg/L | | 90 | 75 - 125 | |
| Lithium | <0.010 | F1 | 0.200 | 0.148 | F1 | mg/L | | 72 | 75 - 125 | |
| Molybdenum | <0.0020 | | 0.200 | 0.178 | | mg/L | | 89 | 75 - 125 | |
| Selenium | <0.0050 | | 0.400 | 0.349 | | mg/L | | 87 | 75 - 125 | |
| Thallium | <0.0010 | F1 F2 | 0.200 | 0.0747 | F1 | mg/L | | 37 | 75 - 125 | |

Lab Sample ID: 310-268442-9 MSD
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 404271

| Analyte | Sample | Sample Qualifier | Spike Added | MSD | MSD | Unit | D | %Rec | %Rec | | RPD | Limit |
|------------|----------|------------------|-------------|--------|-----------|------|---|------|----------|-------|-----|-------|
| | Result | | | Result | Qualifier | | | | Limits | Limit | | |
| Antimony | <0.0020 | | 0.200 | 0.197 | | mg/L | | 99 | 75 - 125 | 3 | 20 | |
| Arsenic | <0.0020 | | 0.200 | 0.198 | | mg/L | | 99 | 75 - 125 | 3 | 20 | |
| Barium | 0.053 | | 0.100 | 0.141 | | mg/L | | 88 | 75 - 125 | 4 | 20 | |
| Beryllium | <0.0010 | | 0.100 | 0.0853 | | mg/L | | 85 | 75 - 125 | 2 | 20 | |
| Boron | <0.10 | | 0.200 | 0.158 | | mg/L | | 79 | 75 - 125 | 0 | 20 | |
| Cadmium | <0.00020 | | 0.100 | 0.0908 | | mg/L | | 91 | 75 - 125 | 2 | 20 | |
| Calcium | 73.7 | | 2.00 | 71.09 | 4 | mg/L | | -132 | 75 - 125 | 2 | 20 | |
| Chromium | <0.0050 | | 0.100 | 0.0866 | | mg/L | | 87 | 75 - 125 | 4 | 20 | |
| Cobalt | <0.00050 | | 0.100 | 0.0881 | | mg/L | | 88 | 75 - 125 | 2 | 20 | |
| Lead | <0.00050 | | 0.200 | 0.186 | | mg/L | | 93 | 75 - 125 | 3 | 20 | |
| Lithium | <0.010 | F1 | 0.200 | 0.151 | F1 | mg/L | | 74 | 75 - 125 | 2 | 20 | |
| Molybdenum | <0.0020 | | 0.200 | 0.186 | | mg/L | | 93 | 75 - 125 | 5 | 20 | |
| Selenium | <0.0050 | | 0.400 | 0.359 | | mg/L | | 90 | 75 - 125 | 3 | 20 | |
| Thallium | <0.0010 | F1 F2 | 0.200 | 0.101 | F1 F2 | mg/L | | 50 | 75 - 125 | 30 | 20 | |

Lab Sample ID: 310-268442-1 DU
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: D-1D - CCR
Prep Type: Total/NA
Prep Batch: 404271

| Analyte | Sample | Sample Qualifier | DU | DU | Unit | D | RPD | Limit |
|-----------|----------|------------------|----------|-----------|------|---|-----|-------|
| | Result | | | Qualifier | | | | |
| Antimony | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |
| Arsenic | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |
| Barium | 0.047 | | 0.0442 | | mg/L | | 6 | 20 |
| Beryllium | <0.0010 | | <0.0010 | | mg/L | | NC | 20 |
| Boron | <0.10 | | <0.10 | | mg/L | | NC | 20 |
| Cadmium | 0.00025 | | <0.00020 | | mg/L | | NC | 20 |
| Calcium | 75.2 | | 72.74 | | mg/L | | 3 | 20 |
| Chromium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Cobalt | <0.00050 | | <0.00050 | | mg/L | | NC | 20 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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

Lab Sample ID: 310-268442-1 DU
Matrix: Ground Water
Analysis Batch: 405090

Client Sample ID: D-1D - CCR
Prep Type: Total/NA
Prep Batch: 404271

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | Limit |
|------------|---------------|------------------|-----------|--------------|------|---|-----|-------|
| Lead | 0.00084 | | <0.00050 | | mg/L | | NC | 20 |
| Lithium | <0.010 | | <0.010 | | mg/L | | NC | 20 |
| Molybdenum | <0.0020 | | <0.0020 | | mg/L | | NC | 20 |
| Selenium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Thallium | 0.014 | | 0.00121 | F3 | mg/L | | 169 | 20 |

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-405441/1-A
Matrix: Water
Analysis Batch: 405672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405441

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:05 | 11/10/23 12:18 | 1 |

Lab Sample ID: LCS 310-405441/2-A
Matrix: Water
Analysis Batch: 405672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405441

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167 | 0.00170 | | mg/L | | 102 | 80 - 120 |

Lab Sample ID: MB 310-405442/1-A
Matrix: Water
Analysis Batch: 405672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405442

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:08 | 11/10/23 13:18 | 1 |

Lab Sample ID: LCS 310-405442/2-A
Matrix: Water
Analysis Batch: 405672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405442

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167 | 0.00169 | | mg/L | | 101 | 80 - 120 |

Lab Sample ID: 310-268442-9 MS
Matrix: Ground Water
Analysis Batch: 405672

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 405442

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Mercury | <0.00020 | | 0.00167 | 0.00175 | | mg/L | | 105 | 80 - 120 |

Lab Sample ID: 310-268442-9 MSD
Matrix: Ground Water
Analysis Batch: 405672

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 405442

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-------|
| Mercury | <0.00020 | | 0.00167 | 0.00179 | | mg/L | | 107 | 80 - 120 | 2 | 20 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 310-405443/1-A
Matrix: Water
Analysis Batch: 405672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405443

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|-----------|--------------|---------|-----|------|---|----------------|----------------|---------|
| Mercury | <0.00020 | | 0.00020 | | mg/L | | 11/09/23 11:10 | 11/10/23 11:01 | 1 |

Lab Sample ID: LCS 310-405443/2-A
Matrix: Water
Analysis Batch: 405672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405443

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| Mercury | 0.00167 | 0.00156 | | mg/L | | 94 | 80 - 120 |

Lab Sample ID: 310-268442-12 MS
Matrix: Ground Water
Analysis Batch: 405672

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 405443

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|------|---|------|-------------|
| Mercury | <0.00020 | | 0.00167 | 0.00142 | | mg/L | | 85 | 80 - 120 |

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 405672

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 405443

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|---------------|------------------|-------------|------------|---------------|------|---|------|-------------|-----|-----------|
| Mercury | <0.00020 | | 0.00167 | 0.00169 | | mg/L | | 101 | 80 - 120 | 18 | 20 |

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

Lab Sample ID: MB 310-404259/1
Matrix: Water
Analysis Batch: 404259

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 | | | 10/30/23 15:35 | 1 |

Lab Sample ID: LCS 310-404259/2
Matrix: Water
Analysis Batch: 404259

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 | 954.0 | | mg/L | | 95 | 90 - 110 |

Lab Sample ID: 310-268442-9 DU
Matrix: Ground Water
Analysis Batch: 404259

Client Sample ID: U-5D - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Total Dissolved Solids | 388 | | 384.0 | | mg/L | | 1 | 20 |

QC Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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

Lab Sample ID: MB 310-404260/1
Matrix: Water
Analysis Batch: 404260

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 | | | 10/30/23 15:41 | 1 |

Lab Sample ID: LCS 310-404260/2
Matrix: Water
Analysis Batch: 404260

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 | 90 - 110 |

Lab Sample ID: 310-268442-12 DU
Matrix: Ground Water
Analysis Batch: 404260

Client Sample ID: D-2S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Total Dissolved Solids | 380 | | 384.0 | | mg/L | | 1 | 20 |

Lab Sample ID: MB 310-404387/1
Matrix: Water
Analysis Batch: 404387

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 | | | 10/31/23 14:51 | 1 |

Lab Sample ID: LCS 310-404387/26
Matrix: Water
Analysis Batch: 404387

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 | 948.0 | | mg/L | | 95 | 90 - 110 |

Lab Sample ID: MB 310-404534/1
Matrix: Water
Analysis Batch: 404534

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 | | | 11/01/23 16:48 | 1 |

Lab Sample ID: LCS 310-404534/2
Matrix: Water
Analysis Batch: 404534

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 | 984.0 | | mg/L | | 98 | 90 - 110 |

Lab Sample ID: 310-268442-6 DU
Matrix: Ground Water
Analysis Batch: 404534

Client Sample ID: D-9 - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|------------------------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| Total Dissolved Solids | 484 | | 470.0 | | mg/L | | 3 | 20 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-404114/1
Matrix: Water
Analysis Batch: 404114

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 | 7.1 | | SU | | 101 | 98 - 102 |

Lab Sample ID: 310-268442-6 DU
Matrix: Ground Water
Analysis Batch: 404114

Client Sample ID: D-9 - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 7.4 | HF | 7.4 | | SU | | 0.1 | 20 |

Lab Sample ID: 310-268442-13 DU
Matrix: Ground Water
Analysis Batch: 404114

Client Sample ID: D-3S - CCR
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---------|---------------|------------------|-----------|--------------|------|---|-----|-----------|
| pH | 7.5 | HF | 7.5 | | SU | | 0.7 | 20 |

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-634830/1-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634830

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|-----------|--------------|-----------------------|-----------------------|----------------|----------------|---------|----------------|----------------|---------|
| Radium-226 | <0.128 | U | 0.0642 | 0.0642 | 1.00 | 0.128 | pCi/L | 11/02/23 06:21 | 12/01/23 20:13 | 1 |
| Carrier | MB %Yield | MB Qualifier | Limits | | Prepared | Analyzed | Dil Fac | | | |
| Barium | 88.4 | | 30 - 110 | | 11/02/23 06:21 | 12/01/23 20:13 | 1 | | | |

Lab Sample ID: LCS 160-634830/2-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634830

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|-------------|---------------|----------|-----------------------|------|-------|-------|------|-------------|
| Radium-226 | 11.3 | 11.36 | | 1.21 | 1.00 | 0.129 | pCi/L | 100 | 75 - 125 |
| Carrier | LCS %Yield | LCS Qualifier | Limits | | | | | | |
| Barium | 94.6 | | 30 - 110 | | | | | | |

Lab Sample ID: MB 160-634836/1-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634836

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|-----------|--------------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.149 | U | 0.0956 | 0.0960 | 1.00 | 0.149 | pCi/L | 11/02/23 06:58 | 12/01/23 07:13 | 1 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-634836/1-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634836

| Carrier | <i>MB</i> %Yield | <i>MB</i> Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---------|---------------------|------------------------|----------|----------------|----------------|---------|
| Barium | 100 | | 30 - 110 | 11/02/23 06:58 | 12/01/23 07:13 | 1 |

Lab Sample ID: LCS 160-634836/2-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634836

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|-------------|------------|----------|-----------------------|------|-------|-------|------|-------------|
| Radium-226 | 11.3 | 10.91 | | 1.21 | 1.00 | 0.183 | pCi/L | 96 | 75 - 125 |

| Carrier | <i>LCS</i> %Yield | <i>LCS</i> Qualifier | Limits |
|---------|----------------------|-------------------------|----------|
| Barium | 93.3 | | 30 - 110 |

Lab Sample ID: 310-268442-9 MS
Matrix: Ground Water
Analysis Batch: 638995

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 634836

| Analyte | Sample Result | Sample Qual | Spike Added | MS Result | MS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits |
|------------|---------------|-------------|-------------|-----------|---------|-----------------------|------|-------|-------|------|-------------|
| Radium-226 | <0.139 | U | 11.2 | 9.919 | | 1.12 | 1.00 | 0.159 | pCi/L | 88 | 60 - 140 |

| Carrier | <i>MS</i> %Yield | <i>MS</i> Qualifier | Limits |
|---------|---------------------|------------------------|----------|
| Barium | 88.4 | | 30 - 110 |

Lab Sample ID: 310-268442-9 MSD
Matrix: Ground Water
Analysis Batch: 638995

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 634836

| Analyte | Sample Result | Sample Qual | Spike Added | MSD Result | MSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | RER | RER Limit |
|------------|---------------|-------------|-------------|------------|----------|-----------------------|------|-------|-------|------|-------------|------|-----------|
| Radium-226 | <0.139 | U | 11.3 | 11.33 | | 1.27 | 1.00 | 0.146 | pCi/L | 100 | 60 - 140 | 0.59 | 1 |

| Carrier | <i>MSD</i> %Yield | <i>MSD</i> Qualifier | Limits |
|---------|----------------------|-------------------------|----------|
| Barium | 82.5 | | 30 - 110 |

Lab Sample ID: MB 160-634839/1-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634839

| Analyte | <i>MB</i> Result | <i>MB</i> Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|------------|---------------------|------------------------|-----------------------|-----------------------|------|-------|-------|----------------|----------------|---------|
| Radium-226 | <0.128 | U | 0.0782 | 0.0784 | 1.00 | 0.128 | pCi/L | 11/02/23 07:22 | 12/01/23 16:02 | 1 |

| Carrier | <i>MB</i> %Yield | <i>MB</i> Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---------|---------------------|------------------------|----------|----------------|----------------|---------|
| Barium | 97.3 | | 30 - 110 | 11/02/23 07:22 | 12/01/23 16:02 | 1 |

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QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-634839/2-A
Matrix: Water
Analysis Batch: 638995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634839

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | |
|----------------|---------------|------------------|---------------|-----------------------|------|-------|-------|------|-------------|-----|--|
| | | | | | | | | | 75 | 125 | |
| Radium-226 | 11.3 | 11.86 | | 1.29 | 1.00 | 0.150 | pCi/L | 105 | 75 | 125 | |
| | | LCS | LCS | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | | |
| Barium | 93.3 | | 30 - 110 | | | | | | | | |

Lab Sample ID: 310-268442-12 MS
Matrix: Ground Water
Analysis Batch: 638995

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 634839

| Analyte | Sample Result | Sample Qual | Spike Added | MS Result | MS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | |
|----------------|---------------|------------------|---------------|-----------|---------|-----------------------|------|-------|-------|------|-------------|-----|
| | | | | | | | | | | | 60 | 140 |
| Radium-226 | <0.143 | U | 11.3 | 11.29 | | 1.26 | 1.00 | 0.145 | pCi/L | 99 | 60 | 140 |
| | | MS | MS | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | | | |
| Barium | 82.7 | | 30 - 110 | | | | | | | | | |

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 638995

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 634839

| Analyte | Sample Result | Sample Qual | Spike Added | MSD Result | MSD Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | | RER | Limit |
|----------------|---------------|------------------|---------------|------------|----------|-----------------------|------|-------|-------|------|-------------|-----|------|-------|
| | | | | | | | | | | | 60 | 140 | 0.04 | 1 |
| Radium-226 | <0.143 | U | 11.3 | 11.19 | | 1.24 | 1.00 | 0.182 | pCi/L | 98 | 60 | 140 | 0.04 | 1 |
| | | MSD | MSD | | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | | | | | |
| Barium | 86.7 | | 30 - 110 | | | | | | | | | | | |

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-634834/1-A
Matrix: Water
Analysis Batch: 638352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634834

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac | |
|----------------|---------------|------------------|-----------------------|-----------------------|-----------------|----------------|-------|----------------|----------------|---------|----------------|
| | | | | | | | | | | | 11/02/23 06:55 |
| Radium-228 | <0.540 | U | 0.312 | 0.312 | 1.00 | 0.540 | pCi/L | 11/02/23 06:55 | 11/27/23 15:59 | 1 | |
| | | MB | MB | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac | | | | | |
| Barium | 88.4 | | 30 - 110 | 11/02/23 06:55 | 11/27/23 15:59 | 1 | | | | | |
| Y Carrier | 85.6 | | 30 - 110 | 11/02/23 06:55 | 11/27/23 15:59 | 1 | | | | | |

QC Sample Results

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-634834/2-A
Matrix: Water
Analysis Batch: 638352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634834

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | |
|----------------|-------------|------------|----------|-----------------------|------|-------|-------|------|-------------|-----|
| | | | | | | | | | 75 | 125 |
| Radium-228 | 7.69 | 9.073 | | 1.41 | 1.00 | 0.705 | pCi/L | 118 | 75 | 125 |
| LCS LCS | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | |
| Barium | 94.6 | | 30 - 110 | | | | | | | |
| Y Carrier | 78.1 | | 30 - 110 | | | | | | | |

Lab Sample ID: MB 160-634838/1-A
Matrix: Water
Analysis Batch: 638434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634838

| Analyte | MB Result | MB Qualifier | Count Uncert. (2σ+/-) | Total Uncert. (2σ+/-) | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|--------------|-----------|--------------|-----------------------|-----------------------|----------------|----------------|---------|----------|----------|---------|
| | | | | | | | | | | |
| MB MB | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | Prepared | Analyzed | Dil Fac | | | |
| Barium | 100 | | 30 - 110 | | 11/02/23 07:19 | 11/28/23 11:56 | 1 | | | |
| Y Carrier | 84.1 | | 30 - 110 | | 11/02/23 07:19 | 11/28/23 11:56 | 1 | | | |

Lab Sample ID: LCS 160-634838/2-A
Matrix: Water
Analysis Batch: 638434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634838

| Analyte | Spike Added | LCS Result | LCS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | |
|----------------|-------------|------------|----------|-----------------------|------|-------|-------|------|-------------|-----|
| | | | | | | | | | 75 | 125 |
| Radium-228 | 7.68 | 6.758 | | 1.05 | 1.00 | 0.652 | pCi/L | 88 | 75 | 125 |
| LCS LCS | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | |
| Barium | 93.3 | | 30 - 110 | | | | | | | |
| Y Carrier | 86.0 | | 30 - 110 | | | | | | | |

Lab Sample ID: 310-268442-9 MS
Matrix: Ground Water
Analysis Batch: 638569

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 634838

| Analyte | Sample Result | Sample Qual | Spike Added | MS Result | MS Qual | Total Uncert. (2σ+/-) | RL | MDC | Unit | %Rec | %Rec Limits | |
|--------------|---------------|-------------|-------------|-----------|---------|-----------------------|------|-------|-------|------|-------------|-----|
| | | | | | | | | | | | 60 | 140 |
| Radium-228 | <0.473 | U | 7.60 | 7.483 | | 1.11 | 1.00 | 0.536 | pCi/L | 93 | 60 | 140 |
| MS MS | | | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | | | |
| Barium | 88.4 | | 30 - 110 | | | | | | | | | |
| Y Carrier | 86.0 | | 30 - 110 | | | | | | | | | |

QC Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 310-268442-9 MSD
Matrix: Ground Water
Analysis Batch: 638569

Client Sample ID: U-5D - CCR
Prep Type: Total/NA
Prep Batch: 634838

| Analyte | Sample | Sample | Spike | MSD | MSD | Total | RL | MDC | Unit | %Rec | %Rec | RER | RER |
|----------------|---------------|------------------|---------------|--------|------|---------|------|-------|-------|------|----------|------|-------|
| | Result | Qual | | Result | Qual | Uncert. | | | | | Limits | | Limit |
| Radium-228 | <0.473 | U | 7.63 | 9.720 | | 1.37 | 1.00 | 0.598 | pCi/L | 122 | 60 - 140 | 0.90 | 1 |
| MSD MSD | | | | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | | | | |
| Barium | 82.5 | | 30 - 110 | | | | | | | | | | |
| Y Carrier | 86.4 | | 30 - 110 | | | | | | | | | | |

Lab Sample ID: MB 160-634841/1-A
Matrix: Water
Analysis Batch: 638569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 634841

| Analyte | MB | MB | Count | Total | RL | MDC | Unit | Prepared | Analyzed | Dil Fac |
|----------------|---------------|------------------|---------------|-----------------|-----------------|----------------|-------|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | | |
| Radium-228 | <0.545 | U | 0.333 | 0.334 | 1.00 | 0.545 | pCi/L | 11/02/23 07:46 | 11/28/23 15:52 | 1 |
| MB MB | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | Prepared | Analyzed | Dil Fac | | | | |
| Barium | 97.3 | | 30 - 110 | 11/02/23 07:46 | 11/28/23 15:52 | 1 | | | | |
| Y Carrier | 83.0 | | 30 - 110 | 11/02/23 07:46 | 11/28/23 15:52 | 1 | | | | |

Lab Sample ID: LCS 160-634841/2-A
Matrix: Water
Analysis Batch: 638569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 634841

| Analyte | Spike | LCS | LCS | Total | RL | MDC | Unit | %Rec | %Rec |
|----------------|---------------|------------------|---------------|---------|------|-------|-------|------|----------|
| | | Result | Qual | Uncert. | | | | | Limits |
| Radium-228 | 7.68 | 8.778 | | 1.23 | 1.00 | 0.556 | pCi/L | 114 | 75 - 125 |
| LCS LCS | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | |
| Barium | 93.3 | | 30 - 110 | | | | | | |
| Y Carrier | 80.7 | | 30 - 110 | | | | | | |

Lab Sample ID: 310-268442-12 MS
Matrix: Ground Water
Analysis Batch: 638569

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 634841

| Analyte | Sample | Sample | Spike | MS | MS | Total | RL | MDC | Unit | %Rec | %Rec |
|----------------|---------------|------------------|---------------|--------|------|---------|------|-------|-------|------|----------|
| | Result | Qual | | Result | Qual | Uncert. | | | | | Limits |
| Radium-228 | <0.587 | U | 7.64 | 9.524 | | 1.36 | 1.00 | 0.594 | pCi/L | 123 | 60 - 140 |
| MS MS | | | | | | | | | | | |
| Carrier | %Yield | Qualifier | Limits | | | | | | | | |
| Barium | 82.7 | | 30 - 110 | | | | | | | | |
| Y Carrier | 76.6 | | 30 - 110 | | | | | | | | |

QC Sample Results

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 310-268442-12 MSD
Matrix: Ground Water
Analysis Batch: 638569

Client Sample ID: D-2S - CCR
Prep Type: Total/NA
Prep Batch: 634841

| Analyte | Sample | Sample | Spike | MSD | MSD | Total | RL | MDC | Unit | %Rec | %Rec | RER | RER |
|------------------|---------------|------------------|---------------|--------|------|--------------------|------|-------|-------|------|----------|------|-------|
| | Result | Qual | Added | Result | Qual | Uncert. (2σ+/-) | | | | | Limits | | Limit |
| Radium-228 | <0.587 | U | 7.66 | 8.471 | | 1.23 | 1.00 | 0.603 | pCi/L | 109 | 60 - 140 | 0.41 | 1 |
| | <i>MSD</i> | <i>MSD</i> | | | | | | | | | | | |
| <i>Carrier</i> | <i>%Yield</i> | <i>Qualifier</i> | <i>Limits</i> | | | | | | | | | | |
| <i>Barium</i> | 86.7 | | 30 - 110 | | | | | | | | | | |
| <i>Y Carrier</i> | 80.0 | | 30 - 110 | | | | | | | | | | |

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QC Association Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

HPLC/IC

Analysis Batch: 405486

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|--------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | 9056A | |
| MB 310-405486/3 | Method Blank | Total/NA | Water | 9056A | |
| LCS 310-405486/4 | Lab Control Sample | Total/NA | Water | 9056A | |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | 9056A | |

Analysis Batch: 405626

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|-----------------------|-----------|--------------|--------|------------|
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | 9056A | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | 9056A | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | 9056A | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | 9056A | |
| MB 310-405626/3 | Method Blank | Total/NA | Water | 9056A | |
| LCS 310-405626/37 | Lab Control Sample | Total/NA | Water | 9056A | |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | 9056A | |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | 9056A | |

Metals

Prep Batch: 404270

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------|------------|
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | 3005A | |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Metals (Continued)

Prep Batch: 404270 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | 3005A | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | 3005A | |
| MB 310-404270/1-A | Method Blank | Total/NA | Water | 3005A | |
| LCS 310-404270/2-A | Lab Control Sample | Total/NA | Water | 3005A | |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | 3005A | |

Prep Batch: 404271

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | 3005A | |
| MB 310-404271/1-A | Method Blank | Total/NA | Water | 3005A | |
| LCS 310-404271/2-A | Lab Control Sample | Total/NA | Water | 3005A | |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | 3005A | |
| 310-268442-1 DU | D-1D - CCR | Total/NA | Ground Water | 3005A | |

Analysis Batch: 405090

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | 6020B | 404270 |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Metals (Continued)

Analysis Batch: 405090 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | 6020B | 404270 |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | 6020B | 404270 |
| MB 310-404270/1-A | Method Blank | Total/NA | Water | 6020B | 404270 |
| MB 310-404271/1-A | Method Blank | Total/NA | Water | 6020B | 404271 |
| LCS 310-404270/2-A | Lab Control Sample | Total/NA | Water | 6020B | 404270 |
| LCS 310-404271/2-A | Lab Control Sample | Total/NA | Water | 6020B | 404271 |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | 6020B | 404271 |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | 6020B | 404270 |
| 310-268442-1 DU | D-1D - CCR | Total/NA | Ground Water | 6020B | 404271 |

Prep Batch: 405441

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | 7470A | |
| MB 310-405441/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 310-405441/2-A | Lab Control Sample | Total/NA | Water | 7470A | |

Prep Batch: 405442

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | 7470A | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | 7470A | |
| MB 310-405442/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 310-405442/2-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | 7470A | |

Prep Batch: 405443

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|--------|------------|
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | 7470A | |
| MB 310-405443/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 310-405443/2-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | 7470A | |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | 7470A | |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Metals

Analysis Batch: 405672

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|--------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | 7470A | 405441 |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | 7470A | 405443 |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | 7470A | 405442 |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | 7470A | 405442 |
| MB 310-405441/1-A | Method Blank | Total/NA | Water | 7470A | 405441 |
| MB 310-405442/1-A | Method Blank | Total/NA | Water | 7470A | 405442 |
| MB 310-405443/1-A | Method Blank | Total/NA | Water | 7470A | 405443 |
| LCS 310-405441/2-A | Lab Control Sample | Total/NA | Water | 7470A | 405441 |
| LCS 310-405442/2-A | Lab Control Sample | Total/NA | Water | 7470A | 405442 |
| LCS 310-405443/2-A | Lab Control Sample | Total/NA | Water | 7470A | 405443 |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | 7470A | 405442 |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | 7470A | 405443 |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | 7470A | 405443 |

General Chemistry

Analysis Batch: 404114

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|--------------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

General Chemistry (Continued)

Analysis Batch: 404114 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|-----------------------|-----------|--------------|--------------|------------|
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | SM 4500 H+ B | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | SM 4500 H+ B | |
| LCS 310-404114/1 | Lab Control Sample | Total/NA | Water | SM 4500 H+ B | |
| LCS 310-404114/26 | Lab Control Sample | Total/NA | Water | SM 4500 H+ B | |
| 310-268442-6 DU | D-9 - CCR | Total/NA | Ground Water | SM 4500 H+ B | |
| 310-268442-13 DU | D-3S - CCR | Total/NA | Ground Water | SM 4500 H+ B | |

Analysis Batch: 404259

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|----------|------------|
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | SM 2540C | |
| MB 310-404259/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 310-404259/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 310-268442-9 DU | U-5D - CCR | Total/NA | Ground Water | SM 2540C | |

Analysis Batch: 404260

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------------|----------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | SM 2540C | |
| MB 310-404260/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 310-404260/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 310-268442-12 DU | D-2S - CCR | Total/NA | Ground Water | SM 2540C | |

Analysis Batch: 404387

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|---------------------|-----------|--------------|----------|------------|
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | SM 2540C | |
| MB 310-404387/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 310-404387/26 | Lab Control Sample | Total/NA | Water | SM 2540C | |

Analysis Batch: 404534

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|-----------------------|-----------|--------------|----------|------------|
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | SM 2540C | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | SM 2540C | |
| MB 310-404534/1 | Method Blank | Total/NA | Water | SM 2540C | |
| LCS 310-404534/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| 310-268442-6 DU | D-9 - CCR | Total/NA | Ground Water | SM 2540C | |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Rad

Prep Batch: 634830

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|------------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| MB 160-634830/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-634830/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |

Prep Batch: 634834

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|-----------|------------|
| 310-268442-1 | D-1D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-2 | D-2D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-3 | D-3D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| MB 160-634834/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-634834/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |

Prep Batch: 634836

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|------------|------------|
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | PrecSep-21 | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | PrecSep-21 | |
| MB 160-634836/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-634836/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | PrecSep-21 | |

Prep Batch: 634838

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------------|-----------|------------|
| 310-268442-4 | D-4D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-5 | D-5D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-6 | D-9 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-7 | U-4D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-8 | U-4S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-9 | U-5D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-10 | U-5S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-11 | D-1S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-14 | D-5S2 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-15 | D-4S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-16 | D-8 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-17 | DUP-1 - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-18 | DUP-2 - CCR | Total/NA | Ground Water | PrecSep_0 | |

Eurofins Cedar Falls

QC Association Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Rad (Continued)

Prep Batch: 634838 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|-----------------------|-----------|--------------|-----------|------------|
| 310-268442-19 | Equipment Blank - CCR | Total/NA | Water | PrecSep_0 | |
| 310-268442-20 | Field Blank 1 - CCR | Total/NA | Water | PrecSep_0 | |
| MB 160-634838/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-634838/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 310-268442-9 MS | U-5D - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-9 MSD | U-5D - CCR | Total/NA | Ground Water | PrecSep_0 | |

Prep Batch: 634839

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|------------|------------|
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| MB 160-634839/1-A | Method Blank | Total/NA | Water | PrecSep-21 | |
| LCS 160-634839/2-A | Lab Control Sample | Total/NA | Water | PrecSep-21 | |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | PrecSep-21 | |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | PrecSep-21 | |

Prep Batch: 634841

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------------|-----------|------------|
| 310-268442-12 | D-2S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-13 | D-3S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| MB 160-634841/1-A | Method Blank | Total/NA | Water | PrecSep_0 | |
| LCS 160-634841/2-A | Lab Control Sample | Total/NA | Water | PrecSep_0 | |
| 310-268442-12 MS | D-2S - CCR | Total/NA | Ground Water | PrecSep_0 | |
| 310-268442-12 MSD | D-2S - CCR | Total/NA | Ground Water | PrecSep_0 | |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1D - CCR

Date Collected: 10/26/23 12:05

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-1

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 17:10 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:10 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 12:54 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:09 |
| Total/NA | Prep | PrecSep-21 | | | 634830 | BMW | EET SL | 11/02/23 06:21 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 22:31 |
| Total/NA | Prep | PrecSep_0 | | | 634834 | BMW | EET SL | 11/02/23 06:55 |
| Total/NA | Analysis | 9320 | | 1 | 638362 | FLC | EET SL | 11/27/23 16:10 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639395 | EMH | EET SL | 12/04/23 22:20 |

Client Sample ID: D-2D - CCR

Date Collected: 10/26/23 14:00

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-2

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 17:47 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:17 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 12:56 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:10 |
| Total/NA | Prep | PrecSep-21 | | | 634830 | BMW | EET SL | 11/02/23 06:21 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 22:31 |
| Total/NA | Prep | PrecSep_0 | | | 634834 | BMW | EET SL | 11/02/23 06:55 |
| Total/NA | Analysis | 9320 | | 1 | 638362 | FLC | EET SL | 11/27/23 16:10 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639395 | EMH | EET SL | 12/04/23 22:20 |

Client Sample ID: D-3D - CCR

Date Collected: 10/26/23 10:20

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-3

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 18:00 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:20 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 12:58 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:20 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-3D - CCR

Lab Sample ID: 310-268442-3

Date Collected: 10/26/23 10:20

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 634830 | BMW | EET SL | 11/02/23 06:21 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 22:31 |
| Total/NA | Prep | PrecSep_0 | | | 634834 | BMW | EET SL | 11/02/23 06:55 |
| Total/NA | Analysis | 9320 | | 1 | 638362 | FLC | EET SL | 11/27/23 16:10 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639395 | EMH | EET SL | 12/04/23 22:20 |

Client Sample ID: D-4D - CCR

Lab Sample ID: 310-268442-4

Date Collected: 10/27/23 09:25

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 18:12 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:23 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:05 |
| Total/NA | Analysis | SM 2540C | | 1 | 404387 | D7CP | EET CF | 10/31/23 14:51 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:32 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:15 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638434 | FLC | EET SL | 11/28/23 11:56 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: D-5D - CCR

Lab Sample ID: 310-268442-5

Date Collected: 10/26/23 09:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 18:25 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:27 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:07 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:24 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:15 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-9 - CCR

Date Collected: 10/27/23 11:15

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-6

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 18:38 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:30 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:09 |
| Total/NA | Analysis | SM 2540C | | 1 | 404534 | D7CP | EET CF | 11/01/23 16:48 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:14 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:15 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: U-4D - CCR

Date Collected: 10/25/23 12:15

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-7

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 18:50 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:33 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:11 |
| Total/NA | Analysis | SM 2540C | | 1 | 404259 | D7CP | EET CF | 10/30/23 15:35 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:31 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:15 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: U-4S - CCR

Date Collected: 10/25/23 11:25

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-8

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 19:03 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:50 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:13 |
| Total/NA | Analysis | SM 2540C | | 1 | 404259 | D7CP | EET CF | 10/30/23 15:35 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:29 |

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: U-4S - CCR

Lab Sample ID: 310-268442-8

Date Collected: 10/25/23 11:25

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:15 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: U-5D - CCR

Lab Sample ID: 310-268442-9

Date Collected: 10/25/23 14:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405486 | QTZ5 | EET CF | 11/08/23 19:15 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 23:53 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:22 |
| Total/NA | Analysis | SM 2540C | | 1 | 404259 | D7CP | EET CF | 10/30/23 15:35 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:30 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:16 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: U-5S - CCR

Lab Sample ID: 310-268442-10

Date Collected: 10/26/23 13:20

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 17:59 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 10:50 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/07/23 00:10 |
| Total/NA | Prep | 7470A | | | 405441 | NFT2 | EET CF | 11/09/23 11:05 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:16 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:19 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:16 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:06 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-1S - CCR

Lab Sample ID: 310-268442-11

Date Collected: 10/26/23 11:40

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 18:13 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 11:04 |
| Total/NA | Prep | 3005A | | | 404271 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/07/23 00:13 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:33 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:25 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:16 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:06 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: D-2S - CCR

Lab Sample ID: 310-268442-12

Date Collected: 10/26/23 13:15

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 18:27 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 11:18 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 20:08 |
| Total/NA | Prep | 7470A | | | 405443 | NFT2 | EET CF | 11/09/23 11:10 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 11:05 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:17 |
| Total/NA | Prep | PrecSep-21 | | | 634839 | BMW | EET SL | 11/02/23 07:22 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 16:02 |
| Total/NA | Prep | PrecSep_0 | | | 634841 | BMW | EET SL | 11/02/23 07:46 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 15:52 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639177 | SCB | EET SL | 12/01/23 21:30 |

Client Sample ID: D-3S - CCR

Lab Sample ID: 310-268442-13

Date Collected: 10/26/23 10:05

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 19:10 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 12:01 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 20:56 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:35 |

Eurofins Cedar Falls

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-3S - CCR

Date Collected: 10/26/23 10:05

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-13

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:27 |
| Total/NA | Prep | PrecSep-21 | | | 634839 | BMW | EET SL | 11/02/23 07:22 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 16:03 |
| Total/NA | Prep | PrecSep_0 | | | 634841 | BMW | EET SL | 11/02/23 07:46 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 15:53 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639177 | SCB | EET SL | 12/01/23 21:30 |

Client Sample ID: D-5S2 - CCR

Date Collected: 10/26/23 08:30

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-14

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 19:24 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 12:16 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 20:59 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:37 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:26 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:16 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:06 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: D-4S - CCR

Date Collected: 10/27/23 09:10

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-15

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 19:38 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 12:58 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 21:02 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:39 |
| Total/NA | Analysis | SM 2540C | | 1 | 404534 | D7CP | EET CF | 11/01/23 16:48 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:35 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 638995 | SCB | EET SL | 12/01/23 07:16 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:06 |

Eurofins Cedar Falls

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: D-4S - CCR

Date Collected: 10/27/23 09:10

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-15

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: D-8 - CCR

Date Collected: 10/27/23 12:00

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-16

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 19:52 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 13:14 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 21:19 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:41 |
| Total/NA | Analysis | SM 2540C | | 1 | 404534 | D7CP | EET CF | 11/01/23 16:48 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:33 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 639150 | SCB | EET SL | 12/01/23 07:24 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:06 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: DUP-1 - CCR

Date Collected: 10/25/23 00:00

Date Received: 10/28/23 10:20

Lab Sample ID: 310-268442-17

Matrix: Ground Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 20:06 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 13:28 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 21:22 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:43 |
| Total/NA | Analysis | SM 2540C | | 1 | 404260 | D7CP | EET CF | 10/30/23 15:41 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:11 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 639150 | SCB | EET SL | 12/01/23 07:24 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:07 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Lab Chronicle

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: DUP-2 - CCR

Lab Sample ID: 310-268442-18

Date Collected: 10/26/23 00:00

Matrix: Ground Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/08/23 20:48 |
| Total/NA | Analysis | 9056A | | 5 | 405626 | QTZ5 | EET CF | 11/09/23 13:42 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 21:26 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:46 |
| Total/NA | Analysis | SM 2540C | | 1 | 404387 | D7CP | EET CF | 10/31/23 14:51 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:18 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 639150 | SCB | EET SL | 12/01/23 07:24 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638569 | FLC | EET SL | 11/28/23 12:07 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: Equipment Blank - CCR

Lab Sample ID: 310-268442-19

Date Collected: 10/27/23 12:00

Matrix: Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 1 | 405626 | QTZ5 | EET CF | 11/08/23 21:02 |
| Total/NA | Analysis | 9056A | | 1 | 405626 | QTZ5 | EET CF | 11/09/23 13:56 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 21:29 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:48 |
| Total/NA | Analysis | SM 2540C | | 1 | 404534 | D7CP | EET CF | 11/01/23 16:48 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:16 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 639150 | SCB | EET SL | 12/01/23 07:24 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638568 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-268442-20

Date Collected: 10/26/23 15:00

Matrix: Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|--------|----------------------|
| Total/NA | Analysis | 9056A | | 1 | 405626 | QTZ5 | EET CF | 11/08/23 21:16 |
| Total/NA | Analysis | 9056A | | 1 | 405626 | QTZ5 | EET CF | 11/09/23 14:10 |
| Total/NA | Prep | 3005A | | | 404270 | KCK5 | EET CF | 10/31/23 10:40 |
| Total/NA | Analysis | 6020B | | 1 | 405090 | DHM5 | EET CF | 11/06/23 21:32 |
| Total/NA | Prep | 7470A | | | 405442 | NFT2 | EET CF | 11/09/23 11:08 |
| Total/NA | Analysis | 7470A | | 1 | 405672 | DHM5 | EET CF | 11/10/23 13:50 |

Eurofins Cedar Falls

Lab Chronicle

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Client Sample ID: Field Blank 1 - CCR

Lab Sample ID: 310-268442-20

Date Collected: 10/26/23 15:00

Matrix: Water

Date Received: 10/28/23 10:20

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|------------------|-------------------|---------------------|------------|------------------------|---------------------|----------------|------------|-----------------------------|
| Total/NA | Analysis | SM 2540C | | 1 | 404387 | D7CP | EET CF | 10/31/23 14:51 |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | 404114 | A3GU | EET CF | 10/28/23 12:21 |
| Total/NA | Prep | PrecSep-21 | | | 634836 | BMW | EET SL | 11/02/23 06:58 |
| Total/NA | Analysis | 9315 | | 1 | 639150 | SCB | EET SL | 12/01/23 07:24 |
| Total/NA | Prep | PrecSep_0 | | | 634838 | BMW | EET SL | 11/02/23 07:19 |
| Total/NA | Analysis | 9320 | | 1 | 638568 | FLC | EET SL | 11/28/23 12:05 |
| Total/NA | Analysis | Ra226_Ra228 | | 1 | 639178 | SCB | EET SL | 12/01/23 21:33 |

Laboratory References:

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

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

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 | 12-31-23 |

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|--------------------------|---|----------------------------|-----------------|
| Alaska (UST) | State | 20-001 | 05-06-25 |
| ANAB | Dept. of Defense ELAP | L2305 | 04-06-25 |
| ANAB | Dept. of Energy | L2305.01 | 04-06-25 |
| ANAB | ISO/IEC 17025 | L2305 | 04-06-25 |
| Arizona | State | AZ0813 | 12-08-23 |
| California | Los Angeles County Sanitation Districts | 10259 | 06-30-22 * |
| California | State | 2886 | 06-30-24 |
| Connecticut | State | PH-0241 | 03-31-25 |
| Florida | NELAP | E87689 | 06-30-24 |
| HI - RadChem Recognition | State | n/a | 06-30-24 |
| Illinois | NELAP | 200023 | 11-30-24 |
| Iowa | State | 373 | 12-01-24 |
| Kansas | NELAP | E-10236 | 10-31-24 |
| Kentucky (DW) | State | KY90125 | 12-31-23 |
| Kentucky (WW) | State | KY90125 (Permit KY0004049) | 12-31-23 |
| Louisiana | NELAP | 04080 | 06-30-22 * |
| Louisiana (All) | NELAP | 04080 | 06-30-24 |
| Louisiana (DW) | State | LA011 | 12-31-23 |
| Maryland | State | 310 | 09-30-24 |
| Massachusetts | State | M-MO054 | 06-30-24 |
| MI - RadChem Recognition | State | 9005 | 06-30-24 |
| Missouri | State | 780 | 06-30-25 |
| Nevada | State | MO000542020-1 | 07-31-24 |
| New Jersey | NELAP | MO002 | 06-30-24 |
| New Mexico | State | MO00054 | 06-30-24 |
| New York | NELAP | 11616 | 03-31-24 |
| North Carolina (DW) | State | 29700 | 07-31-24 |
| North Dakota | State | R-207 | 06-30-24 |
| Oklahoma | NELAP | 9997 | 08-31-24 |
| Oregon | NELAP | 4157 | 09-01-24 |
| Pennsylvania | NELAP | 68-00540 | 02-28-24 |
| South Carolina | State | 85002001 | 06-30-24 |
| Texas | NELAP | T104704193 | 07-31-24 |
| US Fish & Wildlife | US Federal Programs | 058448 | 07-31-24 |
| USDA | US Federal Programs | P330-17-00028 | 05-18-26 |
| Utah | NELAP | MO000542021-14 | 07-31-24 |
| Virginia | NELAP | 10310 | 06-15-25 |
| Washington | State | C592 | 08-30-24 |
| West Virginia DEP | State | 381 | 12-31-23 |

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

Method Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

| Method | Method Description | Protocol | Laboratory |
|--------------|--|----------|------------|
| 9056A | Anions, Ion Chromatography | SW846 | EET CF |
| 6020B | Metals (ICP/MS) | SW846 | EET CF |
| 7470A | Mercury (CVAA) | SW846 | EET CF |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | EET CF |
| SM 4500 H+ B | pH | SM | EET CF |
| 9315 | Radium-226 (GFPC) | SW846 | EET SL |
| 9320 | Radium-228 (GFPC) | SW846 | EET SL |
| Ra226_Ra228 | Combined Radium-226 and Radium-228 | TAL-STL | EET SL |
| 3005A | Preparation, Total Metals | SW846 | EET CF |
| 7470A | Preparation, Mercury | SW846 | EET CF |
| PrecSep_0 | Preparation, Precipitate Separation | None | EET SL |
| PrecSep-21 | Preparation, Precipitate Separation (21-Day In-Growth) | None | EET SL |

Protocol References:

None = None

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.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Environment Testing
America



310-268442 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|--|--|------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LR</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>1</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: | <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | |
| Thermometer ID: | <u>P</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>1.9</u> | Corrected Temp (°C): <u>1.9</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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Environment Testing
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|-------------------------|---|--|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LR</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: |
| Multiple Coolers? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>2</u> of <u>8</u> |
| Cooler Custody Seals Present? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>P</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>1.7</u> | | Corrected Temp (°C): <u>1.7</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|--|--|------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LP</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>3</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: | <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | |
| Thermometer ID: | <u>P</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>1.7</u> | Corrected Temp (°C): <u>1.7</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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|--|--|------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LP</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>4</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: | <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | |
| Thermometer ID: | <u>P</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|-------------------------|----------------------------------|------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LR</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID:</i> | | | |
| Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler # <u>5</u> of <u>8</u></i> | | | |
| Cooler Custody Seals Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler custody seals intact?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Which VOA samples are in cooler? ↓</i> | | | |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>P</u> | | Correction Factor (°C): <u>0</u> | |
| Temp Blank Temperature <i>If no temp blank or temp blank temperature above criteria, proceed to Sample Container temperature</i> | | | |
| Uncorrected Temp (°C): <u>0.9</u> | | Corrected Temp (°C): <u>0.9</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) <i>If yes: Is there evidence that the chilling process began?</i> <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|-------------------------|---|--|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LR</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: |
| Multiple Coolers? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>6</u> of <u>8</u> |
| Cooler Custody Seals Present? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>P</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>2.8</u> | | Corrected Temp (°C): <u>2.8</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
| | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|-------------------------|---|--|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LR</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: |
| Multiple Coolers? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>7</u> of <u>8</u> |
| Cooler Custody Seals Present? | | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Sample Custody Seals Present? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trip Blank Present? | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ |
| Temperature Record | | | |
| Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE | | | |
| Thermometer ID: <u>P</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? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| NOTE: If yes, contact PM before proceeding. If no, proceed with login | | | |
| Additional Comments | | | |
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Cooler/Sample Receipt and Temperature Log Form

| | | | |
|---|--|--|------------------------|
| Client Information | | | |
| Client: <u>GES</u> | | | |
| City/State: | CITY | STATE | Project: |
| Receipt Information | | | |
| Date/Time Received: | DATE <u>10/28/23</u> | TIME <u>1020</u> | Received By: <u>LR</u> |
| Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____ | | | |
| Condition of Cooler/Containers | | | |
| Sample(s) received in Cooler? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler ID: _____ | |
| Multiple Coolers? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler # <u>8</u> of <u>8</u> | |
| Cooler Custody Seals Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| Sample Custody Seals Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Trip Blank Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes: Which VOA samples are in cooler? ↓ | |
| Temperature Record | | | |
| Coolant: | <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ | <input type="checkbox"/> NONE | |
| Thermometer ID: <u>P</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>3.1</u> | Corrected Temp (°C): <u>3.1</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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> 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?) <input type="checkbox"/> Yes <input type="checkbox"/> 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: | | | | | | | | |
|--|-------------|---|------------------------------|---|-----------------------------------|----------------------------|-----------------------------------|-----------------------------------|---|--|-----------------|-----------------------------------|----------------------------|----------------------------|
| Nicholas Schlage | | Bindert, Zach T | | 1414 | | 310-68363-19638.1 | | | | | | | | |
| Company: Groundwater & Environmental Services Inc | | E-Mail: Zach.Bindert@Eurofins.com | | State of Origin: | | Page: Page 1 of 2 | | | | | | | | |
| Address: 1301 Corporate Center Drive Suite 190 | | PWSID: | | Job #: | | 350228740/870 | | | | | | | | |
| City: Eagan | | TAT Requested (days): | | Preservation Codes: | | | | | | | | | | |
| State, Zip: MN, 55121-1562 | | Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other | | | | | | | | | | |
| Phone: 651-742-6685 | | Purchase Order not required | | M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - MCAA V - pH 4-5 W - other (specify) | | | | | | | | | | |
| Email: nschlage@gesonline.com | | WO #: | | Z - other (specify) | | | | | | | | | | |
| Project Name: SKB Rosemount - CCR Monitoring | | Project #: | | Special Instructions/Note: | | | | | | | | | | |
| Site: Minnesota | | SSOW#: | | PLEASE LOGIN USING SITES AND EVENTS | | | | | | | | | | |
| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (Water, Seawater, On-water, etc.) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 9316_Ra228 - Standard Target List | 9320_Ra228 - Standard Target List | 9066A_ORGFM_28D - Chloride, Fluoride, Sulfate | CCR Metals (Sb,As,Ba,Be,Bi,Cd,Ca,Cr,Cu,Pb,Mo,Se,Te,Tl) | 6020B_7470 (Hg) | TDS - 2640C_Caled, pH - SM4600_H+ | Total Number of Containers | Special Instructions/Note: |
| D-1D CCR | 10/26/23 | 12:05 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| D-2D CCR | 10/26/23 | 14:00 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| D-3D CCR | 10/26/23 | 10:20 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| D-4D CCR | 10/27/23 | 9:25 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| D-5D CCR | 10/26/23 | 9:00 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| D-9 CCR | 10/27/23 | 11:15 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| U-4D CCR | 10/25/23 | 12:15 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| U-4S CCR | 10/25/23 | 11:25 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| U-5D CCR | 10/25/23 | 14:00 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| U-5S CCR | 10/25/23 | 13:26 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| D-1S CCR | 10/26/23 | 11:40 | 6 | Water | X | X | X | X | X | X | X | X | 5 | |
| Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological | | | | | | | | | | | | | | |
| Deliverable Requested I, II, III, IV, Other (specify) | | | | | | | | | | | | | | |
| Empty Kit Relinquished by: | | | | | | | | | | | | | | |
| Relinquished by: [Signature] Date: 10/27/23 14:00 Company: GES | | | | | | | | | | | | | | |
| Relinquished by: [Signature] Date: 10/27/23 17:00 Company: | | | | | | | | | | | | | | |
| Relinquished by: [Signature] Date: Company: | | | | | | | | | | | | | | |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | | | | | | | | | | | |
| Cooler Temperature(s) °C and Other Remarks: | | | | | | | | | | | | | | |



Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

| | | | |
|---|--|--|--|
| Client Information Client Contact: Nicholas Schlagel Company: Groundwater & Environmental Services Inc Address: 1301 Corporate Center Drive Suite 190 City: Eagan State Zip: MN, 55121-1562 Phone: 651-792-6085 Email: n.schlagel@gesonline.com Project Name: SKB Rosemount - CCR Monitoring (FALL) Site: Minnesota | | Lab P#: Bindert, Zach T E-Mail: Zach.Bindert@Eurofins.com State of Origin: MN Carmer Tracking No(s): 310-68363-19638.2 Page: Page 2 of 2 Job #: 3502287/40/870 | |
| Due Date Requested: TAT Requested (days): 5 Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Purchase Order not required PO #: Project #: 31013948 SOW#: PWSID: | | Analysis Requested 9316_Ra228 - Standard Target List 9320_Ra228 - Standard Target List 9065A_ORGM_28D - Chloride, Fluoride, Sulfate TDS - 2540C_Calcd, pH - SM4500_H+ | |
| Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Preservation Code Matrix (W=water, S=solid, O=wastewater, AT=tissue, A=air) | | Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 9316_Ra228 - Standard Target List 9320_Ra228 - Standard Target List 9065A_ORGM_28D - Chloride, Fluoride, Sulfate TDS - 2540C_Calcd, pH - SM4500_H+ | |
| Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III IV, Other (specify) | | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months | |
| Empty Kit Relinquished by Relinquished by: [Signature] Date/Time: 10/27/23 14:00 Company: Eurofins | | Method of Shipment: | |
| Relinquished by: [Signature] Date/Time: 10/27/23 17:00 Company: Eurofins | | Received by: [Signature] Date/Time: 10/28/23 10:20 Company: | |
| Relinquished by: [Signature] Date/Time: | | Received by: [Signature] Date/Time: | |
| Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Custody Seal No. | | Cooler Temperature(s) °C and Other Remarks: | |



Login Sample Receipt Checklist

Client: Waste Connections, Inc.

Job Number: 310-268442-1

Login Number: 268442

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

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



Tracer/Carrier Summary

Client: Waste Connections, Inc.
 Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9315 - Radium-226 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

| | | Percent Yield (Acceptance Limits) | |
|-------------------|------------------|-----------------------------------|--|
| Lab Sample ID | Client Sample ID | Ba (30-110) | |
| 310-268442-1 | D-1D - CCR | 85.2 | |
| 310-268442-2 | D-2D - CCR | 90.6 | |
| 310-268442-3 | D-3D - CCR | 88.1 | |
| 310-268442-4 | D-4D - CCR | 95.8 | |
| 310-268442-5 | D-5D - CCR | 95.1 | |
| 310-268442-6 | D-9 - CCR | 88.4 | |
| 310-268442-7 | U-4D - CCR | 93.8 | |
| 310-268442-8 | U-4S - CCR | 88.1 | |
| 310-268442-9 | U-5D - CCR | 90.1 | |
| 310-268442-9 MS | U-5D - CCR | 88.4 | |
| 310-268442-9 MSD | U-5D - CCR | 82.5 | |
| 310-268442-10 | U-5S - CCR | 93.1 | |
| 310-268442-11 | D-1S - CCR | 89.1 | |
| 310-268442-12 | D-2S - CCR | 83.0 | |
| 310-268442-12 MS | D-2S - CCR | 82.7 | |
| 310-268442-12 MSD | D-2S - CCR | 86.7 | |
| 310-268442-13 | D-3S - CCR | 93.6 | |
| 310-268442-14 | D-5S2 - CCR | 91.9 | |
| 310-268442-15 | D-4S - CCR | 85.2 | |
| 310-268442-16 | D-8 - CCR | 92.1 | |
| 310-268442-17 | DUP-1 - CCR | 92.3 | |
| 310-268442-18 | DUP-2 - CCR | 84.7 | |

Tracer/Carrier Legend

Ba = Barium

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

| | | Percent Yield (Acceptance Limits) | |
|--------------------|-----------------------|-----------------------------------|--|
| Lab Sample ID | Client Sample ID | Ba (30-110) | |
| 310-268442-19 | Equipment Blank - CCR | 93.3 | |
| 310-268442-20 | Field Blank 1 - CCR | 97.3 | |
| LCS 160-634830/2-A | Lab Control Sample | 94.6 | |
| LCS 160-634836/2-A | Lab Control Sample | 93.3 | |
| LCS 160-634839/2-A | Lab Control Sample | 93.3 | |
| MB 160-634830/1-A | Method Blank | 88.4 | |
| MB 160-634836/1-A | Method Blank | 100 | |
| MB 160-634839/1-A | Method Blank | 97.3 | |

Tracer/Carrier Legend

Ba = Barium

Method: 9320 - Radium-228 (GFPC)

Matrix: Ground Water

Prep Type: Total/NA

| | | Percent Yield (Acceptance Limits) | |
|---------------|------------------|-----------------------------------|---------------|
| Lab Sample ID | Client Sample ID | Ba (30-110) | Y (30-110) |
| 310-268442-1 | D-1D - CCR | 85.2 | 84.5 |

Tracer/Carrier Summary

Client: Waste Connections, Inc.
Project/Site: SKB Rosemount - CCR Monitoring

Job ID: 310-268442-1

Method: 9320 - Radium-228 (GFPC) (Continued)

Matrix: Ground Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

| Lab Sample ID | Client Sample ID | Ba (30-110) | Y (30-110) |
|-------------------|------------------|----------------|---------------|
| 310-268442-2 | D-2D - CCR | 90.6 | 82.6 |
| 310-268442-3 | D-3D - CCR | 88.1 | 82.2 |
| 310-268442-4 | D-4D - CCR | 95.8 | 83.4 |
| 310-268442-5 | D-5D - CCR | 95.1 | 83.0 |
| 310-268442-6 | D-9 - CCR | 88.4 | 81.9 |
| 310-268442-7 | U-4D - CCR | 93.8 | 87.5 |
| 310-268442-8 | U-4S - CCR | 88.1 | 86.4 |
| 310-268442-9 | U-5D - CCR | 90.1 | 87.1 |
| 310-268442-9 MS | U-5D - CCR | 88.4 | 86.0 |
| 310-268442-9 MSD | U-5D - CCR | 82.5 | 86.4 |
| 310-268442-10 | U-5S - CCR | 93.1 | 93.1 |
| 310-268442-11 | D-1S - CCR | 89.1 | 87.5 |
| 310-268442-12 | D-2S - CCR | 83.0 | 80.7 |
| 310-268442-12 MS | D-2S - CCR | 82.7 | 76.6 |
| 310-268442-12 MSD | D-2S - CCR | 86.7 | 80.0 |
| 310-268442-13 | D-3S - CCR | 93.6 | 87.5 |
| 310-268442-14 | D-5S2 - CCR | 91.9 | 83.7 |
| 310-268442-15 | D-4S - CCR | 85.2 | 88.6 |
| 310-268442-16 | D-8 - CCR | 92.1 | 84.9 |
| 310-268442-17 | DUP-1 - CCR | 92.3 | 86.7 |
| 310-268442-18 | DUP-2 - CCR | 84.7 | 88.2 |

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

| Lab Sample ID | Client Sample ID | Ba (30-110) | Y (30-110) |
|--------------------|-----------------------|----------------|---------------|
| 310-268442-19 | Equipment Blank - CCR | 93.3 | 87.1 |
| 310-268442-20 | Field Blank 1 - CCR | 97.3 | 90.1 |
| LCS 160-634834/2-A | Lab Control Sample | 94.6 | 78.1 |
| LCS 160-634838/2-A | Lab Control Sample | 93.3 | 86.0 |
| LCS 160-634841/2-A | Lab Control Sample | 93.3 | 80.7 |
| MB 160-634834/1-A | Method Blank | 88.4 | 85.6 |
| MB 160-634838/1-A | Method Blank | 100 | 84.1 |
| MB 160-634841/1-A | Method Blank | 97.3 | 83.0 |

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier



Appendix C – Statistical Evaluation Data

| A | B | C | D | E | F | G | H | I | J | K | L | |
|----|---|---|---|-----------|---|---|---|-----------|---|---|---|--|
| 1 | | | Background Statistics for Uncensored Full Data Sets | | | | | | | | | |
| 2 | User Selected Options | | | | | | | | | | | |
| 3 | Date/Time of Computation | | ProUCL 5.11/18/2024 1:28:45 PM | | | | | | | | | |
| 4 | From File | | \\GES.NET\dw05\Minnesota\Projects\SKB Environmental\Rosemount Facility\Statistics\Fall 2023 stats\rosemount | | | | | | | | | |
| 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 | Antimony | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | General Statistics | | | | | | | | | | | |
| 14 | Total Number of Observations | | | 230 | Number of Distinct Observations | | | 2 | | | | |
| 15 | | | | | Number of Missing Observations | | | 2 | | | | |
| 16 | Minimum | | | 0.001 | First Quartile | | | 0.001 | | | | |
| 17 | Second Largest | | | 0.002 | Median | | | 0.001 | | | | |
| 18 | Maximum | | | 0.002 | Third Quartile | | | 0.001 | | | | |
| 19 | Mean | | | 0.00125 | SD | | | 4.3269E-4 | | | | |
| 20 | Coefficient of Variation | | | 0.347 | Skewness | | | 1.176 | | | | |
| 21 | Mean of logged Data | | | -6.736 | SD of logged Data | | | 0.3 | | | | |
| 22 | | | | | | | | | | | | |
| 23 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 24 | Tolerance Factor K (For UTL) | | | 1.822 | d2max (for USL) | | | 3.475 | | | | |
| 25 | | | | | | | | | | | | |
| 26 | Normal GOF Test | | | | | | | | | | | |
| 27 | Shapiro Wilk Test Statistic | | | 0.52 | Normal GOF Test | | | | | | | |
| 28 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | | |
| 29 | Lilliefors Test Statistic | | | 0.469 | Lilliefors GOF Test | | | | | | | |
| 30 | 5% Lilliefors Critical Value | | | 0.0588 | Data Not Normal at 5% Significance Level | | | | | | | |
| 31 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 32 | | | | | | | | | | | | |
| 33 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 34 | 95% UTL with 95% Coverage | | | 0.00204 | 90% Percentile (z) | | | 0.0018 | | | | |
| 35 | 95% UPL (t) | | | 0.00196 | 95% Percentile (z) | | | 0.00196 | | | | |
| 36 | 95% USL | | | 0.00275 | 99% Percentile (z) | | | 0.00225 | | | | |
| 37 | | | | | | | | | | | | |
| 38 | Gamma GOF Test | | | | | | | | | | | |
| 39 | A-D Test Statistic | | | 55.53 | Anderson-Darling Gamma GOF Test | | | | | | | |
| 40 | 5% A-D Critical Value | | | 0.752 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 41 | K-S Test Statistic | | | 0.47 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | | |
| 42 | 5% K-S Critical Value | | | 0.0601 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 43 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 44 | | | | | | | | | | | | |
| 45 | Gamma Statistics | | | | | | | | | | | |
| 46 | k hat (MLE) | | | 10.24 | k star (bias corrected MLE) | | | 10.11 | | | | |
| 47 | Theta hat (MLE) | | | 1.2186E-4 | Theta star (bias corrected MLE) | | | 1.2344E-4 | | | | |
| 48 | nu hat (MLE) | | | 4710 | nu star (bias corrected) | | | 4650 | | | | |
| 49 | MLE Mean (bias corrected) | | | 0.00125 | MLE Sd (bias corrected) | | | 3.9246E-4 | | | | |
| 50 | | | | | | | | | | | | |
| 51 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 52 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | 0.00196 | 90% Percentile | | | 0.00177 | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|--|---|---------|---|---|----------------|---|-----------|---------|---------|---|
| 53 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 0.00195 | 95% Percentile | | | | 0.00196 | |
| 54 | 95% WH Approx. Gamma UTL with 95% Coverage | | | 0.00205 | 99% Percentile | | | | 0.00234 | | |
| 55 | 95% HW Approx. Gamma UTL with 95% Coverage | | | 0.00205 | | | | | | | |
| 56 | 95% WH USL | | | 0.00308 | 95% HW USL | | | | 0.00314 | | |
| 57 | | | | | | | | | | | |
| 58 | Lognormal GOF Test | | | | | | | | | | |
| 59 | Shapiro Wilk Test Statistic | | | 0.52 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 60 | 5% Shapiro Wilk P Value | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 61 | Lilliefors Test Statistic | | | 0.469 | Lilliefors Lognormal GOF Test | | | | | | |
| 62 | 5% Lilliefors Critical Value | | | 0.0588 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 63 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 64 | | | | | | | | | | | |
| 65 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 66 | 95% UTL with 95% Coverage | | 0.00205 | 90% Percentile (z) | | | | 0.00174 | | | |
| 67 | 95% UPL (t) | | 0.00195 | 95% Percentile (z) | | | | 0.00194 | | | |
| 68 | 95% USL | | 0.00337 | 99% Percentile (z) | | | | 0.00239 | | | |
| 69 | | | | | | | | | | | |
| 70 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 71 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 72 | | | | | | | | | | | |
| 73 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 74 | Order of Statistic, r | | 223 | 95% UTL with 95% Coverage | | | | 0.002 | | | |
| 75 | Approx, f used to compute achieved CC | | | 1.467 | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.892 | | |
| 76 | | | | | Approximate Sample Size needed to achieve specified CC | | | | 260 | | |
| 77 | 95% Percentile Bootstrap UTL with 95% Coverage | | N/A | 95% BCA Bootstrap UTL with 95% Coverage | | | | N/A | | | |
| 78 | 95% UPL | | 0.002 | 90% Percentile | | | | 0.002 | | | |
| 79 | 90% Chebyshev UPL | | 0.00255 | 95% Percentile | | | | 0.002 | | | |
| 80 | 95% Chebyshev UPL | | 0.00314 | 99% Percentile | | | | 0.002 | | | |
| 81 | 95% USL | | 0.002 | | | | | | | | |
| 82 | | | | | | | | | | | |
| 83 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 84 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 85 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 86 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 87 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 88 | | | | | | | | | | | |
| 89 | Arsenic | | | | | | | | | | |
| 90 | | | | | | | | | | | |
| 91 | General Statistics | | | | | | | | | | |
| 92 | Total Number of Observations | | 248 | Number of Distinct Observations | | | | 4 | | | |
| 93 | | | | Number of Missing Observations | | | | 3 | | | |
| 94 | Minimum | | 0.001 | First Quartile | | | | 0.001 | | | |
| 95 | Second Largest | | 0.002 | Median | | | | 0.001 | | | |
| 96 | Maximum | | 0.0021 | Third Quartile | | | | 0.002 | | | |
| 97 | Mean | | 0.0013 | SD | | | | 4.6053E-4 | | | |
| 98 | Coefficient of Variation | | 0.353 | Skewness | | | | 0.859 | | | |
| 99 | Mean of logged Data | | -6.697 | SD of logged Data | | | | 0.319 | | | |
| 100 | | | | | | | | | | | |
| 101 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 102 | Tolerance Factor K (For UTL) | | 1.815 | d2max (for USL) | | | | 3.497 | | | |
| 103 | | | | | | | | | | | |
| 104 | Normal GOF Test | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|---|--------------|-------------|---|----------------|---|---|---|---|--------------------|--------------------|-----------|
| 105 | Shapiro Wilk Test Statistic | | | | 0.565 | Normal GOF Test | | | | | | |
| 106 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |
| 107 | Lilliefors Test Statistic | | | | 0.439 | Lilliefors GOF Test | | | | | | |
| 108 | 5% Lilliefors Critical Value | | | | 0.0567 | Data Not Normal at 5% Significance Level | | | | | | |
| 109 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 110 | | | | | | | | | | | | |
| 111 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 112 | 95% UTL with | 95% Coverage | 0.00214 | | | | | | | 90% Percentile (z) | 0.00189 | |
| 113 | | | 95% UPL (t) | 0.00207 | | | | | | | 95% Percentile (z) | 0.00206 |
| 114 | | | 95% USL | 0.00291 | | | | | | | 99% Percentile (z) | 0.00238 |
| 115 | | | | | | | | | | | | |
| 116 | Gamma GOF Test | | | | | | | | | | | |
| 117 | A-D Test Statistic | | | | 53.16 | Anderson-Darling Gamma GOF Test | | | | | | |
| 118 | 5% A-D Critical Value | | | | 0.754 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 119 | K-S Test Statistic | | | | 0.441 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 120 | 5% K-S Critical Value | | | | 0.0581 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 121 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 122 | | | | | | | | | | | | |
| 123 | Gamma Statistics | | | | | | | | | | | |
| 124 | k hat (MLE) | | | | 9.322 | k star (bias corrected MLE) | | | | | | 9.212 |
| 125 | Theta hat (MLE) | | | | 1.3993E-4 | Theta star (bias corrected MLE) | | | | | | 1.4161E-4 |
| 126 | nu hat (MLE) | | | | 4624 | nu star (bias corrected) | | | | | | 4569 |
| 127 | MLE Mean (bias corrected) | | | | 0.0013 | MLE Sd (bias corrected) | | | | | | 4.2979E-4 |
| 128 | | | | | | | | | | | | |
| 129 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 130 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 0.00208 | 90% Percentile | | | | | | 0.00188 |
| 131 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 0.00209 | 95% Percentile | | | | | | 0.00208 |
| 132 | 95% WH Approx. Gamma UTL with | 95% Coverage | 0.00218 | | | | | | | 99% Percentile | 0.00251 | |
| 133 | 95% HW Approx. Gamma UTL with | 95% Coverage | 0.00218 | | | | | | | | | |
| 134 | 95% WH USL | | | | 0.00336 | 95% HW USL | | | | | | 0.00344 |
| 135 | | | | | | | | | | | | |
| 136 | Lognormal GOF Test | | | | | | | | | | | |
| 137 | Shapiro Wilk Test Statistic | | | | 0.564 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 138 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 139 | Lilliefors Test Statistic | | | | 0.439 | Lilliefors Lognormal GOF Test | | | | | | |
| 140 | 5% Lilliefors Critical Value | | | | 0.0567 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 141 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 142 | | | | | | | | | | | | |
| 143 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 144 | 95% UTL with | 95% Coverage | 0.0022 | | | | | | | 90% Percentile (z) | 0.00186 | |
| 145 | | | 95% UPL (t) | 0.00209 | | | | | | | 95% Percentile (z) | 0.00209 |
| 146 | | | 95% USL | 0.00377 | | | | | | | 99% Percentile (z) | 0.0026 |
| 147 | | | | | | | | | | | | |
| 148 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 149 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 150 | | | | | | | | | | | | |
| 151 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 152 | Order of Statistic, r | | | | 241 | 95% UTL with 95% Coverage | | | | | | 0.002 |
| 153 | Approx, f used to compute achieved CC | | | | 1.586 | Approximate Actual Confidence Coefficient achieved by UTL | | | | | | 0.932 |
| 154 | | | | | | Approximate Sample Size needed to achieve specified CC | | | | | | 260 |
| 155 | 95% Percentile Bootstrap UTL with | 95% Coverage | 0.002 | 95% BCA Bootstrap UTL with 95% Coverage | | | | | | 0.002 | | |
| 156 | | | 95% UPL | 0.002 | 90% Percentile | | | | | | 0.002 | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|---------------------------|---|--|---|-----------|---|---|---|---|----------------|---------|
| 157 | | | 90% Chebyshev UPL | | 0.00269 | | | | | 95% Percentile | 0.002 |
| 158 | | | 95% Chebyshev UPL | | 0.00332 | | | | | 99% Percentile | 0.002 |
| 159 | | | 95% USL | | 0.0021 | | | | | | |
| 160 | | | | | | | | | | | |
| 161 | | | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | |
| 162 | | | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | |
| 163 | | | and consists of observations collected from clean unimpacted locations. | | | | | | | | |
| 164 | | | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | |
| 165 | | | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | |
| 166 | | | | | | | | | | | |
| 167 | Barium | | | | | | | | | | |
| 168 | | | | | | | | | | | |
| 169 | General Statistics | | | | | | | | | | |
| 170 | | | Total Number of Observations | | 255 | | | | Number of Distinct Observations | | 54 |
| 171 | | | Minimum | | 0.032 | | | | First Quartile | | 0.05 |
| 172 | | | Second Largest | | 0.094 | | | | Median | | 0.055 |
| 173 | | | Maximum | | 0.097 | | | | Third Quartile | | 0.0635 |
| 174 | | | Mean | | 0.0571 | | | | SD | | 0.0114 |
| 175 | | | Coefficient of Variation | | 0.2 | | | | Skewness | | 0.83 |
| 176 | | | Mean of logged Data | | -2.881 | | | | SD of logged Data | | 0.193 |
| 177 | | | | | | | | | | | |
| 178 | | | Critical Values for Background Threshold Values (BTVs) | | | | | | | | |
| 179 | | | Tolerance Factor K (For UTL) | | 1.813 | | | | d2max (for USL) | | 3.505 |
| 180 | | | | | | | | | | | |
| 181 | | | Normal GOF Test | | | | | | | | |
| 182 | | | Shapiro Wilk Test Statistic | | 0.947 | | | | Normal GOF Test | | |
| 183 | | | 5% Shapiro Wilk P Value | | 3.795E-10 | | | | Data Not Normal at 5% Significance Level | | |
| 184 | | | Lilliefors Test Statistic | | 0.108 | | | | Lilliefors GOF Test | | |
| 185 | | | 5% Lilliefors Critical Value | | 0.0559 | | | | Data Not Normal at 5% Significance Level | | |
| 186 | | | Data Not Normal at 5% Significance Level | | | | | | | | |
| 187 | | | | | | | | | | | |
| 188 | | | Background Statistics Assuming Normal Distribution | | | | | | | | |
| 189 | | | 95% UTL with 95% Coverage | | 0.0779 | | | | 90% Percentile (z) | | 0.0718 |
| 190 | | | 95% UPL (t) | | 0.0761 | | | | 95% Percentile (z) | | 0.076 |
| 191 | | | 95% USL | | 0.0972 | | | | 99% Percentile (z) | | 0.0837 |
| 192 | | | | | | | | | | | |
| 193 | | | Gamma GOF Test | | | | | | | | |
| 194 | | | A-D Test Statistic | | 1.446 | | | | Anderson-Darling Gamma GOF Test | | |
| 195 | | | 5% A-D Critical Value | | 0.751 | | | | Data Not Gamma Distributed at 5% Significance Level | | |
| 196 | | | K-S Test Statistic | | 0.0853 | | | | Kolmogorov-Smirnov Gamma GOF Test | | |
| 197 | | | 5% K-S Critical Value | | 0.0571 | | | | Data Not Gamma Distributed at 5% Significance Level | | |
| 198 | | | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | |
| 199 | | | | | | | | | | | |
| 200 | | | Gamma Statistics | | | | | | | | |
| 201 | | | k hat (MLE) | | 26.54 | | | | k star (bias corrected MLE) | | 26.23 |
| 202 | | | Theta hat (MLE) | | 0.00215 | | | | Theta star (bias corrected MLE) | | 0.00218 |
| 203 | | | nu hat (MLE) | | 13534 | | | | nu star (bias corrected) | | 13376 |
| 204 | | | MLE Mean (bias corrected) | | 0.0571 | | | | MLE Sd (bias corrected) | | 0.0112 |
| 205 | | | | | | | | | | | |
| 206 | | | Background Statistics Assuming Gamma Distribution | | | | | | | | |
| 207 | | | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | 0.0767 | | | | 90% Percentile | | 0.0718 |
| 208 | | | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | 0.0768 | | | | 95% Percentile | | 0.0766 |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|--|---|-----|---------------------------|---|---|---|---|---|-------|-----------|
| 209 | 95% WH Approx. Gamma UTL with 95% Coverage | | | 0.0788 | 99% Percentile | | | | | | 0.0862 |
| 210 | 95% HW Approx. Gamma UTL with 95% Coverage | | | 0.079 | | | | | | | |
| 211 | 95% WH USL | | | 0.105 | 95% HW USL | | | | | | 0.106 |
| 212 | | | | | | | | | | | |
| 213 | Lognormal GOF Test | | | | | | | | | | |
| 214 | Shapiro Wilk Test Statistic | | | 0.979 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 215 | 5% Shapiro Wilk P Value | | | 0.207 | Data appear Lognormal at 5% Significance Level | | | | | | |
| 216 | Lilliefors Test Statistic | | | 0.0729 | Lilliefors Lognormal GOF Test | | | | | | |
| 217 | 5% Lilliefors Critical Value | | | 0.0559 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 218 | Data appear Approximate Lognormal at 5% Significance Level | | | | | | | | | | |
| 219 | | | | | | | | | | | |
| 220 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 221 | 95% UTL with 95% Coverage | | | 0.0796 | 90% Percentile (z) | | | | | | 0.0718 |
| 222 | 95% UPL (t) | | | 0.0772 | 95% Percentile (z) | | | | | | 0.0771 |
| 223 | 95% USL | | | 0.11 | 99% Percentile (z) | | | | | | 0.0879 |
| 224 | | | | | | | | | | | |
| 225 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 226 | Data appear Approximate Lognormal at 5% Significance Level | | | | | | | | | | |
| 227 | | | | | | | | | | | |
| 228 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 229 | Order of Statistic, r | | 247 | 95% UTL with 95% Coverage | | | | | | 0.082 | |
| 230 | Approx, f used to compute achieved CC | | | 1.444 | Approximate Actual Confidence Coefficient achieved by UTL | | | | | | 0.894 |
| 231 | | | | | Approximate Sample Size needed to achieve specified CC | | | | | | 285 |
| 232 | 95% Percentile Bootstrap UTL with 95% Coverage | | | 0.0823 | 95% BCA Bootstrap UTL with 95% Coverage | | | | | | 0.0823 |
| 233 | 95% UPL | | | 0.0792 | 90% Percentile | | | | | | 0.072 |
| 234 | 90% Chebyshev UPL | | | 0.0915 | 95% Percentile | | | | | | 0.0783 |
| 235 | 95% Chebyshev UPL | | | 0.107 | 99% Percentile | | | | | | 0.0913 |
| 236 | 95% USL | | | 0.097 | | | | | | | |
| 237 | | | | | | | | | | | |
| 238 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 239 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 240 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 241 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 242 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 243 | | | | | | | | | | | |
| 244 | Beryllium | | | | | | | | | | |
| 245 | | | | | | | | | | | |
| 246 | General Statistics | | | | | | | | | | |
| 247 | Total Number of Observations | | | 227 | Number of Distinct Observations | | | | | | 2 |
| 248 | Minimum | | | 7.0000E-4 | First Quartile | | | | | | 7.0000E-4 |
| 249 | Second Largest | | | 0.001 | Median | | | | | | 7.0000E-4 |
| 250 | Maximum | | | 0.001 | Third Quartile | | | | | | 7.0000E-4 |
| 251 | Mean | | | 7.7137E-4 | SD | | | | | | 1.2802E-4 |
| 252 | Coefficient of Variation | | | 0.166 | Skewness | | | | | | 1.239 |
| 253 | Mean of logged Data | | | -7.18 | SD of logged Data | | | | | | 0.152 |
| 254 | | | | | | | | | | | |
| 255 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 256 | Tolerance Factor K (For UTL) | | | 1.823 | d2max (for USL) | | | | | | 3.471 |
| 257 | | | | | | | | | | | |
| 258 | Normal GOF Test | | | | | | | | | | |
| 259 | Shapiro Wilk Test Statistic | | | 0.512 | Normal GOF Test | | | | | | |
| 260 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|---|---|-----------|---|---|---|---|-----------|---|--|
| 261 | Lilliefors Test Statistic | | | | 0.474 | Lilliefors GOF Test | | | | | | |
| 262 | 5% Lilliefors Critical Value | | | | 0.0592 | Data Not Normal at 5% Significance Level | | | | | | |
| 263 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 264 | | | | | | | | | | | | |
| 265 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 266 | 95% UTL with 95% Coverage | | | | 0.001 | 90% Percentile (z) | | | | 9.3543E-4 | | |
| 267 | 95% UPL (t) | | | | 9.8327E-4 | 95% Percentile (z) | | | | 9.8194E-4 | | |
| 268 | 95% USL | | | | 0.00122 | 99% Percentile (z) | | | | 0.00107 | | |
| 269 | | | | | | | | | | | | |
| 270 | Gamma GOF Test | | | | | | | | | | | |
| 271 | A-D Test Statistic | | | | 55.86 | Anderson-Darling Gamma GOF Test | | | | | | |
| 272 | 5% A-D Critical Value | | | | 0.751 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 273 | K-S Test Statistic | | | | 0.474 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 274 | 5% K-S Critical Value | | | | 0.0604 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 275 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 276 | | | | | | | | | | | | |
| 277 | Gamma Statistics | | | | | | | | | | | |
| 278 | k hat (MLE) | | | | 41.03 | k star (bias corrected MLE) | | | | 40.5 | | |
| 279 | Theta hat (MLE) | | | | 1.8798E-5 | Theta star (bias corrected MLE) | | | | 1.9048E-5 | | |
| 280 | nu hat (MLE) | | | | 18630 | nu star (bias corrected) | | | | 18385 | | |
| 281 | MLE Mean (bias corrected) | | | | 7.7137E-4 | MLE Sd (bias corrected) | | | | 1.2122E-4 | | |
| 282 | | | | | | | | | | | | |
| 283 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 284 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 9.8136E-4 | 90% Percentile | | | | 9.3022E-4 | | |
| 285 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 9.8111E-4 | 95% Percentile | | | | 9.8098E-4 | | |
| 286 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 0.00101 | 99% Percentile | | | | 0.00108 | | |
| 287 | 95% HW Approx. Gamma UTL with 95% Coverage | | | | 0.00101 | | | | | | | |
| 288 | 95% WH USL | | | | 0.00126 | 95% HW USL | | | | 0.00127 | | |
| 289 | | | | | | | | | | | | |
| 290 | Lognormal GOF Test | | | | | | | | | | | |
| 291 | Shapiro Wilk Test Statistic | | | | 0.512 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 292 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 293 | Lilliefors Test Statistic | | | | 0.474 | Lilliefors Lognormal GOF Test | | | | | | |
| 294 | 5% Lilliefors Critical Value | | | | 0.0592 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 295 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 296 | | | | | | | | | | | | |
| 297 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 298 | 95% UTL with 95% Coverage | | | | 0.00101 | 90% Percentile (z) | | | | 9.2610E-4 | | |
| 299 | 95% UPL (t) | | | | 9.8031E-4 | 95% Percentile (z) | | | | 9.7875E-4 | | |
| 300 | 95% USL | | | | 0.00129 | 99% Percentile (z) | | | | 0.00109 | | |
| 301 | | | | | | | | | | | | |
| 302 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 303 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 304 | | | | | | | | | | | | |
| 305 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 306 | Order of Statistic, r | | | | 220 | 95% UTL with 95% Coverage | | | | 0.001 | | |
| 307 | Approx, f used to compute achieved CC | | | | 1.447 | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.884 | | |
| 308 | | | | | | Approximate Sample Size needed to achieve specified CC | | | | 260 | | |
| 309 | 95% Percentile Bootstrap UTL with 95% Coverage | | | | N/A | 95% BCA Bootstrap UTL with 95% Coverage | | | | N/A | | |
| 310 | 95% UPL | | | | 0.001 | 90% Percentile | | | | 0.001 | | |
| 311 | 90% Chebyshev UPL | | | | 0.00116 | 95% Percentile | | | | 0.001 | | |
| 312 | 95% Chebyshev UPL | | | | 0.00133 | 99% Percentile | | | | 0.001 | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|---|---------|--------|---|---|---|---|--------|---|--|
| 313 | | | | 95% USL | 0.001 | | | | | | | |
| 314 | | | | | | | | | | | | |
| 315 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 316 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 317 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 318 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 319 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 320 | | | | | | | | | | | | |
| 321 | Boron | | | | | | | | | | | |
| 322 | | | | | | | | | | | | |
| 323 | General Statistics | | | | | | | | | | | |
| 324 | Total Number of Observations | | | | 319 | Number of Distinct Observations | | | | 49 | | |
| 325 | | | | | | Number of Missing Observations | | | | 1 | | |
| 326 | Minimum | | | | 0 | First Quartile | | | | 0.02 | | |
| 327 | Second Largest | | | | 0.31 | Median | | | | 0.022 | | |
| 328 | Maximum | | | | 0.31 | Third Quartile | | | | 0.09 | | |
| 329 | Mean | | | | 0.0486 | SD | | | | 0.0454 | | |
| 330 | Coefficient of Variation | | | | 0.936 | Skewness | | | | 2.252 | | |
| 331 | | | | | | | | | | | | |
| 332 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 333 | Tolerance Factor K (For UTL) | | | | 1.794 | d2max (for USL) | | | | 3.57 | | |
| 334 | | | | | | | | | | | | |
| 335 | Normal GOF Test | | | | | | | | | | | |
| 336 | Shapiro Wilk Test Statistic | | | | 0.674 | Normal GOF Test | | | | | | |
| 337 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |
| 338 | Lilliefors Test Statistic | | | | 0.278 | Lilliefors GOF Test | | | | | | |
| 339 | 5% Lilliefors Critical Value | | | | 0.05 | Data Not Normal at 5% Significance Level | | | | | | |
| 340 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 341 | | | | | | | | | | | | |
| 342 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 343 | 95% UTL with 95% Coverage | | | | 0.13 | 90% Percentile (z) | | | | 0.107 | | |
| 344 | 95% UPL (t) | | | | 0.124 | 95% Percentile (z) | | | | 0.123 | | |
| 345 | 95% USL | | | | 0.211 | 99% Percentile (z) | | | | 0.154 | | |
| 346 | | | | | | | | | | | | |
| 347 | Gamma Statistics | | | | | | | | | | | |
| 348 | Gamma Statistics Not Available | | | | | | | | | | | |
| 349 | | | | | | | | | | | | |
| 350 | Cannot Compute Gamma Statistics! | | | | | | | | | | | |
| 351 | | | | | | | | | | | | |
| 352 | Cannot Compute Log Statistics | | | | | | | | | | | |
| 353 | | | | | | | | | | | | |
| 354 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 355 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 356 | | | | | | | | | | | | |
| 357 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 358 | Order of Statistic, r | | | | 309 | 95% UTL with 95% Coverage | | | | 0.13 | | |
| 359 | Approx, f used to compute achieved CC | | | | 1.478 | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.926 | | |
| 360 | | | | | | Approximate Sample Size needed to achieve specified CC | | | | 336 | | |
| 361 | 95% Percentile Bootstrap UTL with 95% Coverage | | | | 0.13 | 95% BCA Bootstrap UTL with 95% Coverage | | | | 0.1 | | |
| 362 | 95% UPL | | | | 0.1 | 90% Percentile | | | | 0.1 | | |
| 363 | 90% Chebyshev UPL | | | | 0.185 | 95% Percentile | | | | 0.1 | | |
| 364 | 95% Chebyshev UPL | | | | 0.247 | 99% Percentile | | | | 0.22 | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|---|---------|-----------|---|---|---|---|-----------|---|--|
| 365 | | | | 95% USL | 0.31 | | | | | | | |
| 366 | | | | | | | | | | | | |
| 367 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 368 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 369 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 370 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 371 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 372 | | | | | | | | | | | | |
| 373 | Cadmium | | | | | | | | | | | |
| 374 | | | | | | | | | | | | |
| 375 | General Statistics | | | | | | | | | | | |
| 376 | Total Number of Observations | | | | 265 | Number of Distinct Observations | | | | 8 | | |
| 377 | | | | | | Number of Missing Observations | | | | 2 | | |
| 378 | Minimum | | | | 1.0000E-4 | First Quartile | | | | 2.0000E-4 | | |
| 379 | Second Largest | | | | 0.001 | Median | | | | 5.0000E-4 | | |
| 380 | Maximum | | | | 0.001 | Third Quartile | | | | 5.0000E-4 | | |
| 381 | Mean | | | | 3.9087E-4 | SD | | | | 1.6991E-4 | | |
| 382 | Coefficient of Variation | | | | 0.435 | Skewness | | | | -0.421 | | |
| 383 | Mean of logged Data | | | | -7.991 | SD of logged Data | | | | 0.601 | | |
| 384 | | | | | | | | | | | | |
| 385 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 386 | Tolerance Factor K (For UTL) | | | | 1.809 | d2max (for USL) | | | | 3.516 | | |
| 387 | | | | | | | | | | | | |
| 388 | Normal GOF Test | | | | | | | | | | | |
| 389 | Shapiro Wilk Test Statistic | | | | 0.688 | Normal GOF Test | | | | | | |
| 390 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |
| 391 | Lilliefors Test Statistic | | | | 0.4 | Lilliefors GOF Test | | | | | | |
| 392 | 5% Lilliefors Critical Value | | | | 0.0548 | Data Not Normal at 5% Significance Level | | | | | | |
| 393 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 394 | | | | | | | | | | | | |
| 395 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 396 | 95% UTL with 95% Coverage | | | | 6.9826E-4 | 90% Percentile (z) | | | | 6.0862E-4 | | |
| 397 | 95% UPL (t) | | | | 6.7186E-4 | 95% Percentile (z) | | | | 6.7035E-4 | | |
| 398 | 95% USL | | | | 9.8836E-4 | 99% Percentile (z) | | | | 7.8615E-4 | | |
| 399 | | | | | | | | | | | | |
| 400 | Gamma GOF Test | | | | | | | | | | | |
| 401 | A-D Test Statistic | | | | 40.53 | Anderson-Darling Gamma GOF Test | | | | | | |
| 402 | 5% A-D Critical Value | | | | 0.759 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 403 | K-S Test Statistic | | | | 0.406 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 404 | 5% K-S Critical Value | | | | 0.0564 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 405 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 406 | | | | | | | | | | | | |
| 407 | Gamma Statistics | | | | | | | | | | | |
| 408 | k hat (MLE) | | | | 3.645 | k star (bias corrected MLE) | | | | 3.607 | | |
| 409 | Theta hat (MLE) | | | | 1.0722E-4 | Theta star (bias corrected MLE) | | | | 1.0837E-4 | | |
| 410 | nu hat (MLE) | | | | 1932 | nu star (bias corrected) | | | | 1912 | | |
| 411 | MLE Mean (bias corrected) | | | | 3.9087E-4 | MLE Sd (bias corrected) | | | | 2.0581E-4 | | |
| 412 | | | | | | | | | | | | |
| 413 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 414 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 7.8191E-4 | 90% Percentile | | | | 6.6682E-4 | | |
| 415 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 8.0685E-4 | 95% Percentile | | | | 7.7905E-4 | | |
| 416 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 8.3351E-4 | 99% Percentile | | | | 0.00102 | | |

| A | B | C | D | E | G | H | I | J | K | L | |
|-----|--|---|-----------|---|---|---|-----------|---------|---|---|--|
| 417 | 95% HW Approx. Gamma UTL with 95% Coverage | | | 8.6490E-4 | | | | | | | |
| 418 | 95% WH USL | | | 0.00156 | 95% HW USL | | | 0.00173 | | | |
| 419 | | | | | | | | | | | |
| 420 | Lognormal GOF Test | | | | | | | | | | |
| 421 | Shapiro Wilk Test Statistic | | | 0.672 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 422 | 5% Shapiro Wilk P Value | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 423 | Lilliefors Test Statistic | | | 0.402 | Lilliefors Lognormal GOF Test | | | | | | |
| 424 | 5% Lilliefors Critical Value | | | 0.0548 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 425 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 426 | | | | | | | | | | | |
| 427 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 428 | 95% UTL with 95% Coverage | | 0.001 | 90% Percentile (z) | | | 7.3137E-4 | | | | |
| 429 | 95% UPL (t) | | 9.1464E-4 | 95% Percentile (z) | | | 9.0976E-4 | | | | |
| 430 | 95% USL | | 0.0028 | 99% Percentile (z) | | | 0.00137 | | | | |
| 431 | | | | | | | | | | | |
| 432 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 433 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 434 | | | | | | | | | | | |
| 435 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 436 | Order of Statistic, r | | 257 | 95% UTL with 95% Coverage | | | 5.0000E-4 | | | | |
| 437 | Approx, f used to compute achieved CC | | | 1.503 | Approximate Actual Confidence Coefficient achieved by UTL | | | 0.917 | | | |
| 438 | | | | | Approximate Sample Size needed to achieve specified CC | | | 285 | | | |
| 439 | 95% Percentile Bootstrap UTL with 95% Coverage | | 5.0000E-4 | 95% BCA Bootstrap UTL with 95% Coverage | | | 5.0000E-4 | | | | |
| 440 | 95% UPL | | 5.0000E-4 | 90% Percentile | | | 5.0000E-4 | | | | |
| 441 | 90% Chebyshev UPL | | 9.0157E-4 | 95% Percentile | | | 5.0000E-4 | | | | |
| 442 | 95% Chebyshev UPL | | 0.00113 | 99% Percentile | | | 5.0000E-4 | | | | |
| 443 | 95% USL | | 0.001 | | | | | | | | |
| 444 | | | | | | | | | | | |
| 445 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 446 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 447 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 448 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 449 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 450 | | | | | | | | | | | |
| 451 | Chromium | | | | | | | | | | |
| 452 | | | | | | | | | | | |
| 453 | General Statistics | | | | | | | | | | |
| 454 | Total Number of Observations | | | 213 | Number of Distinct Observations | | | 33 | | | |
| 455 | | | | | Number of Missing Observations | | | 1 | | | |
| 456 | Minimum | | 0.004 | First Quartile | | | 0.004 | | | | |
| 457 | Second Largest | | 0.049 | Median | | | 0.004 | | | | |
| 458 | Maximum | | 0.052 | Third Quartile | | | 0.005 | | | | |
| 459 | Mean | | 0.00605 | SD | | | 0.00675 | | | | |
| 460 | Coefficient of Variation | | 1.117 | Skewness | | | 5.099 | | | | |
| 461 | Mean of logged Data | | -5.299 | SD of logged Data | | | 0.468 | | | | |
| 462 | | | | | | | | | | | |
| 463 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 464 | Tolerance Factor K (For UTL) | | | 1.829 | d2max (for USL) | | | 3.451 | | | |
| 465 | | | | | | | | | | | |
| 466 | Normal GOF Test | | | | | | | | | | |
| 467 | Shapiro Wilk Test Statistic | | | 0.333 | Normal GOF Test | | | | | | |
| 468 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|---|---|---------|---|---|---|---|---------|---|--|
| 469 | Lilliefors Test Statistic | | | | 0.407 | Lilliefors GOF Test | | | | | | |
| 470 | 5% Lilliefors Critical Value | | | | 0.0611 | Data Not Normal at 5% Significance Level | | | | | | |
| 471 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 472 | | | | | | | | | | | | |
| 473 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 474 | 95% UTL with 95% Coverage | | | | 0.0184 | 90% Percentile (z) | | | | 0.0147 | | |
| 475 | 95% UPL (t) | | | | 0.0172 | 95% Percentile (z) | | | | 0.0172 | | |
| 476 | 95% USL | | | | 0.0294 | 99% Percentile (z) | | | | 0.0218 | | |
| 477 | | | | | | | | | | | | |
| 478 | Gamma GOF Test | | | | | | | | | | | |
| 479 | A-D Test Statistic | | | | 44.38 | Anderson-Darling Gamma GOF Test | | | | | | |
| 480 | 5% A-D Critical Value | | | | 0.762 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 481 | K-S Test Statistic | | | | 0.386 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 482 | 5% K-S Critical Value | | | | 0.0626 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 483 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 484 | | | | | | | | | | | | |
| 485 | Gamma Statistics | | | | | | | | | | | |
| 486 | k hat (MLE) | | | | 2.776 | k star (bias corrected MLE) | | | | 2.74 | | |
| 487 | Theta hat (MLE) | | | | 0.00218 | Theta star (bias corrected MLE) | | | | 0.00221 | | |
| 488 | nu hat (MLE) | | | | 1183 | nu star (bias corrected) | | | | 1167 | | |
| 489 | MLE Mean (bias corrected) | | | | 0.00605 | MLE Sd (bias corrected) | | | | 0.00365 | | |
| 490 | | | | | | | | | | | | |
| 491 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 492 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 0.0125 | 90% Percentile | | | | 0.0109 | | |
| 493 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 0.0121 | 95% Percentile | | | | 0.013 | | |
| 494 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 0.0136 | 99% Percentile | | | | 0.0176 | | |
| 495 | 95% HW Approx. Gamma UTL with 95% Coverage | | | | 0.0131 | | | | | | | |
| 496 | 95% WH USL | | | | 0.026 | 95% HW USL | | | | 0.0257 | | |
| 497 | | | | | | | | | | | | |
| 498 | Lognormal GOF Test | | | | | | | | | | | |
| 499 | Shapiro Wilk Test Statistic | | | | 0.516 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 500 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 501 | Lilliefors Test Statistic | | | | 0.344 | Lilliefors Lognormal GOF Test | | | | | | |
| 502 | 5% Lilliefors Critical Value | | | | 0.0611 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 503 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 504 | | | | | | | | | | | | |
| 505 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 506 | 95% UTL with 95% Coverage | | | | 0.0118 | 90% Percentile (z) | | | | 0.0091 | | |
| 507 | 95% UPL (t) | | | | 0.0108 | 95% Percentile (z) | | | | 0.0108 | | |
| 508 | 95% USL | | | | 0.0252 | 99% Percentile (z) | | | | 0.0149 | | |
| 509 | | | | | | | | | | | | |
| 510 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 511 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 512 | | | | | | | | | | | | |
| 513 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 514 | Order of Statistic, r | | | | 207 | 95% UTL with 95% Coverage | | | | 0.024 | | |
| 515 | Approx, f used to compute achieved CC | | | | 1.556 | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.911 | | |
| 516 | | | | | | Approximate Sample Size needed to achieve specified CC | | | | 234 | | |
| 517 | 95% Percentile Bootstrap UTL with 95% Coverage | | | | 0.024 | 95% BCA Bootstrap UTL with 95% Coverage | | | | 0.021 | | |
| 518 | 95% UPL | | | | 0.0149 | 90% Percentile | | | | 0.0068 | | |
| 519 | 90% Chebyshev UPL | | | | 0.0264 | 95% Percentile | | | | 0.014 | | |
| 520 | 95% Chebyshev UPL | | | | 0.0356 | 99% Percentile | | | | 0.0477 | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|-------|---------------------------------|---|-------|---|-------|---|---|---|--|
| 521 | | | | 95% USL | 0.052 | | | | | | | |
| 522 | | | | | | | | | | | | |
| 523 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 524 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 525 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 526 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 527 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 528 | | | | | | | | | | | | |
| 529 | Calcium | | | | | | | | | | | |
| 530 | | | | | | | | | | | | |
| 531 | General Statistics | | | | | | | | | | | |
| 532 | Total Number of Observations | | | 336 | Number of Distinct Observations | | | 158 | | | | |
| 533 | Minimum | | | 65.1 | First Quartile | | | 90.5 | | | | |
| 534 | Second Largest | | | 132 | Median | | | 97.8 | | | | |
| 535 | Maximum | | | 150 | Third Quartile | | | 104 | | | | |
| 536 | Mean | | | 98.35 | SD | | | 12.17 | | | | |
| 537 | Coefficient of Variation | | | 0.124 | Skewness | | | 0.494 | | | | |
| 538 | Mean of logged Data | | | 4.581 | SD of logged Data | | | 0.123 | | | | |
| 539 | | | | | | | | | | | | |
| 540 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 541 | Tolerance Factor K (For UTL) | | | 1.79 | d2max (for USL) | | | 3.585 | | | | |
| 542 | | | | | | | | | | | | |
| 543 | Normal GOF Test | | | | | | | | | | | |
| 544 | Shapiro Wilk Test Statistic | | | 0.976 | Normal GOF Test | | | | | | | |
| 545 | 5% Shapiro Wilk P Value | | | 0.0286 | Data Not Normal at 5% Significance Level | | | | | | | |
| 546 | Lilliefors Test Statistic | | | 0.0801 | Lilliefors GOF Test | | | | | | | |
| 547 | 5% Lilliefors Critical Value | | | 0.0487 | Data Not Normal at 5% Significance Level | | | | | | | |
| 548 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 549 | | | | | | | | | | | | |
| 550 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 551 | 95% UTL with 95% Coverage | | 120.1 | 90% Percentile (z) | | 113.9 | | | | | | |
| 552 | 95% UPL (t) | | 118.4 | 95% Percentile (z) | | 118.4 | | | | | | |
| 553 | 95% USL | | 142 | 99% Percentile (z) | | 126.7 | | | | | | |
| 554 | | | | | | | | | | | | |
| 555 | Gamma GOF Test | | | | | | | | | | | |
| 556 | A-D Test Statistic | | | 1.474 | Anderson-Darling Gamma GOF Test | | | | | | | |
| 557 | 5% A-D Critical Value | | | 0.752 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 558 | K-S Test Statistic | | | 0.0673 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | | |
| 559 | 5% K-S Critical Value | | | 0.0495 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 560 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 561 | | | | | | | | | | | | |
| 562 | Gamma Statistics | | | | | | | | | | | |
| 563 | k hat (MLE) | | 66.53 | k star (bias corrected MLE) | | 65.94 | | | | | | |
| 564 | Theta hat (MLE) | | 1.478 | Theta star (bias corrected MLE) | | 1.492 | | | | | | |
| 565 | nu hat (MLE) | | 44709 | nu star (bias corrected) | | 44312 | | | | | | |
| 566 | MLE Mean (bias corrected) | | 98.35 | MLE Sd (bias corrected) | | 12.11 | | | | | | |
| 567 | | | | | | | | | | | | |
| 568 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 569 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | 119.1 | 90% Percentile | | 114.2 | | | | | | |
| 570 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | 119.2 | 95% Percentile | | 119.1 | | | | | | |
| 571 | 95% WH Approx. Gamma UTL with 95% Coverage | | 121 | 99% Percentile | | 128.7 | | | | | | |
| 572 | 95% HW Approx. Gamma UTL with 95% Coverage | | 121.2 | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|--|---|-------|---|---|--|-------|-------|---|-------|---|
| 573 | 95% WH USL | | | | 147.6 | 95% HW USL | | | | 148.6 | |
| 574 | | | | | | | | | | | |
| 575 | Lognormal GOF Test | | | | | | | | | | |
| 576 | Shapiro Wilk Test Statistic | | | | 0.984 | Shapiro Wilk Lognormal GOF Test | | | | | |
| 577 | 5% Shapiro Wilk P Value | | | | 0.504 | Data appear Lognormal at 5% Significance Level | | | | | |
| 578 | Lilliefors Test Statistic | | | | 0.062 | Lilliefors Lognormal GOF Test | | | | | |
| 579 | 5% Lilliefors Critical Value | | | | 0.0487 | Data Not Lognormal at 5% Significance Level | | | | | |
| 580 | Data appear Approximate Lognormal at 5% Significance Level | | | | | | | | | | |
| 581 | | | | | | | | | | | |
| 582 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 583 | 95% UTL with 95% Coverage | | | 121.6 | 90% Percentile (z) | | | 114.3 | | | |
| 584 | 95% UPL (t) | | | 119.6 | 95% Percentile (z) | | | 119.5 | | | |
| 585 | 95% USL | | | 151.7 | 99% Percentile (z) | | | 129.9 | | | |
| 586 | | | | | | | | | | | |
| 587 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 588 | Data appear Approximate Lognormal at 5% Significance Level | | | | | | | | | | |
| 589 | | | | | | | | | | | |
| 590 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 591 | Order of Statistic, r | | 325 | 95% UTL with 95% Coverage | | | 122 | | | | |
| 592 | Approx, f used to compute achieved CC | | | 1.425 | Approximate Actual Confidence Coefficient achieved by UTL | | | 0.914 | | | |
| 593 | | | | | Approximate Sample Size needed to achieve specified CC | | | 361 | | | |
| 594 | 95% Percentile Bootstrap UTL with 95% Coverage | | 122 | 95% BCA Bootstrap UTL with 95% Coverage | | | 121.5 | | | | |
| 595 | 95% UPL | | 121 | 90% Percentile | | | 115.5 | | | | |
| 596 | 90% Chebyshev UPL | | 134.9 | 95% Percentile | | | 121 | | | | |
| 597 | 95% Chebyshev UPL | | 151.5 | 99% Percentile | | | 130.3 | | | | |
| 598 | 95% USL | | 150 | | | | | | | | |
| 599 | | | | | | | | | | | |
| 600 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 601 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 602 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 603 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 604 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 605 | | | | | | | | | | | |
| 606 | Chloride | | | | | | | | | | |
| 607 | | | | | | | | | | | |
| 608 | General Statistics | | | | | | | | | | |
| 609 | Total Number of Observations | | | 427 | Number of Distinct Observations | | | 265 | | | |
| 610 | | | | | Number of Missing Observations | | | 1 | | | |
| 611 | Minimum | | | 5 | First Quartile | | | 33 | | | |
| 612 | Second Largest | | | 125 | Median | | | 41.7 | | | |
| 613 | Maximum | | | 126 | Third Quartile | | | 48.8 | | | |
| 614 | Mean | | | 44.02 | SD | | | 16.75 | | | |
| 615 | Coefficient of Variation | | | 0.381 | Skewness | | | 1.903 | | | |
| 616 | Mean of logged Data | | | 3.723 | SD of logged Data | | | 0.348 | | | |
| 617 | | | | | | | | | | | |
| 618 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 619 | Tolerance Factor K (For UTL) | | | 1.773 | d2max (for USL) | | | 3.652 | | | |
| 620 | | | | | | | | | | | |
| 621 | Normal GOF Test | | | | | | | | | | |
| 622 | Shapiro Wilk Test Statistic | | | | 0.849 | Normal GOF Test | | | | | |
| 623 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Normal at 5% Significance Level | | | | | |
| 624 | Lilliefors Test Statistic | | | | 0.176 | Lilliefors GOF Test | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|---|---|-----------|---|--|---|---|---|---|---|-------|
| 625 | 5% Lilliefors Critical Value | | | 0.0432 | Data Not Normal at 5% Significance Level | | | | | | |
| 626 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 627 | | | | | | | | | | | |
| 628 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 629 | 95% UTL with 95% Coverage | | 73.71 | 90% Percentile (z) | | | | | | | 65.49 |
| 630 | 95% UPL (t) | | 71.66 | 95% Percentile (z) | | | | | | | 71.57 |
| 631 | 95% USL | | 105.2 | 99% Percentile (z) | | | | | | | 82.99 |
| 632 | | | | | | | | | | | |
| 633 | Gamma GOF Test | | | | | | | | | | |
| 634 | A-D Test Statistic | | 6.038 | Anderson-Darling Gamma GOF Test | | | | | | | |
| 635 | 5% A-D Critical Value | | 0.755 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 636 | K-S Test Statistic | | 0.127 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | | |
| 637 | 5% K-S Critical Value | | 0.044 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 638 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |
| 639 | | | | | | | | | | | |
| 640 | Gamma Statistics | | | | | | | | | | |
| 641 | k hat (MLE) | | 8.314 | k star (bias corrected MLE) | | | | | | | 8.257 |
| 642 | Theta hat (MLE) | | 5.294 | Theta star (bias corrected MLE) | | | | | | | 5.331 |
| 643 | nu hat (MLE) | | 7100 | nu star (bias corrected) | | | | | | | 7052 |
| 644 | MLE Mean (bias corrected) | | 44.02 | MLE Sd (bias corrected) | | | | | | | 15.32 |
| 645 | | | | | | | | | | | |
| 646 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | |
| 647 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | 71.74 | 90% Percentile | | | | | | | 64.44 |
| 648 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | 72.03 | 95% Percentile | | | | | | | 71.87 |
| 649 | 95% WH Approx. Gamma UTL with 95% Coverage | | 74.35 | 99% Percentile | | | | | | | 87.23 |
| 650 | 95% HW Approx. Gamma UTL with 95% Coverage | | 74.75 | | | | | | | | |
| 651 | 95% WH USL | | 122.8 | 95% HW USL | | | | | | | 127.2 |
| 652 | | | | | | | | | | | |
| 653 | Lognormal GOF Test | | | | | | | | | | |
| 654 | Shapiro Wilk Test Statistic | | 0.965 | Shapiro Wilk Lognormal GOF Test | | | | | | | |
| 655 | 5% Shapiro Wilk P Value | | 3.8642E-7 | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 656 | Lilliefors Test Statistic | | 0.109 | Lilliefors Lognormal GOF Test | | | | | | | |
| 657 | 5% Lilliefors Critical Value | | 0.0432 | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 658 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 659 | | | | | | | | | | | |
| 660 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 661 | 95% UTL with 95% Coverage | | 76.73 | 90% Percentile (z) | | | | | | | 64.68 |
| 662 | 95% UPL (t) | | 73.54 | 95% Percentile (z) | | | | | | | 73.39 |
| 663 | 95% USL | | 147.6 | 99% Percentile (z) | | | | | | | 93.04 |
| 664 | | | | | | | | | | | |
| 665 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 666 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 667 | | | | | | | | | | | |
| 668 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 669 | Order of Statistic, r | | 412 | 95% UTL with 95% Coverage | | | | | | | 82.8 |
| 670 | Approx, f used to compute achieved CC | | 1.355 | Approximate Actual Confidence Coefficient achieved by UTL | | | | | | | 0.908 |
| 671 | | | | Approximate Sample Size needed to achieve specified CC | | | | | | | 458 |
| 672 | 95% Percentile Bootstrap UTL with 95% Coverage | | 83.29 | 95% BCA Bootstrap UTL with 95% Coverage | | | | | | | 82.8 |
| 673 | 95% UPL | | 77.64 | 90% Percentile | | | | | | | 64.36 |
| 674 | 90% Chebyshev UPL | | 94.33 | 95% Percentile | | | | | | | 75.54 |
| 675 | 95% Chebyshev UPL | | 117.1 | 99% Percentile | | | | | | | 112 |
| 676 | 95% USL | | 126 | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|--|---|---|---|-----------|---|---|---|---|---|-----------|
| 677 | | | | | | | | | | | |
| 678 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 679 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 680 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 681 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 682 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 683 | | | | | | | | | | | |
| 684 | Cobalt | | | | | | | | | | |
| 685 | | | | | | | | | | | |
| 686 | General Statistics | | | | | | | | | | |
| 687 | Total Number of Observations | | | | 257 | | Number of Distinct Observations | | | | 28 |
| 688 | | | | | | | Number of Missing Observations | | | | 1 |
| 689 | Minimum | | | | 3.0000E-4 | | First Quartile | | | | 3.0000E-4 |
| 690 | Second Largest | | | | 0.0013 | | Median | | | | 3.0000E-4 |
| 691 | Maximum | | | | 0.0015 | | Third Quartile | | | | 5.0000E-4 |
| 692 | Mean | | | | 3.8829E-4 | | SD | | | | 1.5947E-4 |
| 693 | Coefficient of Variation | | | | 0.411 | | Skewness | | | | 3.309 |
| 694 | Mean of logged Data | | | | -7.909 | | SD of logged Data | | | | 0.305 |
| 695 | | | | | | | | | | | |
| 696 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 697 | Tolerance Factor K (For UTL) | | | | 1.812 | | d2max (for USL) | | | | 3.507 |
| 698 | | | | | | | | | | | |
| 699 | Normal GOF Test | | | | | | | | | | |
| 700 | Shapiro Wilk Test Statistic | | | | 0.587 | | Normal GOF Test | | | | |
| 701 | 5% Shapiro Wilk P Value | | | | 0 | | Data Not Normal at 5% Significance Level | | | | |
| 702 | Lilliefors Test Statistic | | | | 0.313 | | Lilliefors GOF Test | | | | |
| 703 | 5% Lilliefors Critical Value | | | | 0.0557 | | Data Not Normal at 5% Significance Level | | | | |
| 704 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 705 | | | | | | | | | | | |
| 706 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 707 | 95% UTL with 95% Coverage | | | | 6.7722E-4 | | 90% Percentile (z) | | | | 5.9266E-4 |
| 708 | 95% UPL (t) | | | | 6.5206E-4 | | 95% Percentile (z) | | | | 6.5059E-4 |
| 709 | 95% USL | | | | 9.4761E-4 | | 99% Percentile (z) | | | | 7.5927E-4 |
| 710 | | | | | | | | | | | |
| 711 | Gamma GOF Test | | | | | | | | | | |
| 712 | A-D Test Statistic | | | | 34.1 | | Anderson-Darling Gamma GOF Test | | | | |
| 713 | 5% A-D Critical Value | | | | 0.754 | | Data Not Gamma Distributed at 5% Significance Level | | | | |
| 714 | K-S Test Statistic | | | | 0.342 | | Kolmogorov-Smirnov Gamma GOF Test | | | | |
| 715 | 5% K-S Critical Value | | | | 0.0571 | | Data Not Gamma Distributed at 5% Significance Level | | | | |
| 716 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |
| 717 | | | | | | | | | | | |
| 718 | Gamma Statistics | | | | | | | | | | |
| 719 | k hat (MLE) | | | | 9.233 | | k star (bias corrected MLE) | | | | 9.127 |
| 720 | Theta hat (MLE) | | | | 4.2056E-5 | | Theta star (bias corrected MLE) | | | | 4.2541E-5 |
| 721 | nu hat (MLE) | | | | 4746 | | nu star (bias corrected) | | | | 4691 |
| 722 | MLE Mean (bias corrected) | | | | 3.8829E-4 | | MLE Sd (bias corrected) | | | | 1.2852E-4 |
| 723 | | | | | | | | | | | |
| 724 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | |
| 725 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 6.1923E-4 | | 90% Percentile | | | | 5.5940E-4 |
| 726 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 6.1627E-4 | | 95% Percentile | | | | 6.2099E-4 |
| 727 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 6.4712E-4 | | 99% Percentile | | | | 7.4786E-4 |
| 728 | 95% HW Approx. Gamma UTL with 95% Coverage | | | | 6.4463E-4 | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|--|---|-----------|--------|---|---|---|---|-----------|---------|---|
| 729 | 95% WH USL | | | | 0.001 | 95% HW USL | | | | 0.00102 | |
| 730 | | | | | | | | | | | |
| 731 | Lognormal GOF Test | | | | | | | | | | |
| 732 | Shapiro Wilk Test Statistic | | | 0.674 | | Shapiro Wilk Lognormal GOF Test | | | | | |
| 733 | 5% Shapiro Wilk P Value | | | 0 | | Data Not Lognormal at 5% Significance Level | | | | | |
| 734 | Lilliefors Test Statistic | | | 0.35 | | Lilliefors Lognormal GOF Test | | | | | |
| 735 | 5% Lilliefors Critical Value | | | 0.0557 | | Data Not Lognormal at 5% Significance Level | | | | | |
| 736 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 737 | | | | | | | | | | | |
| 738 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 739 | 95% UTL with 95% Coverage | | 6.3876E-4 | | 90% Percentile (z) | | | | 5.4333E-4 | | |
| 740 | 95% UPL (t) | | 6.0874E-4 | | 95% Percentile (z) | | | | 6.0703E-4 | | |
| 741 | 95% USL | | 0.00107 | | 99% Percentile (z) | | | | 7.4737E-4 | | |
| 742 | | | | | | | | | | | |
| 743 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 744 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 745 | | | | | | | | | | | |
| 746 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 747 | Order of Statistic, r | | 249 | | 95% UTL with 95% Coverage | | | | 8.0000E-4 | | |
| 748 | Approx, f used to compute achieved CC | | 1.456 | | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.899 | | |
| 749 | | | | | Approximate Sample Size needed to achieve specified CC | | | | 285 | | |
| 750 | 95% Percentile Bootstrap UTL with 95% Coverage | | 8.0000E-4 | | 95% BCA Bootstrap UTL with 95% Coverage | | | | 8.0000E-4 | | |
| 751 | 95% UPL | | 5.8100E-4 | | 90% Percentile | | | | 5.0000E-4 | | |
| 752 | 90% Chebyshev UPL | | 8.6763E-4 | | 95% Percentile | | | | 5.4800E-4 | | |
| 753 | 95% Chebyshev UPL | | 0.00108 | | 99% Percentile | | | | 0.00108 | | |
| 754 | 95% USL | | 0.0015 | | | | | | | | |
| 755 | | | | | | | | | | | |
| 756 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 757 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 758 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 759 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 760 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 761 | | | | | | | | | | | |
| 762 | Fluoride | | | | | | | | | | |
| 763 | | | | | | | | | | | |
| 764 | General Statistics | | | | | | | | | | |
| 765 | Total Number of Observations | | 295 | | Number of Distinct Observations | | | | 22 | | |
| 766 | Minimum | | 0.05 | | First Quartile | | | | 0.1 | | |
| 767 | Second Largest | | 1 | | Median | | | | 0.1 | | |
| 768 | Maximum | | 1 | | Third Quartile | | | | 0.25 | | |
| 769 | Mean | | 0.218 | | SD | | | | 0.233 | | |
| 770 | Coefficient of Variation | | 1.066 | | Skewness | | | | 2.376 | | |
| 771 | Mean of logged Data | | -1.877 | | SD of logged Data | | | | 0.77 | | |
| 772 | | | | | | | | | | | |
| 773 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 774 | Tolerance Factor K (For UTL) | | 1.8 | | d2max (for USL) | | | | 3.548 | | |
| 775 | | | | | | | | | | | |
| 776 | Normal GOF Test | | | | | | | | | | |
| 777 | Shapiro Wilk Test Statistic | | | 0.615 | | Normal GOF Test | | | | | |
| 778 | 5% Shapiro Wilk P Value | | | 0 | | Data Not Normal at 5% Significance Level | | | | | |
| 779 | Lilliefors Test Statistic | | | 0.304 | | Lilliefors GOF Test | | | | | |
| 780 | 5% Lilliefors Critical Value | | | 0.052 | | Data Not Normal at 5% Significance Level | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|---|---|--------|---|---|---|---|---|-------|---|---|
| 781 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 782 | | | | | | | | | | | |
| 783 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 784 | 95% UTL with 95% Coverage | | 0.637 | | | | 90% Percentile (z) | | 0.517 | | |
| 785 | 95% UPL (t) | | 0.603 | | | | 95% Percentile (z) | | 0.601 | | |
| 786 | 95% USL | | 1.044 | | | | 99% Percentile (z) | | 0.76 | | |
| 787 | | | | | | | | | | | |
| 788 | Gamma GOF Test | | | | | | | | | | |
| 789 | A-D Test Statistic | | 22.97 | | | | Anderson-Darling Gamma GOF Test | | | | |
| 790 | 5% A-D Critical Value | | 0.771 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 791 | K-S Test Statistic | | 0.269 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | | |
| 792 | 5% K-S Critical Value | | 0.0536 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 793 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |
| 794 | | | | | | | | | | | |
| 795 | Gamma Statistics | | | | | | | | | | |
| 796 | k hat (MLE) | | 1.553 | | | | k star (bias corrected MLE) | | 1.539 | | |
| 797 | Theta hat (MLE) | | 0.141 | | | | Theta star (bias corrected MLE) | | 0.142 | | |
| 798 | nu hat (MLE) | | 916 | | | | nu star (bias corrected) | | 908.1 | | |
| 799 | MLE Mean (bias corrected) | | 0.218 | | | | MLE Sd (bias corrected) | | 0.176 | | |
| 800 | | | | | | | | | | | |
| 801 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | |
| 802 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | 0.549 | | | | 90% Percentile | | 0.452 | | |
| 803 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | 0.546 | | | | 95% Percentile | | 0.564 | | |
| 804 | 95% WH Approx. Gamma UTL with 95% Coverage | | 0.598 | | | | 99% Percentile | | 0.816 | | |
| 805 | 95% HW Approx. Gamma UTL with 95% Coverage | | 0.598 | | | | | | | | |
| 806 | 95% WH USL | | 1.413 | | | | 95% HW USL | | 1.539 | | |
| 807 | | | | | | | | | | | |
| 808 | Lognormal GOF Test | | | | | | | | | | |
| 809 | Shapiro Wilk Test Statistic | | 0.846 | | | | Shapiro Wilk Lognormal GOF Test | | | | |
| 810 | 5% Shapiro Wilk P Value | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 811 | Lilliefors Test Statistic | | 0.249 | Lilliefors Lognormal GOF Test | | | | | | | |
| 812 | 5% Lilliefors Critical Value | | 0.052 | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 813 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 814 | | | | | | | | | | | |
| 815 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 816 | 95% UTL with 95% Coverage | | 0.612 | | | | 90% Percentile (z) | | 0.411 | | |
| 817 | 95% UPL (t) | | 0.547 | | | | 95% Percentile (z) | | 0.543 | | |
| 818 | 95% USL | | 2.353 | | | | 99% Percentile (z) | | 0.918 | | |
| 819 | | | | | | | | | | | |
| 820 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 821 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 822 | | | | | | | | | | | |
| 823 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 824 | Order of Statistic, r | | 286 | | | | 95% UTL with 95% Coverage | | 1 | | |
| 825 | Approx, f used to compute achieved CC | | 1.505 | | | | Approximate Actual Confidence Coefficient achieved by UTL | | 0.927 | | |
| 826 | | | | | | | Approximate Sample Size needed to achieve specified CC | | 311 | | |
| 827 | 95% Percentile Bootstrap UTL with 95% Coverage | | 1 | | | | 95% BCA Bootstrap UTL with 95% Coverage | | 1 | | |
| 828 | 95% UPL | | 1 | | | | 90% Percentile | | 0.5 | | |
| 829 | 90% Chebyshev UPL | | 0.918 | | | | 95% Percentile | | 1 | | |
| 830 | 95% Chebyshev UPL | | 1.235 | | | | 99% Percentile | | 1 | | |
| 831 | 95% USL | | 1 | | | | | | | | |
| 832 | | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|--------|--------------------|---|--------|--------|---------|---|---|---|--|
| 833 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 834 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 835 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 836 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 837 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 838 | | | | | | | | | | | | |
| 839 | Lead | | | | | | | | | | | |
| 840 | | | | | | | | | | | | |
| 841 | General Statistics | | | | | | | | | | | |
| 842 | Total Number of Observations | | | 240 | Number of Distinct Observations | | | 15 | | | | |
| 843 | Minimum | | | 5.0000E-4 | First Quartile | | | 0.00108 | | | | |
| 844 | Second Largest | | | 0.01 | Median | | | 0.01 | | | | |
| 845 | Maximum | | | 0.01 | Third Quartile | | | 0.01 | | | | |
| 846 | Mean | | | 0.0074 | SD | | | 0.0042 | | | | |
| 847 | Coefficient of Variation | | | 0.568 | Skewness | | | -1.005 | | | | |
| 848 | Mean of logged Data | | | -5.394 | SD of logged Data | | | 1.289 | | | | |
| 849 | | | | | | | | | | | | |
| 850 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 851 | Tolerance Factor K (For UTL) | | | 1.818 | d2max (for USL) | | | 3.487 | | | | |
| 852 | | | | | | | | | | | | |
| 853 | Normal GOF Test | | | | | | | | | | | |
| 854 | Shapiro Wilk Test Statistic | | | 0.55 | Normal GOF Test | | | | | | | |
| 855 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | | |
| 856 | Lilliefors Test Statistic | | | 0.453 | Lilliefors GOF Test | | | | | | | |
| 857 | 5% Lilliefors Critical Value | | | 0.0576 | Data Not Normal at 5% Significance Level | | | | | | | |
| 858 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 859 | | | | | | | | | | | | |
| 860 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 861 | 95% UTL with 95% Coverage | | 0.015 | 90% Percentile (z) | | 0.0128 | | | | | | |
| 862 | 95% UPL (t) | | 0.0144 | 95% Percentile (z) | | 0.0143 | | | | | | |
| 863 | 95% USL | | 0.0221 | 99% Percentile (z) | | 0.0172 | | | | | | |
| 864 | | | | | | | | | | | | |
| 865 | Gamma GOF Test | | | | | | | | | | | |
| 866 | A-D Test Statistic | | | 53.67 | Anderson-Darling Gamma GOF Test | | | | | | | |
| 867 | 5% A-D Critical Value | | | 0.78 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 868 | K-S Test Statistic | | | 0.462 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | | |
| 869 | 5% K-S Critical Value | | | 0.0606 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |
| 870 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 871 | | | | | | | | | | | | |
| 872 | Gamma Statistics | | | | | | | | | | | |
| 873 | k hat (MLE) | | | 1.164 | k star (bias corrected MLE) | | | 1.152 | | | | |
| 874 | Theta hat (MLE) | | | 0.00636 | Theta star (bias corrected MLE) | | | 0.00642 | | | | |
| 875 | nu hat (MLE) | | | 558.7 | nu star (bias corrected) | | | 553.1 | | | | |
| 876 | MLE Mean (bias corrected) | | | 0.0074 | MLE Sd (bias corrected) | | | 0.00689 | | | | |
| 877 | | | | | | | | | | | | |
| 878 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 879 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | 0.0212 | 90% Percentile | | | 0.0164 | | | | |
| 880 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | 0.0235 | 95% Percentile | | | 0.0211 | | | | |
| 881 | 95% WH Approx. Gamma UTL with 95% Coverage | | 0.0235 | 99% Percentile | | | 0.0317 | | | | | |
| 882 | 95% HW Approx. Gamma UTL with 95% Coverage | | 0.0264 | | | | | | | | | |
| 883 | 95% WH USL | | | 0.0572 | 95% HW USL | | | 0.0754 | | | | |
| 884 | | | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|--|---|---|--------|---|---|---|---------------------------|---|--------|---|
| 885 | Lognormal GOF Test | | | | | | | | | | |
| 886 | Shapiro Wilk Test Statistic | | | 0.558 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 887 | 5% Shapiro Wilk P Value | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 888 | Lilliefors Test Statistic | | | 0.451 | Lilliefors Lognormal GOF Test | | | | | | |
| 889 | 5% Lilliefors Critical Value | | | 0.0576 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 890 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 891 | | | | | | | | | | | |
| 892 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 893 | 95% UTL with 95% Coverage | | | 0.0473 | | | | 90% Percentile (z) | | 0.0237 | |
| 894 | 95% UPL (t) | | | 0.0383 | | | | 95% Percentile (z) | | 0.0379 | |
| 895 | 95% USL | | | 0.407 | | | | 99% Percentile (z) | | 0.0911 | |
| 896 | | | | | | | | | | | |
| 897 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 898 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 899 | | | | | | | | | | | |
| 900 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 901 | Order of Statistic, r | | | 233 | | | | 95% UTL with 95% Coverage | | 0.01 | |
| 902 | Approx, f used to compute achieved CC | | | 1.533 | Approximate Actual Confidence Coefficient achieved by UTL | | | 0.916 | | | |
| 903 | | | | | Approximate Sample Size needed to achieve specified CC | | | 260 | | | |
| 904 | 95% Percentile Bootstrap UTL with 95% Coverage | | | 0.01 | 95% BCA Bootstrap UTL with 95% Coverage | | | 0.01 | | | |
| 905 | 95% UPL | | | 0.01 | 90% Percentile | | | 0.01 | | | |
| 906 | 90% Chebyshev UPL | | | 0.02 | 95% Percentile | | | 0.01 | | | |
| 907 | 95% Chebyshev UPL | | | 0.0258 | 99% Percentile | | | 0.01 | | | |
| 908 | 95% USL | | | 0.01 | | | | | | | |
| 909 | | | | | | | | | | | |
| 910 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 911 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 912 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 913 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 914 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 915 | | | | | | | | | | | |
| 916 | Lithium | | | | | | | | | | |
| 917 | | | | | | | | | | | |
| 918 | General Statistics | | | | | | | | | | |
| 919 | Total Number of Observations | | | 227 | Number of Distinct Observations | | | 2 | | | |
| 920 | Minimum | | | 0.01 | First Quartile | | | 0.03 | | | |
| 921 | Second Largest | | | 0.03 | Median | | | 0.03 | | | |
| 922 | Maximum | | | 0.03 | Third Quartile | | | 0.03 | | | |
| 923 | Mean | | | 0.0252 | SD | | | 0.00853 | | | |
| 924 | Coefficient of Variation | | | 0.338 | Skewness | | | -1.239 | | | |
| 925 | Mean of logged Data | | | -3.768 | SD of logged Data | | | 0.469 | | | |
| 926 | | | | | | | | | | | |
| 927 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 928 | Tolerance Factor K (For UTL) | | | 1.823 | d2max (for USL) | | | 3.471 | | | |
| 929 | | | | | | | | | | | |
| 930 | Normal GOF Test | | | | | | | | | | |
| 931 | Shapiro Wilk Test Statistic | | | 0.512 | Normal GOF Test | | | | | | |
| 932 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |
| 933 | Lilliefors Test Statistic | | | 0.474 | Lilliefors GOF Test | | | | | | |
| 934 | 5% Lilliefors Critical Value | | | 0.0592 | Data Not Normal at 5% Significance Level | | | | | | |
| 935 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 936 | | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|-----|--|---|---------|---|---|---|---|---|---|---|---|---------|
| 937 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 938 | 95% UTL with 95% Coverage | | 0.0408 | | | | | | | | 90% Percentile (z) | 0.0362 |
| 939 | 95% UPL (t) | | 0.0394 | | | | | | | | 95% Percentile (z) | 0.0393 |
| 940 | 95% USL | | 0.0549 | | | | | | | | 99% Percentile (z) | 0.0451 |
| 941 | | | | | | | | | | | | |
| 942 | Gamma GOF Test | | | | | | | | | | | |
| 943 | A-D Test Statistic | | 56.1 | | | | | | | | Anderson-Darling Gamma GOF Test | |
| 944 | 5% A-D Critical Value | | 0.756 | | | | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 945 | K-S Test Statistic | | 0.476 | | | | | | | | Kolmogorov-Smirnov Gamma GOF Test | |
| 946 | 5% K-S Critical Value | | 0.0606 | | | | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 947 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 948 | | | | | | | | | | | | |
| 949 | Gamma Statistics | | | | | | | | | | | |
| 950 | k hat (MLE) | | 5.801 | | | | | | | | k star (bias corrected MLE) | 5.727 |
| 951 | Theta hat (MLE) | | 0.00435 | | | | | | | | Theta star (bias corrected MLE) | 0.00441 |
| 952 | nu hat (MLE) | | 2633 | | | | | | | | nu star (bias corrected) | 2600 |
| 953 | MLE Mean (bias corrected) | | 0.0252 | | | | | | | | MLE Sd (bias corrected) | 0.0105 |
| 954 | | | | | | | | | | | | |
| 955 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 956 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | 0.0449 | | | | | | | | 90% Percentile | 0.0393 |
| 957 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | 0.046 | | | | | | | | 95% Percentile | 0.0447 |
| 958 | 95% WH Approx. Gamma UTL with 95% Coverage | | 0.0475 | | | | | | | | 99% Percentile | 0.056 |
| 959 | 95% HW Approx. Gamma UTL with 95% Coverage | | 0.0489 | | | | | | | | | |
| 960 | 95% WH USL | | 0.079 | | | | | | | | 95% HW USL | 0.0853 |
| 961 | | | | | | | | | | | | |
| 962 | Lognormal GOF Test | | | | | | | | | | | |
| 963 | Shapiro Wilk Test Statistic | | 0.512 | | | | | | | | Shapiro Wilk Lognormal GOF Test | |
| 964 | 5% Shapiro Wilk P Value | | 0 | | | | | | | | Data Not Lognormal at 5% Significance Level | |
| 965 | Lilliefors Test Statistic | | 0.474 | | | | | | | | Lilliefors Lognormal GOF Test | |
| 966 | 5% Lilliefors Critical Value | | 0.0592 | | | | | | | | Data Not Lognormal at 5% Significance Level | |
| 967 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 968 | | | | | | | | | | | | |
| 969 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 970 | 95% UTL with 95% Coverage | | 0.0543 | | | | | | | | 90% Percentile (z) | 0.0421 |
| 971 | 95% UPL (t) | | 0.0502 | | | | | | | | 95% Percentile (z) | 0.0499 |
| 972 | 95% USL | | 0.118 | | | | | | | | 99% Percentile (z) | 0.0687 |
| 973 | | | | | | | | | | | | |
| 974 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 975 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 976 | | | | | | | | | | | | |
| 977 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 978 | Order of Statistic, r | | 220 | | | | | | | | 95% UTL with 95% Coverage | 0.03 |
| 979 | Approx, f used to compute achieved CC | | 1.447 | | | | | | | | Approximate Actual Confidence Coefficient achieved by UTL | 0.884 |
| 980 | | | | | | | | | | | Approximate Sample Size needed to achieve specified CC | 260 |
| 981 | 95% Percentile Bootstrap UTL with 95% Coverage | | N/A | | | | | | | | 95% BCA Bootstrap UTL with 95% Coverage | N/A |
| 982 | 95% UPL | | 0.03 | | | | | | | | 90% Percentile | 0.03 |
| 983 | 90% Chebyshev UPL | | 0.0509 | | | | | | | | 95% Percentile | 0.03 |
| 984 | 95% Chebyshev UPL | | 0.0625 | | | | | | | | 99% Percentile | 0.03 |
| 985 | 95% USL | | 0.03 | | | | | | | | | |
| 986 | | | | | | | | | | | | |
| 987 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 988 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|------|---|---|---------|--------------------|---|---------|---|-----------|---|---|---|--|
| 989 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 990 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 991 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 992 | | | | | | | | | | | | |
| 993 | Mercury | | | | | | | | | | | |
| 994 | | | | | | | | | | | | |
| 995 | General Statistics | | | | | | | | | | | |
| 996 | Total Number of Observations | | | 239 | Number of Distinct Observations | | | 1 | | | | |
| 997 | Minimum | | | 2.0000E-4 | First Quartile | | | 2.0000E-4 | | | | |
| 998 | Second Largest | | | 2.0000E-4 | Median | | | 2.0000E-4 | | | | |
| 999 | Maximum | | | 2.0000E-4 | Third Quartile | | | 2.0000E-4 | | | | |
| 1000 | Mean | | | 2.0000E-4 | SD | | | 7.605E-19 | | | | |
| 1001 | Coefficient of Variation | | | 3.803E-15 | Skewness | | | 1.006 | | | | |
| 1002 | | | | | | | | | | | | |
| 1003 | Warning: There is only one distinct observation value in this data set - resulting in '0' variance! | | | | | | | | | | | |
| 1004 | ProUCL (or any other software) should not be used on such a data set! | | | | | | | | | | | |
| 1005 | The data set for variable Mercury was not processed! | | | | | | | | | | | |
| 1006 | | | | | | | | | | | | |
| 1007 | If possible, compute and collect Data Quality Objectives (DQOs) based sample size and analytical results. | | | | | | | | | | | |
| 1008 | The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV). | | | | | | | | | | | |
| 1009 | | | | | | | | | | | | |
| 1010 | | | | | | | | | | | | |
| 1011 | MOLYBDENUM | | | | | | | | | | | |
| 1012 | | | | | | | | | | | | |
| 1013 | General Statistics | | | | | | | | | | | |
| 1014 | Total Number of Observations | | | 227 | Number of Distinct Observations | | | 4 | | | | |
| 1015 | | | | | Number of Missing Observations | | | 1 | | | | |
| 1016 | Minimum | | | 0.001 | First Quartile | | | 0.001 | | | | |
| 1017 | Second Largest | | | 0.0021 | Median | | | 0.001 | | | | |
| 1018 | Maximum | | | 0.0032 | Third Quartile | | | 0.001 | | | | |
| 1019 | Mean | | | 0.00125 | SD | | | 4.4665E-4 | | | | |
| 1020 | Coefficient of Variation | | | 0.358 | Skewness | | | 1.401 | | | | |
| 1021 | Mean of logged Data | | | -6.738 | SD of logged Data | | | 0.303 | | | | |
| 1022 | | | | | | | | | | | | |
| 1023 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 1024 | Tolerance Factor K (For UTL) | | | 1.823 | d2max (for USL) | | | 3.471 | | | | |
| 1025 | | | | | | | | | | | | |
| 1026 | Normal GOF Test | | | | | | | | | | | |
| 1027 | Shapiro Wilk Test Statistic | | | 0.545 | Normal GOF Test | | | | | | | |
| 1028 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | | |
| 1029 | Lilliefors Test Statistic | | | 0.468 | Lilliefors GOF Test | | | | | | | |
| 1030 | 5% Lilliefors Critical Value | | | 0.0592 | Data Not Normal at 5% Significance Level | | | | | | | |
| 1031 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 1032 | | | | | | | | | | | | |
| 1033 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 1034 | 95% UTL with 95% Coverage | | 0.00206 | 90% Percentile (z) | | 0.00182 | | | | | | |
| 1035 | 95% UPL (t) | | 0.00199 | 95% Percentile (z) | | 0.00198 | | | | | | |
| 1036 | 95% USL | | 0.0028 | 99% Percentile (z) | | 0.00229 | | | | | | |
| 1037 | | | | | | | | | | | | |
| 1038 | Gamma GOF Test | | | | | | | | | | | |
| 1039 | A-D Test Statistic | | | 54.09 | Anderson-Darling Gamma GOF Test | | | | | | | |
| 1040 | 5% A-D Critical Value | | | 0.752 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|------|--|---|---|---|-----------|---|---|---|---|-----------|---|--|
| 1041 | K-S Test Statistic | | | | 0.471 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 1042 | 5% K-S Critical Value | | | | 0.0605 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 1043 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 1044 | | | | | | | | | | | | |
| 1045 | Gamma Statistics | | | | | | | | | | | |
| 1046 | k hat (MLE) | | | | 9.905 | k star (bias corrected MLE) | | | | 9.777 | | |
| 1047 | Theta hat (MLE) | | | | 1.2600E-4 | Theta star (bias corrected MLE) | | | | 1.2765E-4 | | |
| 1048 | nu hat (MLE) | | | | 4497 | nu star (bias corrected) | | | | 4439 | | |
| 1049 | MLE Mean (bias corrected) | | | | 0.00125 | MLE Sd (bias corrected) | | | | 3.9913E-4 | | |
| 1050 | | | | | | | | | | | | |
| 1051 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 1052 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 0.00197 | 90% Percentile | | | | 0.00178 | | |
| 1053 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 0.00197 | 95% Percentile | | | | 0.00197 | | |
| 1054 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 0.00206 | 99% Percentile | | | | 0.00236 | | |
| 1055 | 95% HW Approx. Gamma UTL with 95% Coverage | | | | 0.00206 | | | | | | | |
| 1056 | 95% WH USL | | | | 0.00312 | 95% HW USL | | | | 0.00318 | | |
| 1057 | | | | | | | | | | | | |
| 1058 | Lognormal GOF Test | | | | | | | | | | | |
| 1059 | Shapiro Wilk Test Statistic | | | | 0.537 | Shapiro Wilk Lognormal GOF Test | | | | | | |
| 1060 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 1061 | Lilliefors Test Statistic | | | | 0.47 | Lilliefors Lognormal GOF Test | | | | | | |
| 1062 | 5% Lilliefors Critical Value | | | | 0.0592 | Data Not Lognormal at 5% Significance Level | | | | | | |
| 1063 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 1064 | | | | | | | | | | | | |
| 1065 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 1066 | 95% UTL with 95% Coverage | | | | 0.00206 | 90% Percentile (z) | | | | 0.00175 | | |
| 1067 | 95% UPL (t) | | | | 0.00196 | 95% Percentile (z) | | | | 0.00195 | | |
| 1068 | 95% USL | | | | 0.0034 | 99% Percentile (z) | | | | 0.0024 | | |
| 1069 | | | | | | | | | | | | |
| 1070 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 1071 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 1072 | | | | | | | | | | | | |
| 1073 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 1074 | Order of Statistic, r | | | | 220 | 95% UTL with 95% Coverage | | | | 0.002 | | |
| 1075 | Approx, f used to compute achieved CC | | | | 1.447 | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.884 | | |
| 1076 | | | | | | Approximate Sample Size needed to achieve specified CC | | | | 260 | | |
| 1077 | 95% Percentile Bootstrap UTL with 95% Coverage | | | | 0.002 | 95% BCA Bootstrap UTL with 95% Coverage | | | | 0.002 | | |
| 1078 | 95% UPL | | | | 0.002 | 90% Percentile | | | | 0.002 | | |
| 1079 | 90% Chebyshev UPL | | | | 0.00259 | 95% Percentile | | | | 0.002 | | |
| 1080 | 95% Chebyshev UPL | | | | 0.0032 | 99% Percentile | | | | 0.002 | | |
| 1081 | 95% USL | | | | 0.0032 | | | | | | | |
| 1082 | | | | | | | | | | | | |
| 1083 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 1084 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 1085 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 1086 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 1087 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 1088 | | | | | | | | | | | | |
| 1089 | Radium (226) | | | | | | | | | | | |
| 1090 | | | | | | | | | | | | |
| 1091 | General Statistics | | | | | | | | | | | |
| 1092 | Total Number of Observations | | | | 209 | Number of Distinct Observations | | | | 156 | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|------|---|---|---|--|-----------|---|---|---|---|---|--------|
| 1093 | | | | Minimum | 0.0616 | | | | | First Quartile | 0.0966 |
| 1094 | | | | Second Largest | 0.467 | | | | | Median | 0.125 |
| 1095 | | | | Maximum | 0.479 | | | | | Third Quartile | 0.185 |
| 1096 | | | | Mean | 0.156 | | | | | SD | 0.0876 |
| 1097 | | | | Coefficient of Variation | 0.56 | | | | | Skewness | 1.488 |
| 1098 | | | | Mean of logged Data | -1.982 | | | | | SD of logged Data | 0.483 |
| 1099 | | | | | | | | | | | |
| 1100 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 1101 | | | | Tolerance Factor K (For UTL) | 1.831 | | | | | d2max (for USL) | 3.446 |
| 1102 | | | | | | | | | | | |
| 1103 | Normal GOF Test | | | | | | | | | | |
| 1104 | | | | Shapiro Wilk Test Statistic | 0.81 | | | | | Normal GOF Test | |
| 1105 | | | | 5% Shapiro Wilk P Value | 0 | | | | | Data Not Normal at 5% Significance Level | |
| 1106 | | | | Lilliefors Test Statistic | 0.218 | | | | | Lilliefors GOF Test | |
| 1107 | | | | 5% Lilliefors Critical Value | 0.0617 | | | | | Data Not Normal at 5% Significance Level | |
| 1108 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 1109 | | | | | | | | | | | |
| 1110 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 1111 | | | | 95% UTL with 95% Coverage | 0.317 | | | | | 90% Percentile (z) | 0.269 |
| 1112 | | | | 95% UPL (t) | 0.302 | | | | | 95% Percentile (z) | 0.301 |
| 1113 | | | | 95% USL | 0.458 | | | | | 99% Percentile (z) | 0.36 |
| 1114 | | | | | | | | | | | |
| 1115 | Gamma GOF Test | | | | | | | | | | |
| 1116 | | | | A-D Test Statistic | 6.978 | | | | | Anderson-Darling Gamma GOF Test | |
| 1117 | | | | 5% A-D Critical Value | 0.757 | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 1118 | | | | K-S Test Statistic | 0.157 | | | | | Kolmogorov-Smirnov Gamma GOF Test | |
| 1119 | | | | 5% K-S Critical Value | 0.0629 | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 1120 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |
| 1121 | | | | | | | | | | | |
| 1122 | Gamma Statistics | | | | | | | | | | |
| 1123 | | | | k hat (MLE) | 4.114 | | | | | k star (bias corrected MLE) | 4.058 |
| 1124 | | | | Theta hat (MLE) | 0.038 | | | | | Theta star (bias corrected MLE) | 0.0385 |
| 1125 | | | | nu hat (MLE) | 1720 | | | | | nu star (bias corrected) | 1696 |
| 1126 | | | | MLE Mean (bias corrected) | 0.156 | | | | | MLE Sd (bias corrected) | 0.0776 |
| 1127 | | | | | | | | | | | |
| 1128 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | |
| 1129 | | | | 95% Wilson Hilferty (WH) Approx. Gamma UPL | 0.301 | | | | | 90% Percentile | 0.26 |
| 1130 | | | | 95% Hawkins Wixley (HW) Approx. Gamma UPL | 0.302 | | | | | 95% Percentile | 0.302 |
| 1131 | | | | 95% WH Approx. Gamma UTL with 95% Coverage | 0.323 | | | | | 99% Percentile | 0.391 |
| 1132 | | | | 95% HW Approx. Gamma UTL with 95% Coverage | 0.325 | | | | | | |
| 1133 | | | | 95% WH USL | 0.57 | | | | | 95% HW USL | 0.598 |
| 1134 | | | | | | | | | | | |
| 1135 | Lognormal GOF Test | | | | | | | | | | |
| 1136 | | | | Shapiro Wilk Test Statistic | 0.92 | | | | | Shapiro Wilk Lognormal GOF Test | |
| 1137 | | | | 5% Shapiro Wilk P Value | 1.110E-16 | | | | | Data Not Lognormal at 5% Significance Level | |
| 1138 | | | | Lilliefors Test Statistic | 0.121 | | | | | Lilliefors Lognormal GOF Test | |
| 1139 | | | | 5% Lilliefors Critical Value | 0.0617 | | | | | Data Not Lognormal at 5% Significance Level | |
| 1140 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 1141 | | | | | | | | | | | |
| 1142 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 1143 | | | | 95% UTL with 95% Coverage | 0.334 | | | | | 90% Percentile (z) | 0.256 |
| 1144 | | | | 95% UPL (t) | 0.307 | | | | | 95% Percentile (z) | 0.305 |

| A | B | C | D | E | F | G | H | I | J | K | L |
|------|---|---|---|--|--------|---|---|---|---|---|-------|
| 1145 | | | | 95% USL | 0.727 | | | | | 99% Percentile (z) | 0.424 |
| 1146 | | | | | | | | | | | |
| 1147 | | | | Nonparametric Distribution Free Background Statistics | | | | | | | |
| 1148 | | | | Data do not follow a Discernible Distribution (0.05) | | | | | | | |
| 1149 | | | | | | | | | | | |
| 1150 | | | | Nonparametric Upper Limits for Background Threshold Values | | | | | | | |
| 1151 | | | | Order of Statistic, r | 203 | | | | | 95% UTL with 95% Coverage | 0.368 |
| 1152 | | | | Approx, f used to compute achieved CC | 1.526 | | | | | Approximate Actual Confidence Coefficient achieved by UTL | 0.902 |
| 1153 | | | | | | | | | | Approximate Sample Size needed to achieve specified CC | 234 |
| 1154 | | | | 95% Percentile Bootstrap UTL with 95% Coverage | 0.366 | | | | | 95% BCA Bootstrap UTL with 95% Coverage | 0.366 |
| 1155 | | | | 95% UPL | 0.344 | | | | | 90% Percentile | 0.292 |
| 1156 | | | | 90% Chebyshev UPL | 0.42 | | | | | 95% Percentile | 0.339 |
| 1157 | | | | 95% Chebyshev UPL | 0.539 | | | | | 99% Percentile | 0.442 |
| 1158 | | | | 95% USL | 0.479 | | | | | | |
| 1159 | | | | | | | | | | | |
| 1160 | | | | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | |
| 1161 | | | | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | |
| 1162 | | | | and consists of observations collected from clean unimpacted locations. | | | | | | | |
| 1163 | | | | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | |
| 1164 | | | | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | |
| 1165 | | | | | | | | | | | |
| 1166 | | | | Radium 228 | | | | | | | |
| 1167 | | | | | | | | | | | |
| 1168 | | | | General Statistics | | | | | | | |
| 1169 | | | | Total Number of Observations | 217 | | | | | Number of Distinct Observations | 173 |
| 1170 | | | | | | | | | | Number of Missing Observations | 1 |
| 1171 | | | | Minimum | 0.263 | | | | | First Quartile | 0.388 |
| 1172 | | | | Second Largest | 1.3 | | | | | Median | 0.48 |
| 1173 | | | | Maximum | 1.45 | | | | | Third Quartile | 0.636 |
| 1174 | | | | Mean | 0.548 | | | | | SD | 0.23 |
| 1175 | | | | Coefficient of Variation | 0.419 | | | | | Skewness | 1.406 |
| 1176 | | | | Mean of logged Data | -0.675 | | | | | SD of logged Data | 0.372 |
| 1177 | | | | | | | | | | | |
| 1178 | | | | Critical Values for Background Threshold Values (BTVs) | | | | | | | |
| 1179 | | | | Tolerance Factor K (For UTL) | 1.828 | | | | | d2max (for USL) | 3.457 |
| 1180 | | | | | | | | | | | |
| 1181 | | | | Normal GOF Test | | | | | | | |
| 1182 | | | | Shapiro Wilk Test Statistic | 0.851 | | | | | Normal GOF Test | |
| 1183 | | | | 5% Shapiro Wilk P Value | 0 | | | | | Data Not Normal at 5% Significance Level | |
| 1184 | | | | Lilliefors Test Statistic | 0.152 | | | | | Lilliefors GOF Test | |
| 1185 | | | | 5% Lilliefors Critical Value | 0.0606 | | | | | Data Not Normal at 5% Significance Level | |
| 1186 | | | | Data Not Normal at 5% Significance Level | | | | | | | |
| 1187 | | | | | | | | | | | |
| 1188 | | | | Background Statistics Assuming Normal Distribution | | | | | | | |
| 1189 | | | | 95% UTL with 95% Coverage | 0.968 | | | | | 90% Percentile (z) | 0.843 |
| 1190 | | | | 95% UPL (t) | 0.929 | | | | | 95% Percentile (z) | 0.926 |
| 1191 | | | | 95% USL | 1.343 | | | | | 99% Percentile (z) | 1.083 |
| 1192 | | | | | | | | | | | |
| 1193 | | | | Gamma GOF Test | | | | | | | |
| 1194 | | | | A-D Test Statistic | 4.513 | | | | | Anderson-Darling Gamma GOF Test | |
| 1195 | | | | 5% A-D Critical Value | 0.754 | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 1196 | | | | K-S Test Statistic | 0.11 | | | | | Kolmogorov-Smirnov Gamma GOF Test | |

| A | B | C | D | E | G | H | I | J | K | L |
|------|--|---|---|-----------|---|---|---|-------|---|---|
| 1197 | 5% K-S Critical Value | | | 0.0617 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 1198 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | |
| 1199 | | | | | | | | | | |
| 1200 | Gamma Statistics | | | | | | | | | |
| 1201 | k hat (MLE) | | | 6.944 | k star (bias corrected MLE) | | | 6.851 | | |
| 1202 | Theta hat (MLE) | | | 0.0789 | Theta star (bias corrected MLE) | | | 0.08 | | |
| 1203 | nu hat (MLE) | | | 3014 | nu star (bias corrected) | | | 2973 | | |
| 1204 | MLE Mean (bias corrected) | | | 0.548 | MLE Sd (bias corrected) | | | 0.209 | | |
| 1205 | | | | | | | | | | |
| 1206 | Background Statistics Assuming Gamma Distribution | | | | | | | | | |
| 1207 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | 0.932 | 90% Percentile | | | 0.828 | | |
| 1208 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | 0.934 | 95% Percentile | | | 0.932 | | |
| 1209 | 95% WH Approx. Gamma UTL with 95% Coverage | | | 0.983 | 99% Percentile | | | 1.149 | | |
| 1210 | 95% HW Approx. Gamma UTL with 95% Coverage | | | 0.988 | | | | | | |
| 1211 | 95% WH USL | | | 1.575 | 95% HW USL | | | 1.627 | | |
| 1212 | | | | | | | | | | |
| 1213 | Lognormal GOF Test | | | | | | | | | |
| 1214 | Shapiro Wilk Test Statistic | | | 0.943 | Shapiro Wilk Lognormal GOF Test | | | | | |
| 1215 | 5% Shapiro Wilk P Value | | | 1.7248E-9 | Data Not Lognormal at 5% Significance Level | | | | | |
| 1216 | Lilliefors Test Statistic | | | 0.084 | Lilliefors Lognormal GOF Test | | | | | |
| 1217 | 5% Lilliefors Critical Value | | | 0.0606 | Data Not Lognormal at 5% Significance Level | | | | | |
| 1218 | Data Not Lognormal at 5% Significance Level | | | | | | | | | |
| 1219 | | | | | | | | | | |
| 1220 | Background Statistics assuming Lognormal Distribution | | | | | | | | | |
| 1221 | 95% UTL with 95% Coverage | | | 1.005 | 90% Percentile (z) | | | 0.821 | | |
| 1222 | 95% UPL (t) | | | 0.943 | 95% Percentile (z) | | | 0.939 | | |
| 1223 | 95% USL | | | 1.844 | 99% Percentile (z) | | | 1.211 | | |
| 1224 | | | | | | | | | | |
| 1225 | Nonparametric Distribution Free Background Statistics | | | | | | | | | |
| 1226 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | |
| 1227 | | | | | | | | | | |
| 1228 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | |
| 1229 | Order of Statistic, r | | | 211 | 95% UTL with 95% Coverage | | | 1.08 | | |
| 1230 | Approx, f used to compute achieved CC | | | 1.586 | Approximate Actual Confidence Coefficient achieved by UTL | | | 0.92 | | |
| 1231 | | | | | Approximate Sample Size needed to achieve specified CC | | | 234 | | |
| 1232 | 95% Percentile Bootstrap UTL with 95% Coverage | | | 1.048 | 95% BCA Bootstrap UTL with 95% Coverage | | | 0.927 | | |
| 1233 | 95% UPL | | | 1 | 90% Percentile | | | 0.996 | | |
| 1234 | 90% Chebyshev UPL | | | 1.239 | 95% Percentile | | | 1 | | |
| 1235 | 95% Chebyshev UPL | | | 1.552 | 99% Percentile | | | 1.289 | | |
| 1236 | 95% USL | | | 1.45 | | | | | | |
| 1237 | | | | | | | | | | |
| 1238 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | |
| 1239 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | |
| 1240 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | |
| 1241 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | |
| 1242 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | |
| 1243 | | | | | | | | | | |
| 1244 | Selenium | | | | | | | | | |
| 1245 | | | | | | | | | | |
| 1246 | General Statistics | | | | | | | | | |
| 1247 | Total Number of Observations | | | 227 | Number of Distinct Observations | | | 9 | | |
| 1248 | Minimum | | | 0.001 | First Quartile | | | 0.001 | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|------|---|--------------|---|---------|---------|---|---|---|--------------------|---|---------|
| 1249 | Second Largest | | | | 0.005 | | | | | Median | 0.001 |
| 1250 | Maximum | | | | 0.005 | | | | | Third Quartile | 0.0016 |
| 1251 | Mean | | | | 0.00198 | | | | | SD | 0.0017 |
| 1252 | Coefficient of Variation | | | | 0.858 | | | | | Skewness | 1.224 |
| 1253 | Mean of logged Data | | | | -6.504 | | | | | SD of logged Data | 0.681 |
| 1254 | | | | | | | | | | | |
| 1255 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 1256 | Tolerance Factor K (For UTL) | | | | 1.823 | | | | | d2max (for USL) | 3.471 |
| 1257 | | | | | | | | | | | |
| 1258 | Normal GOF Test | | | | | | | | | | |
| 1259 | Shapiro Wilk Test Statistic | | | | 0.532 | | | | | Normal GOF Test | |
| 1260 | 5% Shapiro Wilk P Value | | | | 0 | | | | | Data Not Normal at 5% Significance Level | |
| 1261 | Lilliefors Test Statistic | | | | 0.416 | | | | | Lilliefors GOF Test | |
| 1262 | 5% Lilliefors Critical Value | | | | 0.0592 | | | | | Data Not Normal at 5% Significance Level | |
| 1263 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 1264 | | | | | | | | | | | |
| 1265 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 1266 | 95% UTL with | 95% Coverage | | 0.00507 | | | | | 90% Percentile (z) | 0.00415 | |
| 1267 | | 95% UPL (t) | | 0.00479 | | | | | 95% Percentile (z) | 0.00477 | |
| 1268 | | 95% USL | | 0.00787 | | | | | 99% Percentile (z) | 0.00592 | |
| 1269 | | | | | | | | | | | |
| 1270 | Gamma GOF Test | | | | | | | | | | |
| 1271 | A-D Test Statistic | | | | 50.81 | | | | | Anderson-Darling Gamma GOF Test | |
| 1272 | 5% A-D Critical Value | | | | 0.767 | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 1273 | K-S Test Statistic | | | | 0.409 | | | | | Kolmogorov-Smirnov Gamma GOF Test | |
| 1274 | 5% K-S Critical Value | | | | 0.0614 | | | | | Data Not Gamma Distributed at 5% Significance Level | |
| 1275 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |
| 1276 | | | | | | | | | | | |
| 1277 | Gamma Statistics | | | | | | | | | | |
| 1278 | k hat (MLE) | | | | 1.947 | | | | | k star (bias corrected MLE) | 1.924 |
| 1279 | Theta hat (MLE) | | | | 0.00102 | | | | | Theta star (bias corrected MLE) | 0.00103 |
| 1280 | nu hat (MLE) | | | | 884 | | | | | nu star (bias corrected) | 873.6 |
| 1281 | MLE Mean (bias corrected) | | | | 0.00198 | | | | | MLE Sd (bias corrected) | 0.00143 |
| 1282 | | | | | | | | | | | |
| 1283 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | |
| 1284 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 0.00469 | | | | | 90% Percentile | 0.00388 |
| 1285 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 0.00468 | | | | | 95% Percentile | 0.00475 |
| 1286 | 95% WH Approx. Gamma UTL with | 95% Coverage | | 0.00513 | | | | | 99% Percentile | 0.00668 | |
| 1287 | 95% HW Approx. Gamma UTL with | 95% Coverage | | 0.00514 | | | | | | | |
| 1288 | | 95% WH USL | | 0.0109 | | | | | 95% HW USL | 0.0117 | |
| 1289 | | | | | | | | | | | |
| 1290 | Lognormal GOF Test | | | | | | | | | | |
| 1291 | Shapiro Wilk Test Statistic | | | | 0.548 | | | | | Shapiro Wilk Lognormal GOF Test | |
| 1292 | 5% Shapiro Wilk P Value | | | | 0 | | | | | Data Not Lognormal at 5% Significance Level | |
| 1293 | Lilliefors Test Statistic | | | | 0.406 | | | | | Lilliefors Lognormal GOF Test | |
| 1294 | 5% Lilliefors Critical Value | | | | 0.0592 | | | | | Data Not Lognormal at 5% Significance Level | |
| 1295 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 1296 | | | | | | | | | | | |
| 1297 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 1298 | 95% UTL with | 95% Coverage | | 0.00518 | | | | | 90% Percentile (z) | 0.00358 | |
| 1299 | | 95% UPL (t) | | 0.00462 | | | | | 95% Percentile (z) | 0.00459 | |
| 1300 | | 95% USL | | 0.0159 | | | | | 99% Percentile (z) | 0.0073 | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|------|--|---|---|--------------|---|---|---|-------|---|---|---|
| 1301 | | | | | | | | | | | |
| 1302 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | |
| 1303 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | |
| 1304 | | | | | | | | | | | |
| 1305 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | |
| 1306 | Order of Statistic, r | | | 220 | 95% UTL with 95% Coverage | | | 0.005 | | | |
| 1307 | Approx, f used to compute achieved CC | | | 1.447 | Approximate Actual Confidence Coefficient achieved by UTL | | | 0.884 | | | |
| 1308 | | | | | Approximate Sample Size needed to achieve specified CC | | | 260 | | | |
| 1309 | 95% Percentile Bootstrap UTL with 95% Coverage | | | 0.005 | 95% BCA Bootstrap UTL with 95% Coverage | | | 0.005 | | | |
| 1310 | 95% UPL | | | 0.005 | 90% Percentile | | | 0.005 | | | |
| 1311 | 90% Chebyshev UPL | | | 0.00708 | 95% Percentile | | | 0.005 | | | |
| 1312 | 95% Chebyshev UPL | | | 0.00939 | 99% Percentile | | | 0.005 | | | |
| 1313 | 95% USL | | | 0.005 | | | | | | | |
| 1314 | | | | | | | | | | | |
| 1315 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | |
| 1316 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | |
| 1317 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | |
| 1318 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | |
| 1319 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | |
| 1320 | | | | | | | | | | | |
| 1321 | Sulfate as SO4 | | | | | | | | | | |
| 1322 | | | | | | | | | | | |
| 1323 | General Statistics | | | | | | | | | | |
| 1324 | Total Number of Observations | | | 442 | Number of Distinct Observations | | | 232 | | | |
| 1325 | Minimum | | | 2 | First Quartile | | | 25.23 | | | |
| 1326 | Second Largest | | | 67 | Median | | | 28.95 | | | |
| 1327 | Maximum | | | 67.3 | Third Quartile | | | 34.7 | | | |
| 1328 | Mean | | | 30.98 | SD | | | 10.01 | | | |
| 1329 | Coefficient of Variation | | | 0.323 | Skewness | | | 0.796 | | | |
| 1330 | Mean of logged Data | | | 3.377 | SD of logged Data | | | 0.363 | | | |
| 1331 | | | | | | | | | | | |
| 1332 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 1333 | Tolerance Factor K (For UTL) | | | 1.77 | d2max (for USL) | | | 3.661 | | | |
| 1334 | | | | | | | | | | | |
| 1335 | Normal GOF Test | | | | | | | | | | |
| 1336 | Shapiro Wilk Test Statistic | | | 0.937 | Normal GOF Test | | | | | | |
| 1337 | 5% Shapiro Wilk P Value | | | 0 | Data Not Normal at 5% Significance Level | | | | | | |
| 1338 | Lilliefors Test Statistic | | | 0.118 | Lilliefors GOF Test | | | | | | |
| 1339 | 5% Lilliefors Critical Value | | | 0.0425 | Data Not Normal at 5% Significance Level | | | | | | |
| 1340 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 1341 | | | | | | | | | | | |
| 1342 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 1343 | 95% UTL with 95% Coverage | | | 48.69 | 90% Percentile (z) | | | 43.8 | | | |
| 1344 | 95% UPL (t) | | | 47.49 | 95% Percentile (z) | | | 47.44 | | | |
| 1345 | 95% USL | | | 67.62 | 99% Percentile (z) | | | 54.26 | | | |
| 1346 | | | | | | | | | | | |
| 1347 | Gamma GOF Test | | | | | | | | | | |
| 1348 | A-D Test Statistic | | | 6.132 | Anderson-Darling Gamma GOF Test | | | | | | |
| 1349 | 5% A-D Critical Value | | | 0.754 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 1350 | K-S Test Statistic | | | 0.0871 | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 1351 | 5% K-S Critical Value | | | 0.0432 | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 1352 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|------|--|---|---|-----------|---|---|---|-----------|---|---|---|--|
| 1353 | | | | | | | | | | | | |
| 1354 | Gamma Statistics | | | | | | | | | | | |
| 1355 | k hat (MLE) | | | 8.966 | k star (bias corrected MLE) | | | 8.906 | | | | |
| 1356 | Theta hat (MLE) | | | 3.455 | Theta star (bias corrected MLE) | | | 3.479 | | | | |
| 1357 | nu hat (MLE) | | | 7926 | nu star (bias corrected) | | | 7873 | | | | |
| 1358 | MLE Mean (bias corrected) | | | 30.98 | MLE Sd (bias corrected) | | | 10.38 | | | | |
| 1359 | | | | | | | | | | | | |
| 1360 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 1361 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | 49.71 | 90% Percentile | | | 44.81 | | | | |
| 1362 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | 50.33 | 95% Percentile | | | 49.79 | | | | |
| 1363 | 95% WH Approx. Gamma UTL with 95% Coverage | | | 51.42 | 99% Percentile | | | 60.08 | | | | |
| 1364 | 95% HW Approx. Gamma UTL with 95% Coverage | | | 52.17 | | | | | | | | |
| 1365 | 95% WH USL | | | 83.81 | 95% HW USL | | | 88.13 | | | | |
| 1366 | | | | | | | | | | | | |
| 1367 | Lognormal GOF Test | | | | | | | | | | | |
| 1368 | Shapiro Wilk Test Statistic | | | 0.892 | Shapiro Wilk Lognormal GOF Test | | | | | | | |
| 1369 | 5% Shapiro Wilk P Value | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 1370 | Lilliefors Test Statistic | | | 0.111 | Lilliefors Lognormal GOF Test | | | | | | | |
| 1371 | 5% Lilliefors Critical Value | | | 0.0425 | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 1372 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 1373 | | | | | | | | | | | | |
| 1374 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 1375 | 95% UTL with 95% Coverage | | | 55.68 | 90% Percentile (z) | | | 46.62 | | | | |
| 1376 | 95% UPL (t) | | | 53.3 | 95% Percentile (z) | | | 53.2 | | | | |
| 1377 | 95% USL | | | 110.7 | 99% Percentile (z) | | | 68.14 | | | | |
| 1378 | | | | | | | | | | | | |
| 1379 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 1380 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 1381 | | | | | | | | | | | | |
| 1382 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 1383 | Order of Statistic, r | | | 427 | 95% UTL with 95% Coverage | | | 53.5 | | | | |
| 1384 | Approx, f used to compute achieved CC | | | 1.405 | Approximate Actual Confidence Coefficient achieved by UTL | | | 0.931 | | | | |
| 1385 | | | | | Approximate Sample Size needed to achieve specified CC | | | 458 | | | | |
| 1386 | 95% Percentile Bootstrap UTL with 95% Coverage | | | 53.47 | 95% BCA Bootstrap UTL with 95% Coverage | | | 53 | | | | |
| 1387 | 95% UPL | | | 51.09 | 90% Percentile | | | 46.1 | | | | |
| 1388 | 90% Chebyshev UPL | | | 61.03 | 95% Percentile | | | 50.95 | | | | |
| 1389 | 95% Chebyshev UPL | | | 74.64 | 99% Percentile | | | 59.28 | | | | |
| 1390 | 95% USL | | | 67.3 | | | | | | | | |
| 1391 | | | | | | | | | | | | |
| 1392 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 1393 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 1394 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 1395 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 1396 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 1397 | | | | | | | | | | | | |
| 1398 | Thallium | | | | | | | | | | | |
| 1399 | | | | | | | | | | | | |
| 1400 | General Statistics | | | | | | | | | | | |
| 1401 | Total Number of Observations | | | 239 | Number of Distinct Observations | | | 9 | | | | |
| 1402 | | | | | Number of Missing Observations | | | 1 | | | | |
| 1403 | Minimum | | | 2.0000E-4 | First Quartile | | | 2.0000E-4 | | | | |
| 1404 | Second Largest | | | 0.014 | Median | | | 2.0000E-4 | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L |
|------|---|---|---|---|-----------|---|---|---|---|-----------|---|
| 1405 | Maximum | | | | 0.021 | Third Quartile | | | | 0.001 | |
| 1406 | Mean | | | | 6.2887E-4 | SD | | | | 0.00185 | |
| 1407 | Coefficient of Variation | | | | 2.949 | Skewness | | | | 8.79 | |
| 1408 | Mean of logged Data | | | | -8.026 | SD of logged Data | | | | 0.855 | |
| 1409 | | | | | | | | | | | |
| 1410 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | |
| 1411 | Tolerance Factor K (For UTL) | | | | 1.818 | d2max (for USL) | | | | 3.486 | |
| 1412 | | | | | | | | | | | |
| 1413 | Normal GOF Test | | | | | | | | | | |
| 1414 | Shapiro Wilk Test Statistic | | | | 0.223 | Normal GOF Test | | | | | |
| 1415 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Normal at 5% Significance Level | | | | | |
| 1416 | Lilliefors Test Statistic | | | | 0.409 | Lilliefors GOF Test | | | | | |
| 1417 | 5% Lilliefors Critical Value | | | | 0.0577 | Data Not Normal at 5% Significance Level | | | | | |
| 1418 | Data Not Normal at 5% Significance Level | | | | | | | | | | |
| 1419 | | | | | | | | | | | |
| 1420 | Background Statistics Assuming Normal Distribution | | | | | | | | | | |
| 1421 | 95% UTL with 95% Coverage | | | | 0.004 | 90% Percentile (z) | | | | 0.00301 | |
| 1422 | 95% UPL (t) | | | | 0.0037 | 95% Percentile (z) | | | | 0.00368 | |
| 1423 | 95% USL | | | | 0.00709 | 99% Percentile (z) | | | | 0.00494 | |
| 1424 | | | | | | | | | | | |
| 1425 | Gamma GOF Test | | | | | | | | | | |
| 1426 | A-D Test Statistic | | | | 43.89 | Anderson-Darling Gamma GOF Test | | | | | |
| 1427 | 5% A-D Critical Value | | | | 0.789 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 1428 | K-S Test Statistic | | | | 0.427 | Kolmogorov-Smirnov Gamma GOF Test | | | | | |
| 1429 | 5% K-S Critical Value | | | | 0.0612 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 1430 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | |
| 1431 | | | | | | | | | | | |
| 1432 | Gamma Statistics | | | | | | | | | | |
| 1433 | k hat (MLE) | | | | 0.894 | k star (bias corrected MLE) | | | | 0.885 | |
| 1434 | Theta hat (MLE) | | | | 7.0361E-4 | Theta star (bias corrected MLE) | | | | 7.1031E-4 | |
| 1435 | nu hat (MLE) | | | | 427.2 | nu star (bias corrected) | | | | 423.2 | |
| 1436 | MLE Mean (bias corrected) | | | | 6.2887E-4 | MLE Sd (bias corrected) | | | | 6.6835E-4 | |
| 1437 | | | | | | | | | | | |
| 1438 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | |
| 1439 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 0.00167 | 90% Percentile | | | | 0.00149 | |
| 1440 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 0.00156 | 95% Percentile | | | | 0.00197 | |
| 1441 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 0.00188 | 99% Percentile | | | | 0.00308 | |
| 1442 | 95% HW Approx. Gamma UTL with 95% Coverage | | | | 0.00176 | | | | | | |
| 1443 | 95% WH USL | | | | 0.00492 | 95% HW USL | | | | 0.005 | |
| 1444 | | | | | | | | | | | |
| 1445 | Lognormal GOF Test | | | | | | | | | | |
| 1446 | Shapiro Wilk Test Statistic | | | | 0.587 | Shapiro Wilk Lognormal GOF Test | | | | | |
| 1447 | 5% Shapiro Wilk P Value | | | | 0 | Data Not Lognormal at 5% Significance Level | | | | | |
| 1448 | Lilliefors Test Statistic | | | | 0.441 | Lilliefors Lognormal GOF Test | | | | | |
| 1449 | 5% Lilliefors Critical Value | | | | 0.0577 | Data Not Lognormal at 5% Significance Level | | | | | |
| 1450 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | |
| 1451 | | | | | | | | | | | |
| 1452 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | |
| 1453 | 95% UTL with 95% Coverage | | | | 0.00155 | 90% Percentile (z) | | | | 9.7698E-4 | |
| 1454 | 95% UPL (t) | | | | 0.00134 | 95% Percentile (z) | | | | 0.00133 | |
| 1455 | 95% USL | | | | 0.00643 | 99% Percentile (z) | | | | 0.00239 | |
| 1456 | | | | | | | | | | | |

| A | B | C | D | E | F | G | H | I | J | K | L | |
|------|--|---|---------|--------|---|---|---|---|--------|--------|---|--|
| 1457 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 1458 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 1459 | | | | | | | | | | | | |
| 1460 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 1461 | Order of Statistic, r | | 232 | | 95% UTL with 95% Coverage | | | | 0.0013 | | | |
| 1462 | Approx, f used to compute achieved CC | | | 1.526 | | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.914 | | |
| 1463 | | | | | | Approximate Sample Size needed to achieve specified CC | | | | 260 | | |
| 1464 | 95% Percentile Bootstrap UTL with 95% Coverage | | 0.0013 | | 95% BCA Bootstrap UTL with 95% Coverage | | | | 0.001 | | | |
| 1465 | 95% UPL | | 0.001 | | 90% Percentile | | | | 0.001 | | | |
| 1466 | 90% Chebyshev UPL | | 0.0062 | | 95% Percentile | | | | 0.001 | | | |
| 1467 | 95% Chebyshev UPL | | 0.00873 | | 99% Percentile | | | | 0.0094 | | | |
| 1468 | 95% USL | | 0.021 | | | | | | | | | |
| 1469 | | | | | | | | | | | | |
| 1470 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 1471 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 1472 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 1473 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 1474 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 1475 | | | | | | | | | | | | |
| 1476 | Total Dissolved Solids | | | | | | | | | | | |
| 1477 | | | | | | | | | | | | |
| 1478 | General Statistics | | | | | | | | | | | |
| 1479 | Total Number of Observations | | | 438 | | Number of Distinct Observations | | | | 178 | | |
| 1480 | | | | | | Number of Missing Observations | | | | 1 | | |
| 1481 | Minimum | | | 127 | | First Quartile | | | | 391 | | |
| 1482 | Second Largest | | | 576 | | Median | | | | 429 | | |
| 1483 | Maximum | | | 576 | | Third Quartile | | | | 465.5 | | |
| 1484 | Mean | | | 429.4 | | SD | | | | 57.75 | | |
| 1485 | Coefficient of Variation | | | 0.134 | | Skewness | | | | -0.214 | | |
| 1486 | Mean of logged Data | | | 6.053 | | SD of logged Data | | | | 0.144 | | |
| 1487 | | | | | | | | | | | | |
| 1488 | Critical Values for Background Threshold Values (BTVs) | | | | | | | | | | | |
| 1489 | Tolerance Factor K (For UTL) | | | 1.771 | | d2max (for USL) | | | | 3.659 | | |
| 1490 | | | | | | | | | | | | |
| 1491 | Normal GOF Test | | | | | | | | | | | |
| 1492 | Shapiro Wilk Test Statistic | | | 0.984 | | Normal GOF Test | | | | | | |
| 1493 | 5% Shapiro Wilk P Value | | | 0.37 | | Data appear Normal at 5% Significance Level | | | | | | |
| 1494 | Lilliefors Test Statistic | | | 0.0549 | | Lilliefors GOF Test | | | | | | |
| 1495 | 5% Lilliefors Critical Value | | | 0.0427 | | Data Not Normal at 5% Significance Level | | | | | | |
| 1496 | Data appear Approximate Normal at 5% Significance Level | | | | | | | | | | | |
| 1497 | | | | | | | | | | | | |
| 1498 | Background Statistics Assuming Normal Distribution | | | | | | | | | | | |
| 1499 | 95% UTL with 95% Coverage | | 531.7 | | 90% Percentile (z) | | | | 503.4 | | | |
| 1500 | 95% UPL (t) | | 524.7 | | 95% Percentile (z) | | | | 524.4 | | | |
| 1501 | 95% USL | | 640.7 | | 99% Percentile (z) | | | | 563.8 | | | |
| 1502 | | | | | | | | | | | | |
| 1503 | Gamma GOF Test | | | | | | | | | | | |
| 1504 | A-D Test Statistic | | | 1.819 | | Anderson-Darling Gamma GOF Test | | | | | | |
| 1505 | 5% A-D Critical Value | | | 0.752 | | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 1506 | K-S Test Statistic | | | 0.056 | | Kolmogorov-Smirnov Gamma GOF Test | | | | | | |
| 1507 | 5% K-S Critical Value | | | 0.0433 | | Data Not Gamma Distributed at 5% Significance Level | | | | | | |
| 1508 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|------|--|---|---|---|--------|---|---|---|---|---|-------|---|
| 1509 | | | | | | | | | | | | |
| 1510 | Gamma Statistics | | | | | | | | | | | |
| 1511 | k hat (MLE) | | | | 51.38 | | k star (bias corrected MLE) | | | | 51.03 | |
| 1512 | Theta hat (MLE) | | | | 8.358 | | Theta star (bias corrected MLE) | | | | 8.416 | |
| 1513 | nu hat (MLE) | | | | 45006 | | nu star (bias corrected) | | | | 44699 | |
| 1514 | MLE Mean (bias corrected) | | | | 429.4 | | MLE Sd (bias corrected) | | | | 60.12 | |
| 1515 | | | | | | | | | | | | |
| 1516 | Background Statistics Assuming Gamma Distribution | | | | | | | | | | | |
| 1517 | 95% Wilson Hilferty (WH) Approx. Gamma UPL | | | | 532.9 | | 90% Percentile | | | | 508 | |
| 1518 | 95% Hawkins Wixley (HW) Approx. Gamma UPL | | | | 534.3 | | 95% Percentile | | | | 532.9 | |
| 1519 | 95% WH Approx. Gamma UTL with 95% Coverage | | | | 541.3 | | 99% Percentile | | | | 581.5 | |
| 1520 | 95% HW Approx. Gamma UTL with 95% Coverage | | | | 543 | | | | | | | |
| 1521 | 95% WH USL | | | | 684.2 | | 95% HW USL | | | | 692.1 | |
| 1522 | | | | | | | | | | | | |
| 1523 | Lognormal GOF Test | | | | | | | | | | | |
| 1524 | Shapiro Wilk Test Statistic | | | | 0.94 | | Shapiro Wilk Lognormal GOF Test | | | | | |
| 1525 | 5% Shapiro Wilk P Value | | | | 0 | | Data Not Lognormal at 5% Significance Level | | | | | |
| 1526 | Lilliefors Test Statistic | | | | 0.0674 | | Lilliefors Lognormal GOF Test | | | | | |
| 1527 | 5% Lilliefors Critical Value | | | | 0.0427 | | Data Not Lognormal at 5% Significance Level | | | | | |
| 1528 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 1529 | | | | | | | | | | | | |
| 1530 | Background Statistics assuming Lognormal Distribution | | | | | | | | | | | |
| 1531 | 95% UTL with 95% Coverage | | | | 549.1 | | 90% Percentile (z) | | | | 511.6 | |
| 1532 | 95% UPL (t) | | | | 539.6 | | 95% Percentile (z) | | | | 539.2 | |
| 1533 | 95% USL | | | | 721 | | 99% Percentile (z) | | | | 594.9 | |
| 1534 | | | | | | | | | | | | |
| 1535 | Nonparametric Distribution Free Background Statistics | | | | | | | | | | | |
| 1536 | Data appear Approximate Normal at 5% Significance Level | | | | | | | | | | | |
| 1537 | | | | | | | | | | | | |
| 1538 | Nonparametric Upper Limits for Background Threshold Values | | | | | | | | | | | |
| 1539 | Order of Statistic, r | | | | 423 | | 95% UTL with 95% Coverage | | | | 538 | |
| 1540 | Approx, f used to compute achieved CC | | | | 1.391 | | Approximate Actual Confidence Coefficient achieved by UTL | | | | 0.925 | |
| 1541 | | | | | | | Approximate Sample Size needed to achieve specified CC | | | | 458 | |
| 1542 | 95% Percentile Bootstrap UTL with 95% Coverage | | | | 538 | | 95% BCA Bootstrap UTL with 95% Coverage | | | | 534 | |
| 1543 | 95% UPL | | | | 526.1 | | 90% Percentile | | | | 510 | |
| 1544 | 90% Chebyshev UPL | | | | 602.9 | | 95% Percentile | | | | 526 | |
| 1545 | 95% Chebyshev UPL | | | | 681.4 | | 99% Percentile | | | | 563 | |
| 1546 | 95% USL | | | | 576 | | | | | | | |
| 1547 | | | | | | | | | | | | |
| 1548 | Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20. | | | | | | | | | | | |
| 1549 | Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers | | | | | | | | | | | |
| 1550 | and consists of observations collected from clean unimpacted locations. | | | | | | | | | | | |
| 1551 | The use of USL tends to provide a balance between false positives and false negatives provided the data | | | | | | | | | | | |
| 1552 | represents a background data set and when many onsite observations need to be compared with the BTV. | | | | | | | | | | | |
| 1553 | | | | | | | | | | | | |

Box Plot for pH from 7.1 to 8.1

