



2025 Annual Leachate Report

**Walter Scott Jr. Energy Center Monofill
Council Bluffs, Iowa
Permit 78-SDP-26-06P**

MidAmerican Energy Company

January 30, 2026

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1. Introduction

The MidAmerican Energy Company (MidAmerican) Walter Scott Jr. Energy Center (WSEC) Coal Combustion Residual (CCR) Monofill is located in the southwest quarter of Section 31, Township 74 North, and Range 43 West; the northwest quarter of Section 6, Township 73 North, and Range 43 West; and the northeast quarter of Section 1, Township 73 North, and Range 44 West in Pottawattamie and Mills counties, Iowa. The location of the site is depicted in Figure 1.1. Figure 1.2 depicts pertinent site features and locations of monitoring wells present at the Monofill.

The Monofill is permitted under Iowa Department of Natural Resources (IDNR) Operating Permit No. 78-SDP-26-06P issued May 2, 2007, with subsequent amendments. A renewed operating permit was issued January 12, 2018, and incorporated all amendments. The site was developed as a Monofill in 2007 (Cell 1) and began receiving CCR in September 2007. The Monofill was constructed with a composite liner system including a 2-foot compacted clay liner and 60-mil high density polyethylene (HDPE) plastic liner. Additional cells were added after 2007 and include Cells 2, 3S, and 3N (2008), Cell 4 (2010), Cell 5 (2011), Cell 6 (2012), Cell 7 (2016), Cell 8 (2020), and Cell 9 (2022).

GHD Services Inc. (GHD) prepared this Leachate Report to document leachate management activities for the WSEC CCR Monofill. This report summarizes the leachate control system performance and leachate analytical data.

2. Leachate Control System Performance Evaluation and Sampling

The Monofill has a leachate collection system with a composite liner, which meets the requirements of Iowa Administrative Code (IAC) 567—113.7(5)a(1) and a leachate collection system, which meets the requirements of IAC 567—113.7(5)b. The leachate collection system consists of leachate collection media (sand or bottom ash), 8-inch diameter HDPE conveyance pipes, pipe bedding, and a geocomposite drainage liner. Leachate flows toward a collection sump in each cell. Each sump includes an 18-inch diameter recovery pipe (riser pipe) from which leachate is pumped into a lined holding pond. The system automatically turns on the applicable sump pumps before levels reach 12 inches above the liner for permit compliance. MidAmerican's contractor pumps the collected leachate from the leachate pond into tanker trucks. The trucks then transport the leachate to the active fill areas where the leachate is used within the lined area (i.e., the area underlain with the geocomposite drainage liner) of the Monofill for dust control and to aid in solidification of CCR. As a backup disposal option for excess leachate, MidAmerican entered into a contractual agreement with the City of Council Bluffs Water Pollution Control Plant (CBWPCP), located immediately north of the Monofill, to accept excess leachate. Leachate is not used for dust suppression outside of the lined area of the Monofill. Groundwater from a water-supply well is used for dust control on roads outside of the lined Monofill area.

2.1 Volume of Leachate Collected

The volume of leachate collected and removed from the leachate pond was recorded by the leachate pond load out flow system. Between January 1, 2025, and December 31, 2025, approximately 6,911,778 gallons were removed from the leachate pond, loaded into trucks, and used for dust control and CCR solidification within the lined Monofill area. During the 2025 reporting period, the facility did not transport excess leachate to the CBWPCP for disposal. The 2025 monthly totals of leachate used for dust control and CCR solidification are summarized in Table 1.

2.2 Leachate Head Measurements

In 2010, MidAmerican constructed an automated leachate handling/pumping system. Prior to the use of this automated system, leachate levels were measured using an electronic water level meter. The current automated system includes dedicated pressure transducers for measurement of leachate head in each cell. This system allows MidAmerican to automatically monitor and record leachate levels in each cell (in inches) and automatically turn on the applicable sump pumps before levels reach 12 inches above the liner. The system is also equipped with a series of alarms that will alert MidAmerican if a component of the system is not functioning properly. Monthly leachate levels are summarized in Table 2. During the period from January 2025 through December 2025, leachate levels did not exceed 12 inches above the liner.

2.3 Leachate Sampling

During the monitoring events conducted on April 2, 2025, and September 30, 2025, leachate samples were collected from each leachate lift station (Leachate Lift Station #1 through Leachate Lift Station #3). The locations of the three leachate lift stations are depicted on Figure 1.2. Leachate sample collection was conducted via bailer. WSEC personnel operated the leachate pump system at each leachate lift station prior to sample collection. The stagnant leachate was removed from the sump at each lift station with fresh leachate pumped from cells into the sump during each monitoring event. Physical and chemical parameters of the leachate (temperature, pH, specific conductance, oxidation-reduction potential [ORP], dissolved oxygen [DO], and turbidity) were measured using an Aquatroll 600 multiparameter probe during sample collection from each of the leachate sample locations. The leachate sample field parameters are summarized in Table 3.

Leachate samples were collected in laboratory-supplied containers and submitted to Eurofins Environment Testing North Central, LLC for analysis of Appendix III (detection monitoring) and Appendix IV (assessment monitoring) constituents. Laboratory analytical results are summarized in Table 4 for the leachate samples. The leachate sample collection records and the laboratory analytical reports for the leachate samples are provided in Appendix A and Appendix B, respectively.

3. Leachate Monitoring Results

The following constituents were analyzed in the leachate samples collected during the 2026 reporting period:

- **Boron:** Boron is a Detection Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, boron concentrations in the leachate samples ranged from 1.43 to 1.78 milligrams per liter (mg/L).
- **Calcium:** Calcium is a Detection Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of calcium concentrations in leachate samples was from 17.5 to 99.0 mg/L.
- **Chloride:** Chloride is a Detection Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the chloride concentrations in the leachate samples ranged from 154 to 447 mg/L.
- **Fluoride:** Fluoride is both a Detection Monitoring and Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the fluoride concentrations in the leachate samples ranged from non-detect (RL of 1.00 mg/L) to 1.25 mg/L.
- **pH:** pH is a Detection Monitoring constituent under the Federal CCR rule. The laboratory pH measurements during 2025 ranged from 9.8 to 12.0 standard units.
- **Sulfate:** Sulfate is a Detection Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the sulfate concentrations in the leachate samples ranged from 2,040 to 4,120 mg/L.
- **Total Dissolved Solids (TDS):** TDS is a Detection Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of TDS values measured in leachate samples was from 3,650 to 8,550 mg/L.

- **Antimony:** Antimony is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, there were no detections of antimony in leachate samples.
- **Arsenic:** Arsenic is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of arsenic concentrations in leachate samples was from 0.00659 to 0.0414 mg/L.
- **Barium:** Barium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the barium concentrations in the leachate samples ranged from 0.0213 to 0.0791 mg/L.
- **Beryllium:** Beryllium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, beryllium was not detected in any of the leachate samples (RL of 0.001 mg/L).
- **Cadmium:** Cadmium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of cadmium concentrations in the leachate samples was from 0.000418 to 0.00194 mg/L.
- **Chromium:** Chromium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the chromium concentrations in leachate samples ranged from not detected at an RL of 0.005 mg/L to 0.00854 mg/L.
- **Cobalt:** Cobalt is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, cobalt concentrations in the leachate samples ranged from non-detect at a RL of 0.0005 mg/L to 0.00179 mg/L.
- **Lead:** Lead is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, lead concentrations ranged from not detected (RL of 0.0005 mg/L) to 0.000584 mg/L.
- **Lithium:** Lithium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of lithium concentrations in the leachate samples was 0.0115 to 0.0869 mg/L.
- **Mercury:** Mercury is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, mercury was not detected in any of the leachate samples (RL of 0.0002 mg/L).
- **Molybdenum:** Molybdenum is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of molybdenum concentrations in the leachate samples was 1.26 to 3.86 mg/L.
- **Radium-226 & 228 (combined):** Radium-226 & 228 (combined) is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of Radium-226 & 228 (combined) concentrations in the leachate samples was -0.605 to 0.772 picocuries per liter (pCi/L).
- **Selenium:** Selenium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, the range of selenium concentrations in leachate samples was 0.0650 to 0.346 mg/L.
- **Thallium:** Thallium is an Assessment Monitoring constituent under the Federal CCR rule. During the 2025 reporting period, thallium was not detected in any of the leachate sampled (RL of 0.001 mg/L).

4. Recommendations

This report documents leachate management and monitoring conducted at the Monofill during the 2025 reporting period.

During 2025, the leachate control and management system at the site appeared to be functioning properly. Approximately 6,911,778 gallons were recovered during the period from January 2025 through December 2025 via the leachate collection system and applied for dust suppression and CCR solidification. No changes to the current operating and maintenance protocols for the leachate control system are proposed or necessary.

During 2026, leachate samples will be collected concurrently with semiannual groundwater monitoring required under the Federal CCR rule. During 2026, the semiannual leachate samples will be analyzed for the Appendix III and Appendix IV constituents.

Tables

**Leachate Use Summary
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Month	End of Month Totalizer Readings (gallons)	Leachate Used for Dust Control (gallons)	Leachate Hauled to POTW (gallons)
Jan-2025	8,646,738	66,516	0
Feb-2025	8,720,904	74,166	0
Mar-2025	10,702,490	1,981,586	0
Apr-2025	12,814,290	2,111,800	0
May-2025	13,557,110	742,820	0
Jun-2025	13,557,110	0	0
Jul-2025	13,557,110	0	0
Aug-2025	13,557,110	0	0
Sep-2025	13,557,110	0	0
Oct-2025	14,691,910	1,134,800	0
Nov-2025	15,458,890	766,980	0
Dec-2025	15,492,000	33,110	0
Totals		6,911,778	0

Note:

POTW = Publicly Owned Treatment Works (City of Council Bluffs Water Pollution Control Plant).

**Leachate Elevation Measurements
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Month/Year	Cell Number	Leachate Level Measurement (inches above transducer)	Top of Liner Level (inches above transducer)	Leachate Level Above Top of Liner (inches)	In Compliance (Yes/No)
Jan-2025	Cell 1	10.00	15.2	-5.2	Yes
Jan-2025	Cell 2	17.00	12.7	4.3	Yes
Jan-2025	Cell 3N	16.00	12.9	3.1	Yes
Jan-2025	Cell 3S	19.00	14.6	4.4	Yes
Jan-2025	Cell 4N	20.00	18.7	1.3	Yes
Jan-2025	Cell 4S	23.00	18.7	4.3	Yes
Jan-2025	Cell 5	23.00	18.7	4.3	Yes
Jan-2025	Cell 6N	24.00	18.7	5.3	Yes
Jan-2025	Cell 6S	5.00	18.7	-13.7	Yes
Jan-2025	Cell 7N	17.00	18.7	-1.7	Yes
Jan-2025	Cell 7S	24.00	18.7	5.3	Yes
Jan-2025	Cell 8S	15.00	18.7	-3.7	Yes
Jan-2025	Cell 8C	27.00	18.7	8.3	Yes
Jan-2025	Cell 8N	10.00	18.7	-8.7	Yes
Jan-2025	Cell 9W	23.00	18.7	4.3	Yes
Jan-2025	Cell 9E	11.00	18.7	-7.7	Yes
Feb-2025	Cell 1	15.0	15.2	-0.2	Yes
Feb-2025	Cell 2	9.0	12.7	-3.7	Yes
Feb-2025	Cell 3N	12.0	12.9	-0.9	Yes
Feb-2025	Cell 3S	16.0	14.6	1.4	Yes
Feb-2025	Cell 4N	21.0	18.7	2.3	Yes
Feb-2025	Cell 4S	23.0	18.7	4.3	Yes
Feb-2025	Cell 5	25.0	18.7	6.3	Yes
Feb-2025	Cell 6N	23.0	18.7	4.3	Yes
Feb-2025	Cell 6S	21.0	18.7	2.3	Yes
Feb-2025	Cell 7N	15.0	18.7	-3.7	Yes
Feb-2025	Cell 7S	28.0	18.7	9.3	Yes
Feb-2025	Cell 8S	24.0	18.7	5.3	Yes
Feb-2025	Cell 8C	26.0	18.7	7.3	Yes
Feb-2025	Cell 8N	22.0	18.7	3.3	Yes
Feb-2025	Cell 9W	16.00	18.7	-2.7	Yes
Feb-2025	Cell 9E	20.00	18.7	1.3	Yes
Mar-2025	Cell 1	15.0	15.2	-0.2	Yes
Mar-2025	Cell 2	9.0	12.7	-3.7	Yes
Mar-2025	Cell 3N	15.0	12.9	2.1	Yes
Mar-2025	Cell 3S	18.0	14.6	3.4	Yes
Mar-2025	Cell 4N	17.0	18.7	-1.7	Yes
Mar-2025	Cell 4S	13.0	18.7	-5.7	Yes
Mar-2025	Cell 5	24.0	18.7	5.3	Yes
Mar-2025	Cell 6N	19.0	18.7	0.3	Yes
Mar-2025	Cell 6S	14.0	18.7	-4.7	Yes
Mar-2025	Cell 7N	20.0	18.7	1.3	Yes
Mar-2025	Cell 7S	21.0	18.7	2.3	Yes
Mar-2025	Cell 8S	18.0	18.7	-0.7	Yes
Mar-2025	Cell 8C	27.0	18.7	8.3	Yes
Mar-2025	Cell 8N	20.0	18.7	1.3	Yes
Mar-2025	Cell 9W	23.0	18.7	4.3	Yes
Mar-2025	Cell 9E	25.0	18.7	6.3	Yes
Apr-2025	Cell 1	0.0	15.2	-15.2	Yes
Apr-2025	Cell 2	8.0	12.7	-4.7	Yes
Apr-2025	Cell 3N	19.0	12.9	6.1	Yes
Apr-2025	Cell 3S	16.0	14.6	1.4	Yes

**Leachate Elevation Measurements
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Month/Year	Cell Number	Leachate Level Measurement (inches above transducer)	Top of Liner Level (inches above transducer)	Leachate Level Above Top of Liner (inches)	In Compliance (Yes/No)
Apr-2025	Cell 4N	23.0	18.7	4.3	Yes
Apr-2025	Cell 4S	23.0	18.7	4.3	Yes
Apr-2025	Cell 5	25.0	18.7	6.3	Yes
Apr-2025	Cell 6N	26.0	18.7	7.3	Yes
Apr-2025	Cell 6S	15.0	18.7	-3.7	Yes
Apr-2025	Cell 7N	27.0	18.7	8.3	Yes
Apr-2025	Cell 7S	29.0	18.7	10.3	Yes
Apr-2025	Cell 8S	23.0	18.7	4.3	Yes
Apr-2025	Cell 8C	27.0	18.7	8.3	Yes
Apr-2025	Cell 8N	20.0	18.7	1.3	Yes
Apr-2025	Cell 9W	24.0	18.7	5.3	Yes
Apr-2025	Cell 9E	25.0	18.7	6.3	Yes
May-2025	Cell 1	18.0	15.2	2.8	Yes
May-2025	Cell 2	17.0	12.7	4.3	Yes
May-2025	Cell 3N	16.0	12.9	3.1	Yes
May-2025	Cell 3S	19.0	14.6	4.4	Yes
May-2025	Cell 4N	17.0	18.7	-1.7	Yes
May-2025	Cell 4S	24.0	18.7	5.3	Yes
May-2025	Cell 5	9.0	18.7	-9.7	Yes
May-2025	Cell 6N	17.0	18.7	-1.7	Yes
May-2025	Cell 6S	13.0	18.7	-5.7	Yes
May-2025	Cell 7N	28.0	18.7	9.3	Yes
May-2025	Cell 7S	25.0	18.7	6.3	Yes
May-2025	Cell 8S	21.0	18.7	2.3	Yes
May-2025	Cell 8C	26.0	18.7	7.3	Yes
May-2025	Cell 8N	22.0	18.7	3.3	Yes
May-2025	Cell 9W	23.0	18.7	4.3	Yes
May-2025	Cell 9E	24.0	18.7	5.3	Yes
Jun-2025	Cell 1	12.0	15.2	-3.2	Yes
Jun-2025	Cell 2	9.0	12.7	-3.7	Yes
Jun-2025	Cell 3N	19.0	12.9	6.1	Yes
Jun-2025	Cell 3S	16.0	14.6	1.4	Yes
Jun-2025	Cell 4N	18.0	18.7	-0.7	Yes
Jun-2025	Cell 4S	24.0	18.7	5.3	Yes
Jun-2025	Cell 5	25.0	18.7	6.3	Yes
Jun-2025	Cell 6N	22.0	18.7	3.3	Yes
Jun-2025	Cell 6S	23.0	18.7	4.3	Yes
Jun-2025	Cell 7N	27.0	18.7	8.3	Yes
Jun-2025	Cell 7S	15.0	18.7	-3.7	Yes
Jun-2025	Cell 8S	23.0	18.7	4.3	Yes
Jun-2025	Cell 8C	27.0	18.7	8.3	Yes
Jun-2025	Cell 8N	13.0	18.7	-5.7	Yes
Jun-2025	Cell 9W	25.0	18.7	6.3	Yes
Jun-2025	Cell 9E	24.0	18.7	5.3	Yes
Jul-2025	Cell 1	12.0	15.2	-3.2	Yes
Jul-2025	Cell 2	18.0	12.7	5.3	Yes
Jul-2025	Cell 3N	14.0	12.9	1.1	Yes
Jul-2025	Cell 3S	16.0	14.6	1.4	Yes
Jul-2025	Cell 4N	19.0	18.7	0.3	Yes
Jul-2025	Cell 4S	22.0	18.7	3.3	Yes
Jul-2025	Cell 5	16.0	18.7	-2.7	Yes
Jul-2025	Cell 6N	22.0	18.7	3.3	Yes

**Leachate Elevation Measurements
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
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Month/Year	Cell Number	Leachate Level Measurement (inches above transducer)	Top of Liner Level (inches above transducer)	Leachate Level Above Top of Liner (inches)	In Compliance (Yes/No)
Jul-2025	Cell 6S	22.0	18.7	3.3	Yes
Jul-2025	Cell 7N	27.0	18.7	8.3	Yes
Jul-2025	Cell 7S	15.0	18.7	-3.7	Yes
Jul-2025	Cell 8S	29.0	18.7	10.3	Yes
Jul-2025	Cell 8C	27.0	18.7	8.3	Yes
Jul-2025	Cell 8N	13.0	18.7	-5.7	Yes
Jul-2025	Cell 9W	29.0	18.7	10.3	Yes
Jul-2025	Cell 9E	25.0	18.7	6.3	Yes
Aug-2025	Cell 1	18.0	15.2	2.8	Yes
Aug-2025	Cell 2	20.0	12.7	7.3	Yes
Aug-2025	Cell 3N	23.0	12.9	10.1	Yes
Aug-2025	Cell 3S	14.0	14.6	-0.6	Yes
Aug-2025	Cell 4N	23.0	18.7	4.3	Yes
Aug-2025	Cell 4S	26.0	18.7	7.3	Yes
Aug-2025	Cell 5	23.0	18.7	4.3	Yes
Aug-2025	Cell 6N	22.0	18.7	3.3	Yes
Aug-2025	Cell 6S	19.0	18.7	0.3	Yes
Aug-2025	Cell 7N	27.0	18.7	8.3	Yes
Aug-2025	Cell 7S	20.0	18.7	1.3	Yes
Aug-2025	Cell 8S	17.0	18.7	-1.7	Yes
Aug-2025	Cell 8C	13.0	18.7	-5.7	Yes
Aug-2025	Cell 8N	17.0	18.7	-1.7	Yes
Aug-2025	Cell 9W	23.0	18.7	4.3	Yes
Aug-2025	Cell 9E	21.0	18.7	2.3	Yes
Sep-2025	Cell 1	20.0	15.2	4.8	Yes
Sep-2025	Cell 2	17.0	12.7	4.3	Yes
Sep-2025	Cell 3N	18.0	12.9	5.1	Yes
Sep-2025	Cell 3S	17.0	14.6	2.4	Yes
Sep-2025	Cell 4N	26.0	18.7	7.3	Yes
Sep-2025	Cell 4S	25.0	18.7	6.3	Yes
Sep-2025	Cell 5	24.0	18.7	5.3	Yes
Sep-2025	Cell 6N	25.0	18.7	6.3	Yes
Sep-2025	Cell 6S	17.0	18.7	-1.7	Yes
Sep-2025	Cell 7N	18.0	18.7	-0.7	Yes
Sep-2025	Cell 7S	25.0	18.7	6.3	Yes
Sep-2025	Cell 8S	19.0	18.7	0.3	Yes
Sep-2025	Cell 8C	27.0	18.7	8.3	Yes
Sep-2025	Cell 8N	20.0	18.7	1.3	Yes
Sep-2025	Cell 9W	26.0	18.7	7.3	Yes
Sep-2025	Cell 9E	21.0	18.7	2.3	Yes
Oct-2025	Cell 1	12.0	15.2	-3.2	Yes
Oct-2025	Cell 2	15.0	12.7	2.3	Yes
Oct-2025	Cell 3N	18.0	12.9	5.1	Yes
Oct-2025	Cell 3S	17.0	14.6	2.4	Yes
Oct-2025	Cell 4N	23.0	18.7	4.3	Yes
Oct-2025	Cell 4S	25.0	18.7	6.3	Yes
Oct-2025	Cell 5	24.0	18.7	5.3	Yes
Oct-2025	Cell 6N	21.0	18.7	2.3	Yes
Oct-2025	Cell 6S	17.0	18.7	-1.7	Yes
Oct-2025	Cell 7N	22.0	18.7	3.3	Yes
Oct-2025	Cell 7S	18.0	18.7	-0.7	Yes
Oct-2025	Cell 8S	19.0	18.7	0.3	Yes

**Leachate Elevation Measurements
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Month/Year	Cell Number	Leachate Level Measurement (inches above transducer)	Top of Liner Level (inches above transducer)	Leachate Level Above Top of Liner (inches)	In Compliance (Yes/No)
Oct-2025	Cell 8C	27.0	18.7	8.3	Yes
Oct-2025	Cell 8N	20.0	18.7	1.3	Yes
Oct-2025	Cell 9W	24.0	18.7	5.3	Yes
Oct-2025	Cell 9E	21.0	18.7	2.3	Yes
Nov-2025	Cell 1	12.0	15.2	5.8	Yes
Nov-2025	Cell 2	15.0	12.7	-0.7	Yes
Nov-2025	Cell 3N	18.0	12.9	5.1	Yes
Nov-2025	Cell 3S	17.0	14.6	2.4	Yes
Nov-2025	Cell 4N	23.0	18.7	4.3	Yes
Nov-2025	Cell 4S	25.0	18.7	6.3	Yes
Nov-2025	Cell 5	24.0	18.7	5.3	Yes
Nov-2025	Cell 6N	21.0	18.7	2.3	Yes
Nov-2025	Cell 6S	17.0	18.7	-1.7	Yes
Nov-2025	Cell 7N	22.0	18.7	3.3	Yes
Nov-2025	Cell 7S	18.0	18.7	-0.7	Yes
Nov-2025	Cell 8S	19.0	18.7	0.3	Yes
Nov-2025	Cell 8C	27.0	18.7	8.3	Yes
Nov-2025	Cell 8N	20.0	18.7	1.3	Yes
Nov-2025	Cell 9W	24.0	18.7	5.3	Yes
Nov-2025	Cell 9E	21.0	18.7	2.3	Yes
Dec-2025	Cell 1	18.0	15.2	2.8	Yes
Dec-2025	Cell 2	22.0	12.7	9.3	Yes
Dec-2025	Cell 3N	18.0	12.9	5.1	Yes
Dec-2025	Cell 3S	25.0	14.6	10.4	Yes
Dec-2025	Cell 4N	23.0	18.7	4.3	Yes
Dec-2025	Cell 4S	14.0	18.7	-4.7	Yes
Dec-2025	Cell 5	24.0	18.7	5.3	Yes
Dec-2025	Cell 6N	21.0	18.7	2.3	Yes
Dec-2025	Cell 6S	24.0	18.7	5.3	Yes
Dec-2025	Cell 7N	22.0	18.7	3.3	Yes
Dec-2025	Cell 7S	25.0	18.7	6.3	Yes
Dec-2025	Cell 8S	19.0	18.7	0.3	Yes
Dec-2025	Cell 8C	26.0	18.7	7.3	Yes
Dec-2025	Cell 8N	20.0	18.7	1.3	Yes
Dec-2025	Cell 9W	27.0	18.7	8.3	Yes
Dec-2025	Cell 9E	25.0	18.7	6.3	Yes

Notes:

The Monofill has been designed with a composite liner system with leachate collection. Leachate is composed of water that percolates through the coal combustion residual (CCR) in the Monofill and may include water soluble compounds from the CCR. Leachate is managed to protect soils, surface water, and groundwater and to maintain the integrity of the composite liner system by preventing a significant accumulation of standing leachate on the liner (e.g. less than 12 inches of head on the liner).

The maximum leachate level allowed is 12 inches above the following measurements. Cell 1 - Top of the Liner Level (TOLL) = 15.2 inches; Cell 2 TOLL = 12.7 inches; Cell 3N TOLL = 12.9 inches; Cell 3S TOLL = 14.6 inches; Cell 4N TOLL = 18.7 inches; Cell 4S TOLL = 18.7 inches; Cell 5 TOLL = 18.7 inches; Cell 6N TOLL = 18.7 inches; Cell 6S TOLL = 18.7 inches; Cell 7N TOLL = 18.7 inches; Cell 7S TOLL = 18.7 inches; Cell 8S TOLL = 18.7 inches; Cell 8C TOLL = 18.7 inches; Cell 8N TOLL = 18.7 inches; Cell 9W TOLL = 18.7 inches; Cell 9E TOLL = 18.7 inches.

**Leachate Physical and Chemical Parameters
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Date	pH, Field (s.u.)		
	Lift Station #1	Lift Station #2	Lift Station #3
4/12/2014	10.94	10.39	
3/18/2016	10.03	10.73	
5/18/2016	11.86	12.19	
7/20/2016	11.33	11.93	
10/6/2016	10.63	12.05	
1/31/2017	11.66	11.43	
7/12/2017	9.92	11.71	
8/16/2017	9.68	10.93	8.93
10/10/2017	10.10	11.28	11.58
5/3/2018	9.84	9.81	9.05
10/10/2018	11.54	10.04	10.92
4/18/2019	11.46	10.42	12.03
10/30/2019	12.91	9.83	12.83
4/21/2020	12.39	11.21	12.35
10/14/2020	11.52	10.96	11.51
4/21/2021	12.54	12.76	12.72
10/28/2021	11.11	11.47	11.69
4/29/2022	10.96	10.72	12.41
10/10/2022	11.18	10.00	11.45
4/25/2023	10.73	10.43	11.62
10/4/2023	11.48	9.93	11.62
4/2/2024	11.04	9.56	11.55
10/2/2024	11.7	11.19	11.97
4/2/2025	11.05	10.20	10.78
9/30/2025	11.37	11.07	11.72

**Leachate Physical and Chemical Parameters
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Date	Temperature (°C)		
	Lift Station #1	Lift Station #2	Lift Station #3
4/12/2014	12.83	14.99	
3/18/2016	12.47	13.81	
5/18/2016	17.49	19.09	
7/20/2016	21.27	22.17	
10/6/2016	15.97	17.40	
1/31/2017	10.05	12.63	
7/12/2017	20.51	20.28	
8/16/2017	19.66	19.46	20.65
10/10/2017	13.03	13.85	15.62
5/3/2018	12.90	15.07	14.48
10/10/2018	16.34	14.03	14.28
4/18/2019	13.69	15.42	13.46
10/30/2019	8.65	12.43	14.10
4/21/2020	13.78	15.79	15.46
10/14/2020	17.60	18.26	19.84
4/21/2021	12.71	12.10	12.56
10/28/2021	14.66	15.44	15.38
4/29/2022	14.12	16.03	17.18
10/10/2022	18.78	19.05	19.19
4/25/2023	11.97	15.31	13.79
10/4/2023	18.23	18.41	17.79
4/2/2024			
10/2/2024	17.77	17.87	17.53
4/2/2025	12.37	13.42	12.68
9/30/2025	20.55	19.40	21.22

**Leachate Physical and Chemical Parameters
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Date	Conductivity (mS/cm)		
	Lift Station #1	Lift Station #2	Lift Station #3
4/12/2014	7.51	11.1	
3/18/2016	9.87	14.3	
5/18/2016	7.84	16.6	
7/20/2016	6.14	15.2	
10/6/2016	9.47	16.3	
1/31/2017	12.0	15.3	
7/12/2017	9.18	13.8	
8/16/2017	8.15	12.2	4.19
10/10/2017	9.23	14.0	10.9
5/3/2018	9.55	9.86	4.61
10/10/2018	8.73		8.15
4/18/2019	8.86	11.9	8.25
10/30/2019	10.8	9.95	7.93
4/21/2020	9.67	15.20	11.5
10/14/2020	10.1	15.00	7.54
4/21/2021	8.36	12.30	11.9
10/28/2021	8.33	11.80	7.08
4/29/2022		12.70	
10/10/2022	9.37	13.94	8.85
4/25/2023	14.24	17.01	10.74
10/4/2023	9.54	14.22	8.75
4/2/2024	9.27	13.57	5.54
10/2/2024	10.77	12.52	9.36
4/2/2025	9.43	9.66	6.53
9/30/2025	9.26	10.14	5.35

**Leachate Physical and Chemical Parameters
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Date	Turbidity (NTU)		
	Lift Station #1	Lift Station #2	Lift Station #3
4/12/2014	3.5	0.0	
3/18/2016	0.0	4.4	
5/18/2016	0.0	0.0	
7/20/2016	3.3	0.6	
10/6/2016	0.0	0.0	
1/31/2017	0.0	0.0	
7/12/2017	0.0	0.0	
8/16/2017	0.0	0.0	0.0
10/10/2017	18.3	30.9	39.4
5/3/2018	2.4	0.9	1.8
10/10/2018	2.9	2.2	2.8
4/18/2019	17.9	0.0	15.6
10/30/2019	201	12.4	45.7
4/21/2020	0.0	0.0	469
10/14/2020	12.4	0.2	11.7
4/21/2021	19.7	5.7	171
10/28/2021	30.4	41.3	37.4
4/29/2022	0.4	9.1	0.0
10/10/2022	22.1	7.3	4.5
4/25/2023	22.2	2.2	5.9
10/4/2023	12.9	0.0	0.0
4/2/2024	0.0	0.3	0.0
10/2/2024	4.8	1.5	14.6
4/2/2025	0.0	0.0	0.0
9/30/2025	3.6	2.6	3.4

**Leachate Physical and Chemical Parameters
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Date	Oxidation-Reduction Potential (mV)		
	Lift Station #1	Lift Station #2	Lift Station #3
4/12/2014	126	133	
3/18/2016	108	-230	
5/18/2016	74	28	
7/20/2016	-13	-66	
10/6/2016	58	50	
1/31/2017	16	-27	
7/12/2017	61	6	
8/16/2017	55	32	115
10/10/2017	90	53	51
5/3/2018	118	140	137
10/10/2018	-58	24	-32
4/18/2019	19	2	-42
10/30/2019	-151	-150	-51
4/21/2020	-46	-16	-103
10/14/2020	-1	17	-3
4/21/2021	1	-34	-34
10/28/2021	49	-6	0
4/29/2022	-9	-10	-75
10/10/2022	161	207	27
4/25/2023	211	198	179
10/4/2023	58	157	9.2
4/2/2024	-156	-103	-95.3
10/2/2024	-127	-198	-139.7
4/2/2025	-39	-38	-30.7
9/30/2025	-54	-22	-48.6

**Leachate Physical and Chemical Parameters
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Date	Dissolved Oxygen (mg/L)		
	Lift Station #1	Lift Station #2	Lift Station #3
4/12/2014	10.50	5.54	
3/18/2016	5.44	6.43	
5/18/2016	4.52	2.40	
7/20/2016	1.73	1.23	
10/6/2016	2.75	5.32	
1/31/2017	3.51	4.88	
7/12/2017	2.93	3.05	
8/16/2017	0.82	0.83	6.64
10/10/2017	4.81	5.08	3.70
5/3/2018	5.05	6.20	6.85
10/10/2018	4.53	3.94	0.00
4/18/2019	0.83	0.62	0.58
10/30/2019	6.14	6.42	5.97
4/21/2020	5.34	2.38	1.77
10/14/2020	0.65	4.64	6.47
4/21/2021	2.96	0.56	0.70
10/28/2021	2.21	0.86	5.34
4/29/2022	3.02	0.80	5.74
10/10/2022	0.50	0.04	1.83
4/25/2023	5.56	2.46	5.59
10/4/2023	4.34	3.09	2.95
4/2/2024	3.35	5.71	9.36
10/2/2024	3.19	2.65	2.16
4/2/2025	6.44	4.05	7.95
9/30/2025	2.84	5.05	5.87

Notes:

Parameters measured using a multiparameter probe.

°C = Degrees Celsius.

mS/cm = milli-Siemens per centimeter.

NTU = Nephelometric Turbidity Unit.

mV = millivolt.

mg/L = milligrams per liter.

s.u. = standard unit.

Blank cells indicate parameter was not measured.

Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa

Sample Location:		Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1
Sample ID:		Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1
Sample Date:		3/18/2016	5/18/2016	7/20/2016	10/6/2016
Parameters	Units				
Appendix III					
Boron	mg/L	1.4	0.88	0.811	1.08
Calcium	mg/L	135	205	281	229
Chloride	mg/L	281	247	148	206
Fluoride	mg/L	0.966	<0.500	<0.500	0.512
pH, lab	s.u.	10.2	11.5	10.9	10.7
Sulfate	mg/L	4670	3010	2760	5900
Total dissolved solids (TDS)	mg/L	8600	6950	5340	7480
Appendix IV					
Antimony	mg/L	0.00111	<0.001	<0.001	0.00129
Arsenic	mg/L	0.0261	0.0170	0.0133	0.0170
Barium	mg/L	0.0621	0.0681	0.0945	0.0841
Beryllium	mg/L	<0.001	<0.001	<0.001	<0.001
Cadmium	mg/L	0.000856	<0.0005	<0.0005	0.000622
Chromium	mg/L	0.0352	0.0583	0.0225	0.133
Cobalt	mg/L	0.00129	0.000613	<0.0005	0.000619
Lead	mg/L	<0.00250	<0.0005	<0.0005	<0.0005
Lithium	mg/L	<0.250	<0.200	0.110	<0.200
Mercury	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	4.32	2.30	2.00	3.48
Radium-226 & 228	pCi/L	0.446	0.671	0.653	0.790
Selenium	mg/L	0.280	0.185	0.150	0.234
Thallium	mg/L	<0.001	<0.001	<0.001	<0.001

Notes:

J - Estimated concentration.

R - Rejected.

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1
Sample ID:		Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1
Sample Date:		1/31/2017	4/12/2017	7/12/2017	8/16/2017
Parameters	Units				
Appendix III					
Boron	mg/L	1.82	1.54	1.94	1.74
Calcium	mg/L	80.7	150	116	93.3
Chloride	mg/L	415	282	266	324
Fluoride	mg/L	<0.500	0.667	<0.500	0.614
pH, lab	s.u.	11.3	10.7	9.8	9.9
Sulfate	mg/L	5380	3950	4720	4900
Total dissolved solids (TDS)	mg/L	10000	8200	8500	9480
Appendix IV					
Antimony	mg/L	0.00124	<0.001	0.00121	0.00125
Arsenic	mg/L	0.0210	0.0153	0.0174	0.0155
Barium	mg/L	0.0525	0.0526	0.0507	0.0504
Beryllium	mg/L	<0.001	<0.001	<0.001	<0.001
Cadmium	mg/L	0.00103	0.000782	0.000761	<0.0005
Chromium	mg/L	0.0189	0.0210	0.0306	0.0184
Cobalt	mg/L	0.000976	0.000765	0.000777	0.000780
Lead	mg/L	<0.001	<0.0005	<0.0005	<0.0005
Lithium	mg/L	<0.300	<0.150	<0.250	<0.250
Mercury	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	4.74	3.86	4.17	3.79
Radium-226 & 228	pCi/L	0.501	0.502	1.07	0.558
Selenium	mg/L	0.375	0.305	0.254	0.260
Thallium	mg/L	<0.001	<0.001	<0.001	<0.001

Notes:

J - Estimated concentration.

R - Rejected.

Table 4

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1
Sample ID:		Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1
Sample Date:		10/10/2017	5/3/2018	10/10/2018	4/18/2019
Parameters	Units				
Appendix III					
Boron	mg/L	1.57	1.99	3.73	1.17
Calcium	mg/L	148	126	199	190
Chloride	mg/L	269	318	281	291
Fluoride	mg/L	0.534	0.913	<0.500	<0.500
pH, lab	s.u.	10	9	11.1	9.2
Sulfate	mg/L	4730	4840	3540	3910
Total dissolved solids (TDS)	mg/L	8520	9180	7280	6840
Appendix IV					
Antimony	mg/L	--	--	--	--
Arsenic	mg/L	--	--	--	--
Barium	mg/L	--	--	--	--
Beryllium	mg/L	--	--	--	--
Cadmium	mg/L	--	--	--	--
Chromium	mg/L	--	--	--	--
Cobalt	mg/L	--	--	--	--
Lead	mg/L	--	--	--	--
Lithium	mg/L	--	--	--	--
Mercury	mg/L	--	--	--	--
Molybdenum	mg/L	--	--	--	--
Radium-226 & 228	pCi/L	--	--	--	--
Selenium	mg/L	--	--	--	--
Thallium	mg/L	--	--	--	--

Notes:

J - Estimated concentration.

R - Rejected.

Table 4

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1
Sample ID:		Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1	Leachate (Lift Station) #1
Sample Date:		10/30/2019	4/21/2020	10/14/2020	4/21/2021
Parameters	Units				
Appendix III					
Boron	mg/L	1.75	1.65	1.63	1.53
Calcium	mg/L	508	186	159	170
Chloride	mg/L	272	312	278	233
Fluoride	mg/L	<0.500	<0.500	<1.00	0.687
pH, lab	s.u.	11.7	11.8	11.1	11.3
Sulfate	mg/L	3320	3890	5040	3930
Total dissolved solids (TDS)	mg/L	7240	7820	8100	6760
Appendix IV					
Antimony	mg/L	--	--	--	--
Arsenic	mg/L	--	--	--	--
Barium	mg/L	--	--	--	--
Beryllium	mg/L	--	--	--	--
Cadmium	mg/L	--	--	--	--
Chromium	mg/L	--	--	--	--
Cobalt	mg/L	--	--	--	--
Lead	mg/L	--	--	--	--
Lithium	mg/L	--	--	--	--
Mercury	mg/L	--	--	--	--
Molybdenum	mg/L	--	--	--	--
Radium-226 & 228	pCi/L	--	--	--	--
Selenium	mg/L	--	--	--	--
Thallium	mg/L	--	--	--	--

Notes:

J - Estimated concentration.

R - Rejected.

Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa

Sample Location:	Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 1
Sample ID:	Leachate (Lift Station) #1	Leachate-1	LS1-1022	LS1-0423	LS1-1023	LS1-0424
Sample Date:	10/28/2021	4/29/2022	10/10/2022	4/25/2023	10/4/2023	4/2/2024

Parameters	Units					
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Appendix III

Boron	mg/L	2.01	1.81	1.69	2.36	1.81	2.12
Calcium	mg/L	138	127	69.1	104	87.4	50.4
Chloride	mg/L	263	271	288	289	293	311
Fluoride	mg/L	4.14	4.98	6.35	<1.00	<1.00	<1.00
pH, lab	s.u.	11.4	10.9 J	11.7 J	11.0 J	11.8 J	11.2 J
Sulfate	mg/L	3700	4970	3850	5500	3980	75.9 R
Total dissolved solids (TDS)	mg/L	5360	7390	7310	8020	7010	7170

Appendix IV

Antimony	mg/L	--	--	--	0.00200 J+	<0.00200	<0.00200
Arsenic	mg/L	--	--	--	0.0474	0.0371	0.0533
Barium	mg/L	--	--	--	0.0325	0.0357	0.0262
Beryllium	mg/L	--	--	--	<0.00100	<0.00100	<0.00100
Cadmium	mg/L	--	--	--	0.00282	0.00200	0.00116
Chromium	mg/L	--	--	--	0.00546	<0.00500	<0.00500
Cobalt	mg/L	--	--	--	0.00151	0.000945	0.00131
Lead	mg/L	--	--	--	<0.000500	<0.000500	<0.000500
Lithium	mg/L	--	--	--	0.0824	0.102	0.0788
Mercury	mg/L	--	--	--	<0.000200	<0.000200	<0.000200
Molybdenum	mg/L	--	--	--	6.27	4.96	6.34
Radium-226 & 228	pCi/L	--	--	--	<0.346	<0.387	<1.13
Selenium	mg/L	--	--	--	0.420	0.371	0.315
Thallium	mg/L	--	--	--	<0.00100	<0.00100	<0.00100

Notes:

J - Estimated concentration.

R - Rejected.

Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa

Sample Location:	Lift Station 1	Lift Station 1	Lift Station 1	Lift Station 2	Lift Station 2
Sample ID:	LS1-1024	LS1-0425	LS1-1025	Leachate (Lift Station) #2	Leachate (Lift Station) #2
Sample Date:	10/2/2024	4/2/2025	9/30/2025	3/18/2016	5/18/2016

Parameters	Units					
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Appendix III

Boron	mg/L	1.84	1.78	1.74	1.81	1.68
Calcium	mg/L	89.2	51.5	88.6	123	144
Chloride	mg/L	319	347 J-	375	438	710
Fluoride	mg/L	<1.00	<1.00 J	<1.00	<0.500	<0.500
pH, lab	s.u.	12.0 J	10.5 J	11.7 J	10.9	11.8
Sulfate	mg/L	3250	3790 J-	3880	6000	6930
Total dissolved solids (TDS)	mg/L	6320	7320 J-	8170	11500	13000

Appendix IV

Antimony	mg/L	<0.00200	<0.00200	<0.00200	<0.001	<0.001
Arsenic	mg/L	0.0229	0.0414	0.0205	0.0368	0.0160
Barium	mg/L	0.0324	0.0316	0.0361	0.0569	0.0942
Beryllium	mg/L	<0.00100	<0.00100	<0.00100	<0.001	<0.001
Cadmium	mg/L	0.00157	0.00183	0.00138	0.00124	0.000715
Chromium	mg/L	<0.00500	0.00854	<0.00500	0.0402	0.0839
Cobalt	mg/L	<0.000500	0.00179	0.000557	0.00193	0.000541
Lead	mg/L	<0.000500	0.000584	<0.000500	<0.00250	<0.0005
Lithium	mg/L	0.112	0.0765	0.0684	<0.300	<0.300
Mercury	mg/L	<0.000200	<0.000200 J	<0.000200	<0.0002	<0.0002
Molybdenum	mg/L	4.23	1.45	3.86	5.81	4.32
Radium-226 & 228	pCi/L	0.712	0.199	0.545	0.495	0.399
Selenium	mg/L	0.350	0.321	0.277	0.408	0.370
Thallium	mg/L	0.00483	<0.00100	<0.00100	<0.001	<0.001

Notes:

J - Estimated concentration.

R - Rejected.

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2
Sample ID:		Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2
Sample Date:		7/20/2016	10/6/2016	1/31/2017	4/12/2017
Parameters	Units				
Appendix III					
Boron	mg/L	1.7	1.51	1.65	2.57
Calcium	mg/L	119	109	74.2	106
Chloride	mg/L	592	633	635	608
Fluoride	mg/L	<0.500	<0.500	13.5	<0.500
pH, lab	s.u.	11.7	11.9	11.5	10.3
Sulfate	mg/L	6750	7670	7440	6520
Total dissolved solids (TDS)	mg/L	12600	12500	13500	13100
Appendix IV					
Antimony	mg/L	<0.001	<0.001	0.00113	<0.001
Arsenic	mg/L	0.0196	0.0156	0.0322	0.0152
Barium	mg/L	0.0807	0.0753	0.0482	0.0697
Beryllium	mg/L	<0.001	<0.001	<0.001	<0.001
Cadmium	mg/L	0.000602	0.000806	0.00124	0.000892
Chromium	mg/L	0.0452	0.0330	0.0210	0.0613
Cobalt	mg/L	0.000614	0.000564	0.00157	0.00111
Lead	mg/L	<0.0005	<0.0005	<0.001	<0.0005
Lithium	mg/L	<0.350	<0.400	<0.400	<0.350
Mercury	mg/L	0.000267	<0.0002	<0.0002	<0.0002
Molybdenum	mg/L	4.27	4.58	5.43	3.80
Radium-226 & 228	pCi/L	0.114	1.71	1.17	0.433
Selenium	mg/L	0.384	0.370	0.425	0.374
Thallium	mg/L	<0.001	<0.001	<0.001	<0.001

Notes:

J - Estimated concentration.

R - Rejected.

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2
Sample ID:		Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2
Sample Date:		7/12/2017	8/16/2017	10/10/2017	5/3/2018
Parameters	Units				
Appendix III					
Boron	mg/L	2.03	2.28	1.67	1.81
Calcium	mg/L	68.8	36.4	180	155
Chloride	mg/L	629	607	514	644
Fluoride	mg/L	<0.500	<0.500	<0.500	0.698
pH, lab	s.u.	11.4	11.4	11.1	9.3
Sulfate	mg/L	6350	6610	6650	4950
Total dissolved solids (TDS)	mg/L	13000	13000	12200	8460
Appendix IV					
Antimony	mg/L	<0.001	<0.01	--	--
Arsenic	mg/L	0.0186	0.0160	--	--
Barium	mg/L	0.0529	0.0410	--	--
Beryllium	mg/L	<0.001	<0.001	--	--
Cadmium	mg/L	0.000920	<0.005	--	--
Chromium	mg/L	0.0241	0.0190	--	--
Cobalt	mg/L	0.000675	0.000668	--	--
Lead	mg/L	<0.0005	<0.0005	--	--
Lithium	mg/L	<0.350	<0.350	--	--
Mercury	mg/L	0.000252	<0.0002	--	--
Molybdenum	mg/L	5.10	4.79	--	--
Radium-226 & 228	pCi/L	0.190	0.258	--	--
Selenium	mg/L	0.417	0.427	--	--
Thallium	mg/L	<0.001	<0.001	--	--

Notes:

J - Estimated concentration.

R - Rejected.

Table 4

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2
Sample ID:		Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2
Sample Date:		10/10/2018	4/18/2019	10/30/2019	4/21/2020
Parameters	Units				
Appendix III					
Boron	mg/L	1.42	2.06	2.38	2.97
Calcium	mg/L	152	93.3	210	93.7
Chloride	mg/L	357	471	183	487
Fluoride	mg/L	<0.500	<0.500	<0.500	<0.500
pH, lab	s.u.	9.6	10.1	9.2	10.6
Sulfate	mg/L	4930	5210	2490	5880
Total dissolved solids (TDS)	mg/L	9200	9960	8640	11400
Appendix IV					
Antimony	mg/L	--	--	--	--
Arsenic	mg/L	--	--	--	--
Barium	mg/L	--	--	--	--
Beryllium	mg/L	--	--	--	--
Cadmium	mg/L	--	--	--	--
Chromium	mg/L	--	--	--	--
Cobalt	mg/L	--	--	--	--
Lead	mg/L	--	--	--	--
Lithium	mg/L	--	--	--	--
Mercury	mg/L	--	--	--	--
Molybdenum	mg/L	--	--	--	--
Radium-226 & 228	pCi/L	--	--	--	--
Selenium	mg/L	--	--	--	--
Thallium	mg/L	--	--	--	--

Notes:

J - Estimated concentration.

R - Rejected.

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2
Sample ID:		Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate (Lift Station) #2	Leachate-2	LS2-1022
Sample Date:		10/14/2020	4/21/2021	10/28/2021	4/29/2022	10/10/2022
Parameters	Units					
Appendix III						
Boron	mg/L	2.66	2.86	2.82	2.12	2.15
Calcium	mg/L	28.6	55	53.9	36.7	26.2
Chloride	mg/L	586	428	453	618	549
Fluoride	mg/L	<1.00	<0.500	11.9	12.8	14.7
pH, lab	s.u.	11	11.3	11.3	11.1 J	10.7 J
Sulfate	mg/L	7810	5660	5350	6530	5680
Total dissolved solids (TDS)	mg/L	12500	9400	9640	10500	11200
Appendix IV						
Antimony	mg/L	--	--	--	--	--
Arsenic	mg/L	--	--	--	--	--
Barium	mg/L	--	--	--	--	--
Beryllium	mg/L	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--
Cobalt	mg/L	--	--	--	--	--
Lead	mg/L	--	--	--	--	--
Lithium	mg/L	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--
Molybdenum	mg/L	--	--	--	--	--
Radium-226 & 228	pCi/L	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--
Thallium	mg/L	--	--	--	--	--

Notes:

J - Estimated concentration.

R - Rejected.

Table 4

Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa

Sample Location:	Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2	Lift Station 2
Sample ID:	LS2-0423	LS2-1023	LS2-0424	LS2-1024	LS2-0425	LS2-1025
Sample Date:	4/25/2023	10/4/2023	4/2/2024	10/2/2024	4/2/2025	9/30/2025

Parameters	Units
-------------------	--------------

Appendix III

Boron	mg/L	3.38	1.91	3.03	2.13	1.49	1.77
Calcium	mg/L	269	46.6	36.2	126	37.8	99.0
Chloride	mg/L	648	564	586	403	376 J-	447
Fluoride	mg/L	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00
pH, lab	s.u.	10.6 J	10.1 J	9.8 J	11.4 J	9.8 J	11.9 J
Sulfate	mg/L	6200	5900	5570	4560	3990 J-	4120
Total dissolved solids (TDS)	mg/L	9750	10700	10200	7540	7500 J-	8550

Appendix IV

Antimony	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00800
Arsenic	mg/L	0.00733	0.0188	0.0251	0.00832	0.0386	0.00999
Barium	mg/L	0.0526	0.0229	0.0275	0.0421	0.0213	0.0435
Beryllium	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Cadmium	mg/L	0.00179	0.00254	0.00157	0.00141	0.00194	0.00136
Chromium	mg/L	0.980	<0.00500	0.0272	0.00500	0.00624	0.00739
Cobalt	mg/L	0.00122	0.000824	0.00224	<0.000500	0.00165	<0.000500
Lead	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Lithium	mg/L	0.0147	0.0396	0.0744	0.0619	0.0869	0.0427
Mercury	mg/L	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200 J	<0.000200
Molybdenum	mg/L	4.19	5.22	8.46	3.86	1.50	3.31
Radium-226 & 228	pCi/L	<0.305	<0.369	<1.11	0.629	0.171	0.711
Selenium	mg/L	0.249	0.367	0.423	0.253	0.346	0.226
Thallium	mg/L	<0.00100	<0.00400	<0.00100	<0.00400	<0.00100	<0.00100

Notes:

J - Estimated concentration.

R - Rejected.

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 3	Lift Station 3	Lift Station 3	Lift Station 3
Sample ID:		Leachate (Lift Station) #3	Leachate (Lift Station) #3	Leachate (Lift Station) #3	Leachate (Lift Station) #3
Sample Date:		8/16/2017	10/10/2017	5/3/2018	10/10/2018
Parameters	Units				
Appendix III					
Boron	mg/L	4.85	4.27	4.24	1.57
Calcium	mg/L	224	218	168	137
Chloride	mg/L	156	354	158	273
Fluoride	mg/L	<0.500	<0.500	<0.500	<0.500
pH, lab	s.u.	8.8	11.4	8.7	10.3
Sulfate	mg/L	2120	4930	1940	3430
Total dissolved solids (TDS)	mg/L	5040	10200	3840	6520
Appendix IV					
Antimony	mg/L	<0.001	--	--	--
Arsenic	mg/L	0.00293	--	--	--
Barium	mg/L	0.0556	--	--	--
Beryllium	mg/L	<0.001	--	--	--
Cadmium	mg/L	<0.0005	--	--	--
Chromium	mg/L	0.0505	--	--	--
Cobalt	mg/L	0.000607	--	--	--
Lead	mg/L	<0.0005	--	--	--
Lithium	mg/L	<0.250	--	--	--
Mercury	mg/L	<0.0002	--	--	--
Molybdenum	mg/L	1.08	--	--	--
Radium-226 & 228	pCi/L	0.303	--	--	--
Selenium	mg/L	0.0623	--	--	--
Thallium	mg/L	<0.001	--	--	--

Notes:

J - Estimated concentration.

R - Rejected.

**Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa**

Sample Location:		Lift Station 3	Lift Station 3	Lift Station 3	Lift Station 3
Sample ID:		Leachate (Lift Station) #3	Leachate (Lift Station) #3	Leachate (Lift Station) #3	Leachate (Lift Station) #3
Sample Date:		4/18/2019	10/30/2019	4/21/2020	10/14/2020
Parameters	Units				
Appendix III					
Boron	mg/L	2.01	1.49	4.11	4.36
Calcium	mg/L	108	103	158	316
Chloride	mg/L	232	264	501	306
Fluoride	mg/L	<0.500	<0.500	<0.500	<0.500
pH, lab	s.u.	11.5	11.8	10.6	11
Sulfate	mg/L	3440	4480	4190	3590
Total dissolved solids (TDS)	mg/L	6320	5580	9020	5710
Appendix IV					
Antimony	mg/L	--	--	--	--
Arsenic	mg/L	--	--	--	--
Barium	mg/L	--	--	--	--
Beryllium	mg/L	--	--	--	--
Cadmium	mg/L	--	--	--	--
Chromium	mg/L	--	--	--	--
Cobalt	mg/L	--	--	--	--
Lead	mg/L	--	--	--	--
Lithium	mg/L	--	--	--	--
Mercury	mg/L	--	--	--	--
Molybdenum	mg/L	--	--	--	--
Radium-226 & 228	pCi/L	--	--	--	--
Selenium	mg/L	--	--	--	--
Thallium	mg/L	--	--	--	--

Notes:

J - Estimated concentration.

R - Rejected.

Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa

Sample Location:	Lift Station 3	Lift Station 3	Lift Station 3	Lift Station 3	Lift Station 3
Sample ID:	Leachate (Lift Station) #3	Leachate (Lift Station) #3	Leachate-3	LS3-1022	LS3-0423
Sample Date:	4/21/2021	10/28/2021	4/29/2022	10/10/2022	4/25/2023

Parameters	Units					
Appendix III						
Boron	mg/L	5.53	3.47	3.56	2.40	2.09
Calcium	mg/L	544	191	144	77.4	135
Chloride	mg/L	408	317	321	315	240
Fluoride	mg/L	0.515	3.2	3.69	4.82	<1.00
pH, lab	s.u.	11.6	11.3	11.3 J	11.9 J	11.9 J
Sulfate	mg/L	3920	2690	2500	2910	3300
Total dissolved solids (TDS)	mg/L	7260	4260	5400	6680	5520
Appendix IV						
Antimony	mg/L	--	--	--	--	<0.00200
Arsenic	mg/L	--	--	--	--	0.0108
Barium	mg/L	--	--	--	--	0.0564
Beryllium	mg/L	--	--	--	--	<0.00100
Cadmium	mg/L	--	--	--	--	0.000790
Chromium	mg/L	--	--	--	--	0.0103
Cobalt	mg/L	--	--	--	--	0.000683
Lead	mg/L	--	--	--	--	<0.000500
Lithium	mg/L	--	--	--	--	<0.0100
Mercury	mg/L	--	--	--	--	<0.000200
Molybdenum	mg/L	--	--	--	--	1.80
Radium-226 & 228	pCi/L	--	--	--	--	<-0.0661
Selenium	mg/L	--	--	--	--	0.145
Thallium	mg/L	--	--	--	--	<0.00100

Notes:

J - Estimated concentration.

R - Rejected.

Table 4

Leachate Analytical Results
MidAmerican Energy Company
Walter Scott Jr. Energy Center CCR Monofill
Council Bluffs, Iowa

Sample Location:	Lift Station 3	Lift Station 3	Lift Station 3	Lift Station 3	Lift Station 3
Sample ID:	LS3-1023	LS3-0424	LS3-1024	LS3-0425	LS3-1025
Sample Date:	10/4/2023	4/2/2024	10/2/2024	4/2/2025	9/30/2025

Parameters	Units
-------------------	--------------

Appendix III

Boron	mg/L	1.94	2.00	1.44	1.43	1.75
Calcium	mg/L	42.5	22.5	106	17.5	87.5
Chloride	mg/L	317	154	248	175 J-	154
Fluoride	mg/L	<1.00	<1.00	<1.00	1.25 J-	<1.00
pH, lab	s.u.	11.9 J	11.9 J	12.1 J	10.2 J	12.0 J
Sulfate	mg/L	3070	1720	3030	2490 J-	2040
Total dissolved solids (TDS)	mg/L	6330	3550	5630	5060 J-	3650

Appendix IV

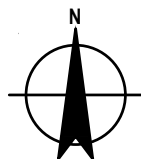
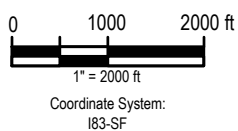
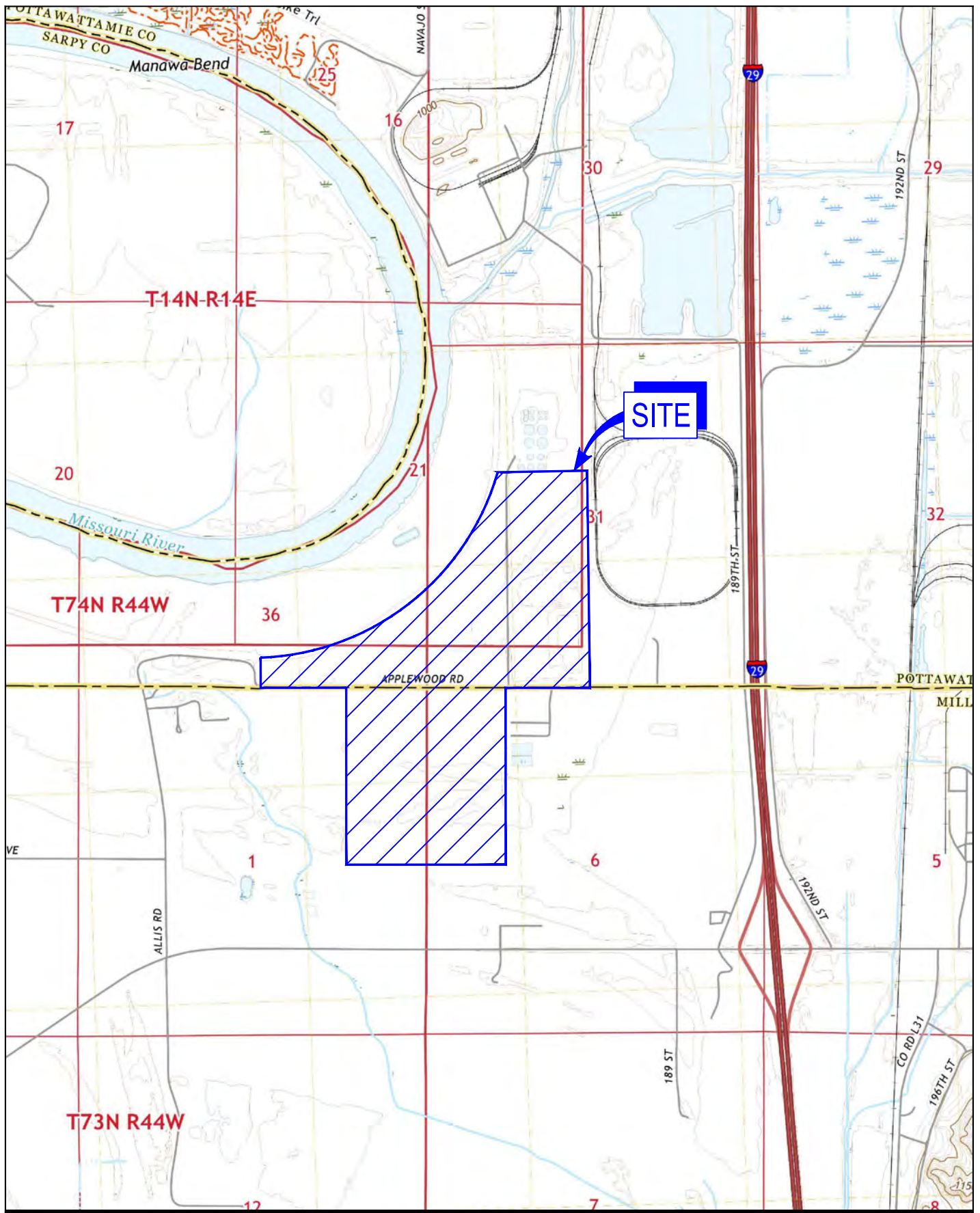
Antimony	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Arsenic	mg/L	0.0170	0.0107	0.0206	0.0150	0.00659
Barium	mg/L	0.0248	0.0249	0.0471	0.0366	0.0791
Beryllium	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Cadmium	mg/L	0.000417	0.000211	0.000791	0.000510	0.000418
Chromium	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt	mg/L	0.000570	0.000550	<0.000500	0.000548	<0.000500
Lead	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Lithium	mg/L	<0.0100	<0.0100	0.0123	0.0115	0.0204
Mercury	mg/L	<0.000200	<0.000200	<0.000200	<0.000200 J	<0.000200
Molybdenum	mg/L	2.33	1.26	2.10	1.55	1.26
Radium-226 & 228	pCi/L	<0.585	<0.595	0.590	-0.605	0.772
Selenium	mg/L	0.231	0.103	0.232	0.0650	0.0799
Thallium	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100

Notes:

J - Estimated concentration.

R - Rejected.

Figures

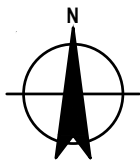
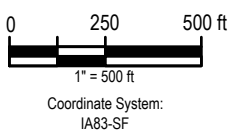
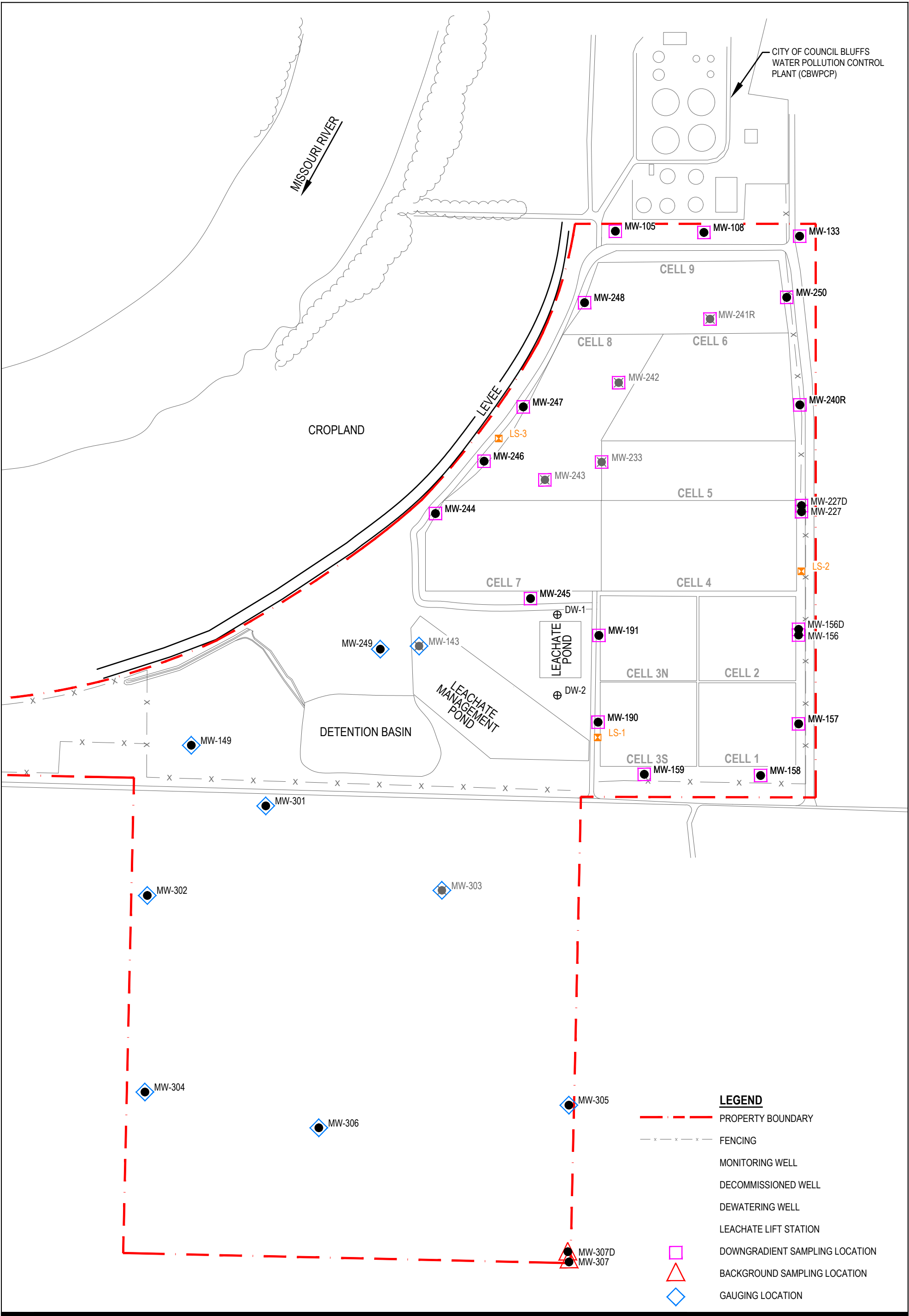


MIDAMERICAN ENERGY COMPANY
WALTER SCOTT JR. ENERGY CENTER
CCR MONOFILL
COUNCIL BLUFFS, IOWA

Project No. 12592594
Date January 2026

SITE LOCATION MAP

FIGURE 1.1



MIDAMERICAN ENERGY COMPANY
WALTER SCOTT JR. ENERGY CENTER
CCR MONOFILL
COUNCIL BLUFFS, IOWA

Project No. 12592594
Date January 2026

SITE MAP AND MONITORING NETWORK

FIGURE 1.2

Appendices

Appendix A

Sample Collection Records

SAMPLE COLLECTION RECORD

Location ID: LS1 (Lift Station #1)

Job. No.: 12592594

Client: MidAmerican Energy Company

Location: WSEC CCR Monofill

Date: 4/2/25

Weather: 53° F Cloudy, Windy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (ft)	<u>na</u>	(Known, Meas.)	d. One System Volume (mL)	<u>na</u>
b. Depth to Water (ft)	<u>na</u>		e. Well Diameter (in)	<u>na</u>
c. Length of water column (ft)	<u>na</u>			

2. WELL PURGING DATA:

a. Purge Method:	Purged with leachate pump ~5 minutes prior to sampling
b. Purge Basis:	~5 minutes
c. Field Testing Equipment Used:	Aquatroll 600

[illegible]

3. **SAMPLE COLLECTION:** Bailer

Parameters requested for analysis Appendix III and Appendix IV to 40 CFR Part 257

Sample ID#: LSI-0428

Sample Time: 1300

4. COMMENTS:

QA/QC samples collected: NA


 Sampler (Signature)

Brodie Wilson
(Print Name)

SAMPLE COLLECTION RECORD

Location ID: LS2 (Lift Station #2)

Job. No.: 12592594

Client: MidAmerican Energy Company

Location: WSEC CCR Monofill

Date: 4/2/25

Weather: 53° F Cloudy, Windy

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (ft)	<u>na</u>	(Known, Meas.)	d. One System Volume (mL)	<u>na</u>
b. Depth to Water (ft)	<u>na</u>		e. Well Diameter (in)	<u>na</u>
c. Length of water column (ft)	<u>na</u>			

2. WELL PURGING DATA:

a. Purge Method:	Purged with leachate pump ~5 minutes prior to sampling
b. Purge Basis:	~5 minutes
c. Field Testing Equipment Used:	Aquatroll 600

[illegible]

3. SAMPLE COLLECTION: Bailer

Parameters requested for analysis Appendix III and Appendix IV to 40 CFR Part 257

Sample ID#: LS2-0425

Sample Time: 1245

4. COMMENTS:

QA/QC samples collected: N/A

Samplers (Signature)

Brooke Waisson
(Print Name)

Location ID: LS3 (Lift Station #3)

Client: MidAmerican Energy Company

Date: 4/2/25

Weather: 53°F Cloudy, windy

a. Total Well Length (ft)	na	(Known, Meas.)	d. One System Volume (mL)	na
b. Depth to Water (ft)	na		e. Well Diameter (in)	na
c. Length of water column (ft)	na			

a. Purge Method:	Purged with leachate pump ~5 minutes prior to sampling
b. Purge Basis:	~5 minutes
c. Field Testing Equipment Used:	Aquatroll 600

[illegible]

Parameters requested for analysis Appendix III and Appendix IV to 40 CFR Part 257

Sample ID#: LS3-0425

Sample Time: 13/0

4. COMMENTS:

QA/QC samples collected: N/A


 Sampler (Signature)

Brooke Wasson
(Print Name)

LEACHATE

SAMPLE COLLECTION RECORD

Location ID: LS1 (Lift Station #1)

Job. No.: 12592594

Client: MidAmerican Energy Company

Location: WSEC CCR Monofill

Date: 9/30/25

Weather: partly cloudy, 74°F

1. WATER LEVEL DATA: (from TOC)

a. Total Well Length (ft)	na	(Known, Meas.)
---------------------------	----	----------------

b. Depth to Water (ft)	na
------------------------	----

c. Length of water column (ft)	na
--------------------------------	----

d. One System Volume (mL)	na
---------------------------	----

e. Well Diameter (in)	na
-----------------------	----

2. WELL PURGING DATA:

a. Purge Method: Purged with leachate pump ~5 minutes prior to sampling

b. Purge Basis:	~5 minutes
-----------------	------------

c. Field Testing Equipment Used: Aquatroll 600

[illegible]

3. **SAMPLE COLLECTION:** Bailer

Parameters requested for analysis Appendix III and Appendix IV to 40 CFR Part 257

Sample ID#: LS1-1025

Sample Time: 1130

4. COMMENTS: water fairly clear, yellow

QA/QC samples collected: n/a

Pange Richards
Sampler (Signature)

Paige Richards
(Print Name)

Location ID: LS2 (Lift Station #2)

Job. No.: 12592594
Location: WSEC CCR Monofill
Weather: Partly Cloudy, 72°F

Client: MidAmerican Energy Company
Date: 9/30/25

a. Total Well Length (ft)	<u>na</u>	(Known, Meas.)	d. One System Volume (mL)	<u>na</u>
b. Depth to Water (ft)	<u>na</u>		e. Well Diameter (in)	<u>na</u>
c. Length of water column (ft)	<u>na</u>			

a. Purge Method:	Purged with leachate pump ~5 minutes prior to sampling
b. Purge Basis:	~5 minutes
c. Field Testing Equipment Used:	Aquatroll 600

[illegible]

Sample ID#: LS2-1025 Sample Time: 1100

QA/QC samples collected: W/A

Pange Richards
Sampler (Signature)

Paige Richards
(Print Name)

Location ID: LS3 (Lift Station #3)

Client: MidAmerican Energy Company
Date: 9/30/25

a. Total Well Length (ft)	<u>na</u>	(Known, Meas.)	d. One System Volume (mL)	<u>na</u>
b. Depth to Water (ft)	<u>na</u>		e. Well Diameter (in)	<u>na</u>
c. Length of water column (ft)	<u>na</u>			

a. Purge Method:	Purged with leachate pump ~5 minutes prior to sampling
b. Purge Basis:	~5 minutes
c. Field Testing Equipment Used:	Aquatroll 600

[illegible]

Sample ID#: LS3-1025 Sample Time: 1200

QA/QC samples collected: NA

Paige Richards
(Print Name)

Appendix B

Laboratory Analytical Reports

ANALYTICAL REPORT

PREPARED FOR

Attn: Kevin Armstrong
GHD Services Inc.
11228 Aurora Avenue
Des Moines, Iowa 50322-7905

Generated 5/2/2025 4:44:24 PM Revision 1

JOB DESCRIPTION

MEC Walter Scott CCR (WSEC)
Leachate

JOB NUMBER

310-303424-1

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



Authorized for release by
Zach Bindert, Senior Project Manager
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(319)595-2016

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5/2/2025 4:44:24 PM
Revision 1

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Case Narrative

Client: GHD Services Inc.
Project: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Job ID: 310-303424-1

Eurofins Cedar Falls

**Job Narrative
310-303424-1**

REVISION

The report being provided is a revision of the original report sent on 5/2/2025. The report (revision 1) is being revised due to This report was revised 5/02/2025. Sample ID entered incorrectly..

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

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

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

Receipt

The samples were received on 4/3/2025 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.4°C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: LS1-0425 (310-303424-1), LS2-0425 (310-303424-2) and LS3-0425 (310-303424-3). This does not meet regulatory requirements. The client was contacted regarding this issue.

HPLC/IC

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: LS1-0425 (310-303424-1) and LS2-0425 (310-303424-2). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Case Narrative

Client: GHD Services Inc.
Project: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Job ID: 310-303424-2

Eurofins Cedar Falls

**Job Narrative
310-303424-2**

REVISION

The report being provided is a revision of the original report sent on 5/2/2025. The report (revision 1) is being revised due to This report was revised 5/02/2025. Sample ID entered incorrectly..

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

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

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

Receipt

The samples were received on 4/3/2025 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.4°C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: LS1-0425 (310-303424-1), LS2-0425 (310-303424-2) and LS3-0425 (310-303424-3). This does not meet regulatory requirements. The client was contacted regarding this issue.

Gas Flow Proportional Counter

Method 9320_Ra228: Radium 228 Batch 711347

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. LS1-0425 (310-303424-1), LS2-0425 (310-303424-2) and LS3-0425 (310-303424-3)

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.

Eurofins Cedar Falls

Sample Summary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-303424-1	LS1-0425	Water	04/02/25 13:00	04/03/25 16:50
310-303424-2	LS2-0425	Water	04/02/25 12:45	04/03/25 16:50
310-303424-3	LS3-0425	Water	04/02/25 13:10	04/03/25 16:50

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Detection Summary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS1-0425

Lab Sample ID: 310-303424-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	347		5.00		mg/L	5		9056A	Total/NA
Sulfate	3790		100		mg/L	100		9056A	Total/NA
Arsenic	0.0414		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0316		0.00200		mg/L	1		6020B	Total/NA
Boron	1.78		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.00183		0.000200		mg/L	1		6020B	Total/NA
Calcium	51.5		0.500		mg/L	1		6020B	Total/NA
Chromium	0.00854		0.00500		mg/L	1		6020B	Total/NA
Cobalt	0.00179		0.000500		mg/L	1		6020B	Total/NA
Lithium	0.0765		0.0100		mg/L	1		6020B	Total/NA
Lead	0.000584		0.000500		mg/L	1		6020B	Total/NA
Molybdenum	1.45		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.321		0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	7320		500		mg/L	1		SM 2540C	Total/NA
pH	10.5	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: LS2-0425

Lab Sample ID: 310-303424-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	376		5.00		mg/L	5		9056A	Total/NA
Sulfate	3990		100		mg/L	100		9056A	Total/NA
Arsenic	0.0386		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0213		0.00200		mg/L	1		6020B	Total/NA
Boron	1.49		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.00194		0.000200		mg/L	1		6020B	Total/NA
Calcium	37.8		0.500		mg/L	1		6020B	Total/NA
Chromium	0.00624		0.00500		mg/L	1		6020B	Total/NA
Cobalt	0.00165		0.000500		mg/L	1		6020B	Total/NA
Lithium	0.0869		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	1.50		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.346		0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	7500		500		mg/L	1		SM 2540C	Total/NA
pH	9.8	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: LS3-0425

Lab Sample ID: 310-303424-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	175		5.00		mg/L	5		9056A	Total/NA
Fluoride	1.25		1.00		mg/L	5		9056A	Total/NA
Sulfate	2490		50.0		mg/L	50		9056A	Total/NA
Arsenic	0.0150		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0366		0.00200		mg/L	1		6020B	Total/NA
Boron	1.43		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.000510		0.000200		mg/L	1		6020B	Total/NA
Calcium	17.5		0.500		mg/L	1		6020B	Total/NA
Cobalt	0.000548		0.000500		mg/L	1		6020B	Total/NA
Lithium	0.0115		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	1.55		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.0650		0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	5060		500		mg/L	1		SM 2540C	Total/NA
pH	10.2	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: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS1-0425

Lab Sample ID: 310-303424-1

Date Collected: 04/02/25 13:00

Matrix: Water

Date Received: 04/03/25 16:50

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	347		5.00		mg/L			04/10/25 13:54	5
Fluoride	<1.00		1.00		mg/L			04/10/25 13:54	5
Sulfate	3790		100		mg/L			04/10/25 14:07	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 17:03	1
Arsenic	0.0414		0.00200		mg/L		04/08/25 09:00	04/08/25 17:03	1
Barium	0.0316		0.00200		mg/L		04/08/25 09:00	04/08/25 17:03	1
Beryllium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 17:03	1
Boron	1.78		0.100		mg/L		04/08/25 09:00	04/08/25 17:03	1
Cadmium	0.00183		0.000200		mg/L		04/08/25 09:00	04/08/25 17:03	1
Calcium	51.5		0.500		mg/L		04/08/25 09:00	04/08/25 17:03	1
Chromium	0.00854		0.00500		mg/L		04/08/25 09:00	04/08/25 17:03	1
Cobalt	0.00179		0.000500		mg/L		04/08/25 09:00	04/08/25 17:03	1
Lithium	0.0765		0.0100		mg/L		04/08/25 09:00	04/08/25 17:03	1
Lead	0.000584		0.000500		mg/L		04/08/25 09:00	04/08/25 17:03	1
Molybdenum	1.45		0.00200		mg/L		04/08/25 09:00	04/09/25 14:59	1
Selenium	0.321		0.00500		mg/L		04/08/25 09:00	04/08/25 17:03	1
Thallium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 17:03	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		04/09/25 09:40	04/10/25 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7320		500		mg/L			04/09/25 21:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	10.5	HF	1.0		SU			04/04/25 00:56	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	<0.797	U	0.266	0.270	1.00	0.797	pCi/L	04/08/25 07:42	05/01/25 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	87.4		30 - 110					04/08/25 07:42	05/01/25 16:36	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	<1.07	U G	0.675	0.678	1.00	1.07	pCi/L	04/08/25 07:48	05/01/25 09:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	87.4		30 - 110					04/08/25 07:48	05/01/25 09:47	1
Y Carrier	80.0		30 - 110					04/08/25 07:48	05/01/25 09:47	1

Eurofins Cedar Falls

Client Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS1-0425

Lab Sample ID: 310-303424-1

Date Collected: 04/02/25 13:00

Matrix: Water

Date Received: 04/03/25 16:50

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	<1.07	U	0.726	0.730	5.00	1.07	pCi/L		05/02/25 11:35	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS2-0425

Lab Sample ID: 310-303424-2

Date Collected: 04/02/25 12:45

Matrix: Water

Date Received: 04/03/25 16:50

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	376		5.00		mg/L			04/10/25 14:20	5
Fluoride	<1.00		1.00		mg/L			04/10/25 14:20	5
Sulfate	3990		100		mg/L			04/10/25 14:33	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 17:06	1
Arsenic	0.0386		0.00200		mg/L		04/08/25 09:00	04/08/25 17:06	1
Barium	0.0213		0.00200		mg/L		04/08/25 09:00	04/08/25 17:06	1
Beryllium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 17:06	1
Boron	1.49		0.100		mg/L		04/08/25 09:00	04/08/25 17:06	1
Cadmium	0.00194		0.000200		mg/L		04/08/25 09:00	04/08/25 17:06	1
Calcium	37.8		0.500		mg/L		04/08/25 09:00	04/08/25 17:06	1
Chromium	0.00624		0.00500		mg/L		04/08/25 09:00	04/08/25 17:06	1
Cobalt	0.00165		0.000500		mg/L		04/08/25 09:00	04/08/25 17:06	1
Lithium	0.0869		0.0100		mg/L		04/08/25 09:00	04/08/25 17:06	1
Lead	<0.000500		0.000500		mg/L		04/08/25 09:00	04/08/25 17:06	1
Molybdenum	1.50		0.00200		mg/L		04/08/25 09:00	04/09/25 15:01	1
Selenium	0.346		0.00500		mg/L		04/08/25 09:00	04/08/25 17:06	1
Thallium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 17:06	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		04/09/25 09:40	04/10/25 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	7500		500		mg/L			04/09/25 21:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	9.8	HF	1.0		SU			04/04/25 00:59	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	<0.678	U	0.296	0.296	1.00	0.678	pCi/L	04/08/25 07:42	05/01/25 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	88.9		30 - 110					04/08/25 07:42	05/01/25 16:36	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	<1.14	U G	0.654	0.654	1.00	1.14	pCi/L	04/08/25 07:48	05/01/25 09:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	88.9		30 - 110					04/08/25 07:48	05/01/25 09:47	1
Y Carrier	79.6		30 - 110					04/08/25 07:48	05/01/25 09:47	1

Eurofins Cedar Falls

Client Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS2-0425

Lab Sample ID: 310-303424-2

Date Collected: 04/02/25 12:45

Matrix: Water

Date Received: 04/03/25 16:50

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	<1.14	U	0.718	0.718	5.00	1.14	pCi/L		05/02/25 11:35	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS3-0425

Lab Sample ID: 310-303424-3

Date Collected: 04/02/25 13:10

Matrix: Water

Date Received: 04/03/25 16:50

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	175		5.00		mg/L			04/08/25 19:39	5
Fluoride	1.25		1.00		mg/L			04/08/25 19:39	5
Sulfate	2490		50.0		mg/L			04/09/25 20:27	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 17:09	1
Arsenic	0.0150		0.00200		mg/L		04/08/25 09:00	04/08/25 17:09	1
Barium	0.0366		0.00200		mg/L		04/08/25 09:00	04/08/25 17:09	1
Beryllium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 17:09	1
Boron	1.43		0.100		mg/L		04/08/25 09:00	04/08/25 17:09	1
Cadmium	0.000510		0.000200		mg/L		04/08/25 09:00	04/08/25 17:09	1
Calcium	17.5		0.500		mg/L		04/08/25 09:00	04/08/25 17:09	1
Chromium	<0.00500		0.00500		mg/L		04/08/25 09:00	04/08/25 17:09	1
Cobalt	0.000548		0.000500		mg/L		04/08/25 09:00	04/08/25 17:09	1
Lithium	0.0115		0.0100		mg/L		04/08/25 09:00	04/08/25 17:09	1
Lead	<0.000500		0.000500		mg/L		04/08/25 09:00	04/08/25 17:09	1
Molybdenum	1.55		0.00200		mg/L		04/08/25 09:00	04/08/25 17:09	1
Selenium	0.0650		0.00500		mg/L		04/08/25 09:00	04/08/25 17:09	1
Thallium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 17:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		04/09/25 09:40	04/10/25 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	5060		500		mg/L			04/09/25 21:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	10.2	HF	1.0		SU			04/04/25 00:49	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	<0.769	U	0.361	0.362	1.00	0.769	pCi/L	04/08/25 07:42	05/01/25 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	72.0		30 - 110					04/08/25 07:42	05/01/25 16:36	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	<1.47	U G	0.706	0.708	1.00	1.47	pCi/L	04/08/25 07:48	05/01/25 09:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	72.0		30 - 110					04/08/25 07:48	05/01/25 09:47	1
Y Carrier	78.5		30 - 110					04/08/25 07:48	05/01/25 09:47	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS3-0425
Date Collected: 04/02/25 13:10
Date Received: 04/03/25 16:50

Lab Sample ID: 310-303424-3
Matrix: Water

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	<1.47	U	0.793	0.795	5.00	1.47	pCi/L		05/02/25 11:35	1

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Qualifiers

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
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.
☼	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: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-451132/3

Matrix: Water

Analysis Batch: 451132

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			04/08/25 14:12	1
Fluoride	<0.200		0.200		mg/L			04/08/25 14:12	1
Sulfate	<1.00		1.00		mg/L			04/08/25 14:12	1

Lab Sample ID: LCS 310-451132/4

Matrix: Water

Analysis Batch: 451132

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.739		mg/L		97	90 - 110
Fluoride	2.00	2.041		mg/L		102	90 - 110
Sulfate	10.0	10.17		mg/L		102	90 - 110

Lab Sample ID: MB 310-451618/3

Matrix: Water

Analysis Batch: 451618

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			04/10/25 11:17	1
Fluoride	<0.200		0.200		mg/L			04/10/25 11:17	1
Sulfate	<1.00		1.00		mg/L			04/10/25 11:17	1

Lab Sample ID: LCS 310-451618/4

Matrix: Water

Analysis Batch: 451618

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	9.899		mg/L		99	90 - 110
Fluoride	2.00	2.068		mg/L		103	90 - 110
Sulfate	10.0	9.819		mg/L		98	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-450882/1-A

Matrix: Water

Analysis Batch: 451045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450882

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 15:45	1
Arsenic	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 15:45	1
Barium	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 15:45	1
Beryllium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 15:45	1
Boron	<0.100		0.100		mg/L		04/08/25 09:00	04/08/25 15:45	1
Cadmium	<0.000200		0.000200		mg/L		04/08/25 09:00	04/08/25 15:45	1
Calcium	<0.500		0.500		mg/L		04/08/25 09:00	04/08/25 15:45	1
Chromium	<0.00500		0.00500		mg/L		04/08/25 09:00	04/08/25 15:45	1
Cobalt	<0.000500		0.000500		mg/L		04/08/25 09:00	04/08/25 15:45	1
Lithium	<0.0100		0.0100		mg/L		04/08/25 09:00	04/08/25 15:45	1
Lead	<0.000500		0.000500		mg/L		04/08/25 09:00	04/08/25 15:45	1
Molybdenum	<0.00200		0.00200		mg/L		04/08/25 09:00	04/08/25 15:45	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

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

Lab Sample ID: MB 310-450882/1-A

Matrix: Water

Analysis Batch: 451045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 450882

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00500		0.00500		mg/L		04/08/25 09:00	04/08/25 15:45	1
Thallium	<0.00100		0.00100		mg/L		04/08/25 09:00	04/08/25 15:45	1

Lab Sample ID: LCS 310-450882/2-A

Matrix: Water

Analysis Batch: 451045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 450882

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2032		mg/L		102	80 - 120
Arsenic	0.200	0.1999		mg/L		100	80 - 120
Barium	0.100	0.1018		mg/L		102	80 - 120
Beryllium	0.100	0.09738		mg/L		97	80 - 120
Boron	0.200	0.1835		mg/L		92	80 - 120
Cadmium	0.100	0.09678		mg/L		97	80 - 120
Calcium	2.00	1.922		mg/L		96	80 - 120
Chromium	0.100	0.1029		mg/L		103	80 - 120
Cobalt	0.100	0.1046		mg/L		105	80 - 120
Lithium	0.200	0.2017		mg/L		101	80 - 120
Lead	0.200	0.2067		mg/L		103	80 - 120
Molybdenum	0.200	0.1978		mg/L		99	80 - 120
Selenium	0.400	0.3931		mg/L		98	80 - 120
Thallium	0.100	0.08785		mg/L		88	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-451002/1-A

Matrix: Water

Analysis Batch: 451223

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 451002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		04/09/25 09:40	04/10/25 10:00	1

Lab Sample ID: LCS 310-451002/2-A

Matrix: Water

Analysis Batch: 451223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 451002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001761		mg/L		106	80 - 120

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

Lab Sample ID: MB 310-451144/1

Matrix: Water

Analysis Batch: 451144

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0		mg/L			04/09/25 21:56	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

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

Lab Sample ID: LCS 310-451144/2

Matrix: Water

Analysis Batch: 451144

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	980.0		mg/L		98	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-450649/29

Matrix: Water

Analysis Batch: 450649

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		101	98 - 102

Lab Sample ID: 310-303424-3 DU

Matrix: Water

Analysis Batch: 450649

Client Sample ID: LS3-0425

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	10.2	HF	10.3		SU		0.6	20

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-711346/1-A

Matrix: Water

Analysis Batch: 715645

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 711346

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	<0.355	U	0.204	0.204	1.00	0.355	pCi/L	04/08/25 07:42	05/01/25 14:21	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Barium	86.1		30 - 110	04/08/25 07:42	05/01/25 14:21	1

Lab Sample ID: LCS 160-711346/2-A

Matrix: Water

Analysis Batch: 715645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 711346

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.108		1.22	1.00	0.311	pCi/L	95	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Barium	89.4		30 - 110

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QC Sample Results

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-711347/1-A
Matrix: Water
Analysis Batch: 715644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 711347

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	<0.589	U	0.290	0.290	1.00	0.589	pCi/L	04/08/25 07:48	05/01/25 09:50	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	86.1		30 - 110					04/08/25 07:48	05/01/25 09:50	1
Y Carrier	79.3		30 - 110					04/08/25 07:48	05/01/25 09:50	1

Lab Sample ID: LCS 160-711347/2-A
Matrix: Water
Analysis Batch: 715644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 711347

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	9.49	11.15		1.47	1.00	0.573	pCi/L	117	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Barium	89.4		30 - 110						
Y Carrier	80.7		30 - 110						

QC Association Summary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

HPLC/IC

Analysis Batch: 451132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-3	LS3-0425	Total/NA	Water	9056A	
310-303424-3	LS3-0425	Total/NA	Water	9056A	
MB 310-451132/3	Method Blank	Total/NA	Water	9056A	
LCS 310-451132/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 451618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	9056A	
310-303424-1	LS1-0425	Total/NA	Water	9056A	
310-303424-2	LS2-0425	Total/NA	Water	9056A	
310-303424-2	LS2-0425	Total/NA	Water	9056A	
MB 310-451618/3	Method Blank	Total/NA	Water	9056A	
LCS 310-451618/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 450882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	3005A	
310-303424-2	LS2-0425	Total/NA	Water	3005A	
310-303424-3	LS3-0425	Total/NA	Water	3005A	
MB 310-450882/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-450882/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 451002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	7470A	
310-303424-2	LS2-0425	Total/NA	Water	7470A	
310-303424-3	LS3-0425	Total/NA	Water	7470A	
MB 310-451002/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-451002/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 451045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	6020B	450882
310-303424-2	LS2-0425	Total/NA	Water	6020B	450882
310-303424-3	LS3-0425	Total/NA	Water	6020B	450882
MB 310-450882/1-A	Method Blank	Total/NA	Water	6020B	450882
LCS 310-450882/2-A	Lab Control Sample	Total/NA	Water	6020B	450882

Analysis Batch: 451133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	6020B	450882
310-303424-2	LS2-0425	Total/NA	Water	6020B	450882

Analysis Batch: 451223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	7470A	451002
310-303424-2	LS2-0425	Total/NA	Water	7470A	451002
310-303424-3	LS3-0425	Total/NA	Water	7470A	451002
MB 310-451002/1-A	Method Blank	Total/NA	Water	7470A	451002

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QC Association Summary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Metals (Continued)

Analysis Batch: 451223 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-451002/2-A	Lab Control Sample	Total/NA	Water	7470A	451002

General Chemistry

Analysis Batch: 450649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	SM 4500 H+ B	
310-303424-2	LS2-0425	Total/NA	Water	SM 4500 H+ B	
310-303424-3	LS3-0425	Total/NA	Water	SM 4500 H+ B	
LCS 310-450649/29	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-303424-3 DU	LS3-0425	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 451144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	SM 2540C	
310-303424-2	LS2-0425	Total/NA	Water	SM 2540C	
310-303424-3	LS3-0425	Total/NA	Water	SM 2540C	
MB 310-451144/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-451144/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 711346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	PrecSep-21	
310-303424-2	LS2-0425	Total/NA	Water	PrecSep-21	
310-303424-3	LS3-0425	Total/NA	Water	PrecSep-21	
MB 160-711346/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-711346/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 711347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-303424-1	LS1-0425	Total/NA	Water	PrecSep_0	
310-303424-2	LS2-0425	Total/NA	Water	PrecSep_0	
310-303424-3	LS3-0425	Total/NA	Water	PrecSep_0	
MB 160-711347/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-711347/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS1-0425

Lab Sample ID: 310-303424-1

Date Collected: 04/02/25 13:00

Matrix: Water

Date Received: 04/03/25 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	451618	WZC8	EET CF	04/10/25 13:54
Total/NA	Analysis	9056A		100	451618	WZC8	EET CF	04/10/25 14:07
Total/NA	Prep	3005A			450882	QTZ5	EET CF	04/08/25 09:00
Total/NA	Analysis	6020B		1	451133	NFT2	EET CF	04/09/25 14:59
Total/NA	Prep	3005A			450882	QTZ5	EET CF	04/08/25 09:00
Total/NA	Analysis	6020B		1	451045	NFT2	EET CF	04/08/25 17:03
Total/NA	Prep	7470A			451002	F5MW	EET CF	04/09/25 09:40
Total/NA	Analysis	7470A		1	451223	F5MW	EET CF	04/10/25 10:19
Total/NA	Analysis	SM 2540C		1	451144	MDU9	EET CF	04/09/25 21:56
Total/NA	Analysis	SM 4500 H+ B		1	450649	W9YR	EET CF	04/04/25 00:56
Total/NA	Prep	PrecSep-21			711346	OGC	EET SL	04/08/25 07:42
Total/NA	Analysis	9315		1	715645	SWS	EET SL	05/01/25 16:36
Total/NA	Prep	PrecSep_0			711347	OGC	EET SL	04/08/25 07:48
Total/NA	Analysis	9320		1	715645	SWS	EET SL	05/01/25 09:47
Total/NA	Analysis	Ra226_Ra228		1	715708	CAH	EET SL	05/02/25 11:35

Client Sample ID: LS2-0425

Lab Sample ID: 310-303424-2

Date Collected: 04/02/25 12:45

Matrix: Water

Date Received: 04/03/25 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	451618	WZC8	EET CF	04/10/25 14:20
Total/NA	Analysis	9056A		100	451618	WZC8	EET CF	04/10/25 14:33
Total/NA	Prep	3005A			450882	QTZ5	EET CF	04/08/25 09:00
Total/NA	Analysis	6020B		1	451133	NFT2	EET CF	04/09/25 15:01
Total/NA	Prep	3005A			450882	QTZ5	EET CF	04/08/25 09:00
Total/NA	Analysis	6020B		1	451045	NFT2	EET CF	04/08/25 17:06
Total/NA	Prep	7470A			451002	F5MW	EET CF	04/09/25 09:40
Total/NA	Analysis	7470A		1	451223	F5MW	EET CF	04/10/25 10:21
Total/NA	Analysis	SM 2540C		1	451144	MDU9	EET CF	04/09/25 21:56
Total/NA	Analysis	SM 4500 H+ B		1	450649	W9YR	EET CF	04/04/25 00:59
Total/NA	Prep	PrecSep-21			711346	OGC	EET SL	04/08/25 07:42
Total/NA	Analysis	9315		1	715645	SWS	EET SL	05/01/25 16:36
Total/NA	Prep	PrecSep_0			711347	OGC	EET SL	04/08/25 07:48
Total/NA	Analysis	9320		1	715645	SWS	EET SL	05/01/25 09:47
Total/NA	Analysis	Ra226_Ra228		1	715708	CAH	EET SL	05/02/25 11:35

Client Sample ID: LS3-0425

Lab Sample ID: 310-303424-3

Date Collected: 04/02/25 13:10

Matrix: Water

Date Received: 04/03/25 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	451132	WZC8	EET CF	04/08/25 19:39
Total/NA	Analysis	9056A		50	451132	WZC8	EET CF	04/09/25 20:27

Eurofins Cedar Falls

Lab Chronicle

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Client Sample ID: LS3-0425

Lab Sample ID: 310-303424-3

Date Collected: 04/02/25 13:10

Matrix: Water

Date Received: 04/03/25 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			450882	QTZ5	EET CF	04/08/25 09:00
Total/NA	Analysis	6020B		1	451045	NFT2	EET CF	04/08/25 17:09
Total/NA	Prep	7470A			451002	F5MW	EET CF	04/09/25 09:40
Total/NA	Analysis	7470A		1	451223	F5MW	EET CF	04/10/25 10:23
Total/NA	Analysis	SM 2540C		1	451144	MDU9	EET CF	04/09/25 21:56
Total/NA	Analysis	SM 4500 H+ B		1	450649	W9YR	EET CF	04/04/25 00:49
Total/NA	Prep	PrecSep-21			711346	OGC	EET SL	04/08/25 07:42
Total/NA	Analysis	9315		1	715645	SWS	EET SL	05/01/25 16:36
Total/NA	Prep	PrecSep_0			711347	OGC	EET SL	04/08/25 07:48
Total/NA	Analysis	9320		1	715645	SWS	EET SL	05/01/25 09:47
Total/NA	Analysis	Ra226_Ra228		1	715708	CAH	EET SL	05/02/25 11:35

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: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
6020B	3005A	Water	Lithium

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	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

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

Eurofins Cedar Falls

Method Summary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

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



310-303424 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>GHD</u>			
City/State.	CITY <u>Des Moines</u>	STATE <u>IA</u>	Project.
Receipt Information			
Date/Time Received:	DATE <u>4.3.25</u>	TIME <u>1650</u>	Received By: <u>PH</u>
Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? ☒ Yes ☐ No If yes: Cooler ID: _____			
Multiple Coolers? ☐ Yes ☒ No If yes: Cooler # _____ of _____			
Cooler Custody Seals Present? ☐ Yes ☒ No If yes: Cooler custody seals intact? ☐ Yes ☐ No			
Sample Custody Seals Present? ☐ Yes ☒ No If yes: Sample custody seals intact? ☐ Yes ☐ No			
Trip Blank Present? ☐ Yes ☒ No If yes: Which VOA samples are in cooler? ↓			
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>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>10.1</u>		Corrected Temp (°C): <u>10.1</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>PL 1L</u>	CONTAINER 2 <u>PL 250 N</u>	
Uncorrected Temp (°C):	<u>10.9</u>	<u>11.2</u>	
Corrected Temp (°C):	<u>10.4</u>	<u>11.2</u>	
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☒ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			

Eurofins Cedar Falls

3019 Venture Way
Cedar Falls, IA 50613
Phone 319-277-2401 Fax 319-277-2425

Chain of Custody Record

Testame ca Des c n e s b u
21
eurofins |

Client Information		Sampler: <u>B. Wilson</u>		Lab PM	Carrier Tracking Net(s)		COC No:				
Client Contact:		Phone: <u>503-508-7524</u>		Bindert, Zach T	State of Origin.		310-104769-25190 1				
Kevin Armstrong		E-Mail: Zach.Bindert@eurofins.com		Page: Page 1 of 1							
Company: GHD Services Inc.		PWSID:		Job #:							
Address:		Due Date Requested		Analysis Requested							
11228 Aurora Avenue		TAT Requested (days):		Preservation Codes:							
City: Des Moines		Compliance Project: ☐ Yes ☐ No		D - HNO3							
State, Zip: IA, 50322-7905		PO #: 340-016858		N - None							
Phone: 515-414-3935(Tel)		WO #: 12592594		Other:							
Email: Kevin.Armstrong@ghd.com		Project #: 31017236		Total Number of Containers							
Project Name: MEC Walter Scott CCR (WSEC)		SSOW#:		Special Instructions/Note:							
Site: Iowa											
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9316_Ra226 - Standard Target List	9320_Ra228 - Standard Target List	9065A_ORGFM_28D - Chloride, Fluoride & Sulfate	2640C_Calcd, SM4500_H+
LS1-0425	4/2/25	1300	G	Water	X	X	X	X	X	X	X
LS2-0425	4/2/25	1245	G	Water	X	X	X	X	X	X	X
LS3-0425	4/2/25	1310	G	Water	X	X	X	X	X	X	X
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Deliverable Requested I, II, III, IV, Other (specify)				Special Instructions/QC Requirements.							
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: <u>Brocke Warren</u>		Date/Time: <u>4/3/25</u>		Company: <u>GH</u>		Received by: <u>Brocke Warren</u>		Date/Time: <u>4/3/25</u>		Company: <u>GH</u>	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks:							

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 310-303424-1

Login Number: 303424

List Number: 1

Creator: Hirsch, Preston

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.	N/A	
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.	False	Cooler temperature outside required temperature criteria.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Cedar Falls

Tracer/Carrier Summary

Client: GHD Services Inc.
Project/Site: MEC Walter Scott CCR (WSEC)

Job ID: 310-303424-1

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)					
		Ba					
Lab Sample ID	Client Sample ID	(30-110)					
310-303424-1	LS1-0425	87.4					
310-303424-2	LS2-0425	88.9					
310-303424-3	LS3-0425	72.0					
LCS 160-711346/2-A	Lab Control Sample	89.4					
MB 160-711346/1-A	Method Blank	86.1					

Tracer/Carrier Legend

Ba = Barium

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)					
		Ba	Y				
Lab Sample ID	Client Sample ID	(30-110)	(30-110)				
310-303424-1	LS1-0425	87.4	80.0				
310-303424-2	LS2-0425	88.9	79.6				
310-303424-3	LS3-0425	72.0	78.5				
LCS 160-711347/2-A	Lab Control Sample	89.4	80.7				
MB 160-711347/1-A	Method Blank	86.1	79.3				

Tracer/Carrier Legend

Ba = Barium

Y = Y Carrier



ANALYTICAL REPORT

PREPARED FOR

Attn: Kevin Armstrong
GHD Services Inc.
11228 Aurora Avenue
Des Moines, Iowa 50322-7905

Generated 10/31/2025 10:40:23 AM

JOB DESCRIPTION

MidAmerican WSEC CCR Monofill Leachate
Leachate

JOB NUMBER

310-316873-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
10/31/2025 10:40:23 AM

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

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Case Narrative

Client: GHD Services Inc.
Project: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Job ID: 310-316873-1

Eurofins Cedar Falls

Job Narrative 310-316873-1

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

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

Receipt

The samples were received on 10/1/2025 10:22 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.3°C, 0.9°C and 2.3°C.

HPLC/IC

Method 9056A_ORGFM_28D: The following samples were diluted due to the nature of the sample matrix: LS1-1025 (310-316873-1), LS2-1025 (310-316873-2) and LS3-1025 (310-316873-3). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Case Narrative

Client: GHD Services Inc.
Project: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Job ID: 310-316873-2

Eurofins Cedar Falls

Job Narrative 310-316873-2

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

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

Receipt

The samples were received on 10/1/2025 10:22 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.3°C, 0.9°C and 2.3°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.

Eurofins Cedar Falls

Sample Summary

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-316873-1	LS1-1025	Water	09/30/25 11:30	10/01/25 10:22	Iowa
310-316873-2	LS2-1025	Water	09/30/25 11:00	10/01/25 10:22	Iowa
310-316873-3	LS3-1025	Water	09/30/25 12:00	10/01/25 10:22	Iowa

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Detection Summary

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS1-1025

Lab Sample ID: 310-316873-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	375		5.00		mg/L	5		9056A	Total/NA
Sulfate	3880		50.0		mg/L	50		9056A	Total/NA
Arsenic	0.0205		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0361		0.00200		mg/L	1		6020B	Total/NA
Boron	1.74		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.00138		0.000200		mg/L	1		6020B	Total/NA
Calcium	88.6		0.500		mg/L	1		6020B	Total/NA
Cobalt	0.000557		0.000500		mg/L	1		6020B	Total/NA
Lithium	0.0684		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	3.86		0.00800		mg/L	4		6020B	Total/NA
Selenium	0.277		0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	8170		250		mg/L	1		SM 2540C	Total/NA
pH	11.7	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: LS2-1025

Lab Sample ID: 310-316873-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	447		5.00		mg/L	5		9056A	Total/NA
Sulfate	4120		50.0		mg/L	50		9056A	Total/NA
Arsenic	0.00999		0.00800		mg/L	4		6020B	Total/NA
Barium	0.0435		0.00200		mg/L	1		6020B	Total/NA
Boron	1.77		0.400		mg/L	4		6020B	Total/NA
Cadmium	0.00136		0.000800		mg/L	4		6020B	Total/NA
Calcium	99.0		0.500		mg/L	1		6020B	Total/NA
Chromium	0.00739		0.00500		mg/L	1		6020B	Total/NA
Lithium	0.0427		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	3.31		0.00800		mg/L	4		6020B	Total/NA
Selenium	0.226		0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	8550		250		mg/L	1		SM 2540C	Total/NA
pH	11.9	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: LS3-1025

Lab Sample ID: 310-316873-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	154		5.00		mg/L	5		9056A	Total/NA
Sulfate	2040		50.0		mg/L	50		9056A	Total/NA
Arsenic	0.00659		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0791		0.00200		mg/L	1		6020B	Total/NA
Boron	1.75		0.100		mg/L	1		6020B	Total/NA
Cadmium	0.000418		0.000200		mg/L	1		6020B	Total/NA
Calcium	87.5		0.500		mg/L	1		6020B	Total/NA
Lithium	0.0204		0.0100		mg/L	1		6020B	Total/NA
Molybdenum	1.26		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.0799		0.00500		mg/L	1		6020B	Total/NA
Total Dissolved Solids	3650		250		mg/L	1		SM 2540C	Total/NA
pH	12.0	HF	1.0		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS1-1025

Lab Sample ID: 310-316873-1

Date Collected: 09/30/25 11:30

Matrix: Water

Date Received: 10/01/25 10:22

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	375		5.00		mg/L			10/02/25 11:26	5
Fluoride	<1.00		1.00		mg/L			10/02/25 11:26	5
Sulfate	3880		50.0		mg/L			10/02/25 14:41	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		10/02/25 09:00	10/09/25 18:23	1
Arsenic	0.0205		0.00200		mg/L		10/02/25 09:00	10/09/25 18:23	1
Barium	0.0361		0.00200		mg/L		10/02/25 09:00	10/09/25 18:23	1
Beryllium	<0.00100		0.00100		mg/L		10/02/25 09:00	10/09/25 18:23	1
Boron	1.74		0.100		mg/L		10/02/25 09:00	10/09/25 18:23	1
Cadmium	0.00138		0.000200		mg/L		10/02/25 09:00	10/09/25 18:23	1
Calcium	88.6		0.500		mg/L		10/02/25 09:00	10/09/25 18:23	1
Chromium	<0.00500		0.00500		mg/L		10/02/25 09:00	10/09/25 18:23	1
Cobalt	0.000557		0.000500		mg/L		10/02/25 09:00	10/09/25 18:23	1
Lithium	0.0684		0.0100		mg/L		10/02/25 09:00	10/09/25 18:23	1
Lead	<0.000500		0.000500		mg/L		10/02/25 09:00	10/09/25 18:23	1
Molybdenum	3.86		0.00800		mg/L		10/02/25 09:00	10/10/25 13:41	4
Selenium	0.277		0.00500		mg/L		10/02/25 09:00	10/09/25 18:23	1
Thallium	<0.00100		0.00100		mg/L		10/02/25 09:00	10/09/25 18:23	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		10/09/25 15:00	10/10/25 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8170		250		mg/L			10/01/25 14:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	11.7	HF	1.0		SU			10/01/25 11:31	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	0.521	U	0.391	0.394	1.00	0.576	pCi/L	10/06/25 08:00	10/30/25 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	79.9		30 - 110					10/06/25 08:00	10/30/25 16:55	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	0.0241	U	0.467	0.467	1.00	0.865	pCi/L	10/06/25 08:04	10/30/25 11:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	79.9		30 - 110					10/06/25 08:04	10/30/25 11:42	1
Y Carrier	77.8		30 - 110					10/06/25 08:04	10/30/25 11:42	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS1-1025

Lab Sample ID: 310-316873-1

Date Collected: 09/30/25 11:30

Matrix: Water

Date Received: 10/01/25 10:22

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	0.545	U	0.609	0.611	5.00	0.865	pCi/L		10/30/25 17:33	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS2-1025

Lab Sample ID: 310-316873-2

Date Collected: 09/30/25 11:00

Matrix: Water

Date Received: 10/01/25 10:22

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	447		5.00		mg/L			10/02/25 11:39	5
Fluoride	<1.00		1.00		mg/L			10/02/25 11:39	5
Sulfate	4120		50.0		mg/L			10/02/25 14:55	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00800		0.00800		mg/L		10/02/25 09:00	10/14/25 14:30	4
Arsenic	0.00999		0.00800		mg/L		10/02/25 09:00	10/10/25 13:44	4
Barium	0.0435		0.00200		mg/L		10/02/25 09:00	10/09/25 18:26	1
Beryllium	<0.00100		0.00100		mg/L		10/02/25 09:00	10/09/25 18:26	1
Boron	1.77		0.400		mg/L		10/02/25 09:00	10/10/25 13:44	4
Cadmium	0.00136		0.000800		mg/L		10/02/25 09:00	10/10/25 13:44	4
Calcium	99.0		0.500		mg/L		10/02/25 09:00	10/09/25 18:26	1
Chromium	0.00739		0.00500		mg/L		10/02/25 09:00	10/09/25 18:26	1
Cobalt	<0.000500		0.000500		mg/L		10/02/25 09:00	10/09/25 18:26	1
Lithium	0.0427		0.0100		mg/L		10/02/25 09:00	10/09/25 18:26	1
Lead	<0.000500		0.000500		mg/L		10/02/25 09:00	10/09/25 18:26	1
Molybdenum	3.31		0.00800		mg/L		10/02/25 09:00	10/10/25 13:44	4
Selenium	0.226		0.00500		mg/L		10/02/25 09:00	10/09/25 18:26	1
Thallium	<0.00100		0.00100		mg/L		10/02/25 09:00	10/09/25 18:26	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		10/09/25 15:00	10/10/25 11:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	8550		250		mg/L			10/01/25 14:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	11.9	HF	1.0		SU			10/01/25 11:30	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	0.402	U	0.391	0.393	1.00	0.616	pCi/L	10/06/25 08:00	10/30/25 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	73.6		30 - 110					10/06/25 08:00	10/30/25 16:55	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	0.308	U	0.494	0.495	1.00	0.845	pCi/L	10/06/25 08:04	10/30/25 11:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	73.6		30 - 110					10/06/25 08:04	10/30/25 11:42	1
Y Carrier	77.8		30 - 110					10/06/25 08:04	10/30/25 11:42	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS2-1025
Date Collected: 09/30/25 11:00
Date Received: 10/01/25 10:22

Lab Sample ID: 310-316873-2
Matrix: Water

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	0.711	U	0.630	0.632	5.00	0.845	pCi/L		10/30/25 17:33	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS3-1025

Lab Sample ID: 310-316873-3

Date Collected: 09/30/25 12:00

Matrix: Water

Date Received: 10/01/25 10:22

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	154		5.00		mg/L			10/02/25 11:53	5
Fluoride	<1.00		1.00		mg/L			10/02/25 11:53	5
Sulfate	2040		50.0		mg/L			10/02/25 15:36	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		10/03/25 10:00	10/08/25 19:48	1
Arsenic	0.00659		0.00200		mg/L		10/03/25 10:00	10/08/25 19:48	1
Barium	0.0791		0.00200		mg/L		10/03/25 10:00	10/08/25 19:48	1
Beryllium	<0.00100		0.00100		mg/L		10/03/25 10:00	10/08/25 19:48	1
Boron	1.75		0.100		mg/L		10/03/25 10:00	10/09/25 13:40	1
Cadmium	0.000418		0.000200		mg/L		10/03/25 10:00	10/08/25 19:48	1
Calcium	87.5		0.500		mg/L		10/03/25 10:00	10/08/25 19:48	1
Chromium	<0.00500		0.00500		mg/L		10/03/25 10:00	10/08/25 19:48	1
Cobalt	<0.000500		0.000500		mg/L		10/03/25 10:00	10/08/25 19:48	1
Lithium	0.0204		0.0100		mg/L		10/03/25 10:00	10/08/25 19:48	1
Lead	<0.000500		0.000500		mg/L		10/03/25 10:00	10/08/25 19:48	1
Molybdenum	1.26		0.00200		mg/L		10/03/25 10:00	10/08/25 19:48	1
Selenium	0.0799		0.00500		mg/L		10/03/25 10:00	10/08/25 19:48	1
Thallium	<0.00100		0.00100		mg/L		10/03/25 10:00	10/08/25 19:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		10/09/25 15:00	10/10/25 11:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	3650		250		mg/L			10/01/25 14:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	12.0	HF	1.0		SU			10/01/25 11:33	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	0.0301	U	0.218	0.218	1.00	0.434	pCi/L	10/06/25 08:00	10/30/25 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	90.3		30 - 110					10/06/25 08:00	10/30/25 16:55	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	0.742	U	0.506	0.511	1.00	0.748	pCi/L	10/06/25 08:04	10/30/25 11:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	90.3		30 - 110					10/06/25 08:04	10/30/25 11:42	1
Y Carrier	66.9		30 - 110					10/06/25 08:04	10/30/25 11:42	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS3-1025

Lab Sample ID: 310-316873-3

Date Collected: 09/30/25 12:00

Matrix: Water

Date Received: 10/01/25 10:22

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	0.772		0.551	0.556	5.00	0.748	pCi/L		10/30/25 17:33	1

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Qualifiers

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.
☼	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: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-468800/3

Matrix: Water

Analysis Batch: 468800

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00		mg/L			10/02/25 10:04	1
Fluoride	<0.200		0.200		mg/L			10/02/25 10:04	1
Sulfate	<1.00		1.00		mg/L			10/02/25 10:04	1

Lab Sample ID: LCS 310-468800/4

Matrix: Water

Analysis Batch: 468800

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	9.992		mg/L		100	90 - 110
Fluoride	2.00	2.018		mg/L		101	90 - 110
Sulfate	10.0	10.08		mg/L		101	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-468586/1-A

Matrix: Water

Analysis Batch: 469594

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		10/02/25 09:00	10/09/25 17:06	1
Arsenic	<0.00200		0.00200		mg/L		10/02/25 09:00	10/09/25 17:06	1
Barium	<0.00200		0.00200		mg/L		10/02/25 09:00	10/09/25 17:06	1
Beryllium	<0.00100		0.00100		mg/L		10/02/25 09:00	10/09/25 17:06	1
Boron	<0.100		0.100		mg/L		10/02/25 09:00	10/09/25 17:06	1
Cadmium	<0.000200		0.000200		mg/L		10/02/25 09:00	10/09/25 17:06	1
Calcium	<0.500		0.500		mg/L		10/02/25 09:00	10/09/25 17:06	1
Chromium	<0.00500		0.00500		mg/L		10/02/25 09:00	10/09/25 17:06	1
Cobalt	<0.000500		0.000500		mg/L		10/02/25 09:00	10/09/25 17:06	1
Lithium	<0.0100		0.0100		mg/L		10/02/25 09:00	10/09/25 17:06	1
Lead	<0.000500		0.000500		mg/L		10/02/25 09:00	10/09/25 17:06	1
Molybdenum	<0.00200		0.00200		mg/L		10/02/25 09:00	10/09/25 17:06	1
Selenium	<0.00500		0.00500		mg/L		10/02/25 09:00	10/09/25 17:06	1
Thallium	<0.00100		0.00100		mg/L		10/02/25 09:00	10/09/25 17:06	1

Lab Sample ID: LCS 310-468586/2-A

Matrix: Water

Analysis Batch: 469594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2136		mg/L		107	80 - 120
Arsenic	0.200	0.1931		mg/L		97	80 - 120
Barium	0.100	0.1012		mg/L		101	80 - 120
Beryllium	0.100	0.09964		mg/L		100	80 - 120
Boron	0.200	0.2037		mg/L		102	80 - 120
Cadmium	0.100	0.09627		mg/L		96	80 - 120
Calcium	2.00	2.102		mg/L		105	80 - 120
Chromium	0.100	0.09865		mg/L		99	80 - 120
Cobalt	0.100	0.09696		mg/L		97	80 - 120

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QC Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

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

Lab Sample ID: LCS 310-468586/2-A

Matrix: Water

Analysis Batch: 469594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lithium	0.200	0.1988		mg/L		99	80 - 120
Lead	0.200	0.2045		mg/L		102	80 - 120
Molybdenum	0.200	0.2057		mg/L		103	80 - 120
Selenium	0.400	0.3806		mg/L		95	80 - 120
Thallium	0.100	0.1043		mg/L		104	80 - 120

Lab Sample ID: MB 310-468716/1-A

Matrix: Water

Analysis Batch: 469410

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		10/03/25 10:00	10/08/25 18:37	1
Arsenic	<0.00200		0.00200		mg/L		10/03/25 10:00	10/08/25 18:37	1
Barium	<0.00200		0.00200		mg/L		10/03/25 10:00	10/08/25 18:37	1
Beryllium	<0.00100		0.00100		mg/L		10/03/25 10:00	10/08/25 18:37	1
Cadmium	<0.000200		0.000200		mg/L		10/03/25 10:00	10/08/25 18:37	1
Calcium	<0.500		0.500		mg/L		10/03/25 10:00	10/08/25 18:37	1
Chromium	<0.00500		0.00500		mg/L		10/03/25 10:00	10/08/25 18:37	1
Cobalt	<0.000500		0.000500		mg/L		10/03/25 10:00	10/08/25 18:37	1
Lithium	<0.0100		0.0100		mg/L		10/03/25 10:00	10/08/25 18:37	1
Lead	<0.000500		0.000500		mg/L		10/03/25 10:00	10/08/25 18:37	1
Molybdenum	<0.00200		0.00200		mg/L		10/03/25 10:00	10/08/25 18:37	1
Selenium	<0.00500		0.00500		mg/L		10/03/25 10:00	10/08/25 18:37	1
Thallium	<0.00100		0.00100		mg/L		10/03/25 10:00	10/08/25 18:37	1

Lab Sample ID: MB 310-468716/1-A

Matrix: Water

Analysis Batch: 469592

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.100		0.100		mg/L		10/03/25 10:00	10/09/25 13:17	1

Lab Sample ID: LCS 310-468716/2-A

Matrix: Water

Analysis Batch: 469410

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2132		mg/L		107	80 - 120
Arsenic	0.200	0.2010		mg/L		101	80 - 120
Barium	0.100	0.09726		mg/L		97	80 - 120
Beryllium	0.100	0.1004		mg/L		100	80 - 120
Cadmium	0.100	0.09967		mg/L		100	80 - 120
Calcium	2.00	2.113		mg/L		106	80 - 120
Chromium	0.100	0.09891		mg/L		99	80 - 120
Cobalt	0.100	0.09495		mg/L		95	80 - 120
Lithium	0.200	0.2073		mg/L		104	80 - 120
Lead	0.200	0.2110		mg/L		106	80 - 120
Molybdenum	0.200	0.1949		mg/L		97	80 - 120
Selenium	0.400	0.3831		mg/L		96	80 - 120

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QC Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

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

Lab Sample ID: LCS 310-468716/2-A
Matrix: Water
Analysis Batch: 469410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.100	0.1012		mg/L		101	80 - 120

Lab Sample ID: LCS 310-468716/2-A
Matrix: Water
Analysis Batch: 469592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468716

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.200	0.2133		mg/L		107	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-469470/1-A
Matrix: Water
Analysis Batch: 469704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 469470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200		mg/L		10/09/25 15:00	10/10/25 10:48	1

Lab Sample ID: LCS 310-469470/2-A
Matrix: Water
Analysis Batch: 469704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 469470

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001739		mg/L		104	80 - 120

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

Lab Sample ID: MB 310-468573/1
Matrix: Water
Analysis Batch: 468573

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			10/01/25 14:29	1

Lab Sample ID: LCS 310-468573/2
Matrix: Water
Analysis Batch: 468573

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	934.0		mg/L		93	89 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-468537/1
Matrix: Water
Analysis Batch: 468537

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

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

Eurofins Cedar Falls

QC Sample Results

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-739223/1-A

Matrix: Water

Analysis Batch: 742990

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 739223

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.04016	U	0.170	0.170	1.00	0.363	pCi/L	10/06/25 08:00	10/30/25 16:44	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	89.1		30 - 110					10/06/25 08:00	10/30/25 16:44	1

Lab Sample ID: LCS 160-739223/2-A

Matrix: Water

Analysis Batch: 742990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 739223

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226		9.57	7.953		1.13	1.00	0.337	pCi/L	83	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Barium	82.6		30 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-739239/1-A

Matrix: Water

Analysis Batch: 742990

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 739239

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1083	U	0.370	0.370	1.00	0.655	pCi/L	10/06/25 08:04	10/30/25 11:39	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Barium	89.1		30 - 110					10/06/25 08:04	10/30/25 11:39	1
Y Carrier	77.4		30 - 110					10/06/25 08:04	10/30/25 11:39	1

Lab Sample ID: LCS 160-739239/2-A

Matrix: Water

Analysis Batch: 742990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 739239

Analyte		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228		7.97	8.440		1.22	1.00	0.553	pCi/L	106	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits							
Barium	82.6		30 - 110							
Y Carrier	83.0		30 - 110							

Eurofins Cedar Falls

QC Association Summary

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

HPLC/IC

Analysis Batch: 468800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	9056A	
310-316873-1	LS1-1025	Total/NA	Water	9056A	
310-316873-2	LS2-1025	Total/NA	Water	9056A	
310-316873-2	LS2-1025	Total/NA	Water	9056A	
310-316873-3	LS3-1025	Total/NA	Water	9056A	
310-316873-3	LS3-1025	Total/NA	Water	9056A	
MB 310-468800/3	Method Blank	Total/NA	Water	9056A	
LCS 310-468800/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 468586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	3005A	
310-316873-2	LS2-1025	Total/NA	Water	3005A	
MB 310-468586/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-468586/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 468716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-3	LS3-1025	Total/NA	Water	3005A	
MB 310-468716/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-468716/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 469410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-3	LS3-1025	Total/NA	Water	6020B	468716
MB 310-468716/1-A	Method Blank	Total/NA	Water	6020B	468716
LCS 310-468716/2-A	Lab Control Sample	Total/NA	Water	6020B	468716

Prep Batch: 469470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	7470A	
310-316873-2	LS2-1025	Total/NA	Water	7470A	
310-316873-3	LS3-1025	Total/NA	Water	7470A	
MB 310-469470/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-469470/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 469592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-3	LS3-1025	Total/NA	Water	6020B	468716
MB 310-468716/1-A	Method Blank	Total/NA	Water	6020B	468716
LCS 310-468716/2-A	Lab Control Sample	Total/NA	Water	6020B	468716

Analysis Batch: 469594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	6020B	468586
310-316873-2	LS2-1025	Total/NA	Water	6020B	468586
MB 310-468586/1-A	Method Blank	Total/NA	Water	6020B	468586
LCS 310-468586/2-A	Lab Control Sample	Total/NA	Water	6020B	468586

Eurofins Cedar Falls

QC Association Summary

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Metals

Analysis Batch: 469704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	7470A	469470
310-316873-2	LS2-1025	Total/NA	Water	7470A	469470
310-316873-3	LS3-1025	Total/NA	Water	7470A	469470
MB 310-469470/1-A	Method Blank	Total/NA	Water	7470A	469470
LCS 310-469470/2-A	Lab Control Sample	Total/NA	Water	7470A	469470

Analysis Batch: 469722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	6020B	468586
310-316873-2	LS2-1025	Total/NA	Water	6020B	468586

Analysis Batch: 470074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-2	LS2-1025	Total/NA	Water	6020B	468586

General Chemistry

Analysis Batch: 468537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	SM 4500 H+ B	
310-316873-2	LS2-1025	Total/NA	Water	SM 4500 H+ B	
310-316873-3	LS3-1025	Total/NA	Water	SM 4500 H+ B	
LCS 310-468537/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 468573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	SM 2540C	
310-316873-2	LS2-1025	Total/NA	Water	SM 2540C	
310-316873-3	LS3-1025	Total/NA	Water	SM 2540C	
MB 310-468573/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-468573/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Rad

Prep Batch: 739223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	PrecSep-21	
310-316873-2	LS2-1025	Total/NA	Water	PrecSep-21	
310-316873-3	LS3-1025	Total/NA	Water	PrecSep-21	
MB 160-739223/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-739223/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 739239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-316873-1	LS1-1025	Total/NA	Water	PrecSep_0	
310-316873-2	LS2-1025	Total/NA	Water	PrecSep_0	
310-316873-3	LS3-1025	Total/NA	Water	PrecSep_0	
MB 160-739239/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-739239/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Eurofins Cedar Falls

Lab Chronicle

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS1-1025

Lab Sample ID: 310-316873-1

Date Collected: 09/30/25 11:30

Matrix: Water

Date Received: 10/01/25 10:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	468800	QTZ5	EET CF	10/02/25 11:26
Total/NA	Analysis	9056A		50	468800	QTZ5	EET CF	10/02/25 14:41
Total/NA	Prep	3005A			468586	QTZ5	EET CF	10/02/25 09:00
Total/NA	Analysis	6020B		4	469722	NFT2	EET CF	10/10/25 13:41
Total/NA	Prep	3005A			468586	QTZ5	EET CF	10/02/25 09:00
Total/NA	Analysis	6020B		1	469594	NFT2	EET CF	10/09/25 18:23
Total/NA	Prep	7470A			469470	RLT9	EET CF	10/09/25 15:00
Total/NA	Analysis	7470A		1	469704	RLT9	EET CF	10/10/25 11:07
Total/NA	Analysis	SM 2540C		1	468573	TGN5	EET CF	10/01/25 14:29
Total/NA	Analysis	SM 4500 H+ B		1	468537	W9YR	EET CF	10/01/25 11:31
Total/NA	Prep	PrecSep-21			739223	AMS	EET SL	10/06/25 08:00
Total/NA	Analysis	9315		1	743002	SWS	EET SL	10/30/25 16:55
Total/NA	Prep	PrecSep_0			739239	AMS	EET SL	10/06/25 08:04
Total/NA	Analysis	9320		1	742990	SWS	EET SL	10/30/25 11:42
Total/NA	Analysis	Ra226_Ra228		1	743094	SCB	EET SL	10/30/25 17:33

Client Sample ID: LS2-1025

Lab Sample ID: 310-316873-2

Date Collected: 09/30/25 11:00

Matrix: Water

Date Received: 10/01/25 10:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	468800	QTZ5	EET CF	10/02/25 11:39
Total/NA	Analysis	9056A		50	468800	QTZ5	EET CF	10/02/25 14:55
Total/NA	Prep	3005A			468586	QTZ5	EET CF	10/02/25 09:00
Total/NA	Analysis	6020B		4	469722	NFT2	EET CF	10/10/25 13:44
Total/NA	Prep	3005A			468586	QTZ5	EET CF	10/02/25 09:00
Total/NA	Analysis	6020B		1	469594	NFT2	EET CF	10/09/25 18:26
Total/NA	Prep	3005A			468586	QTZ5	EET CF	10/02/25 09:00
Total/NA	Analysis	6020B		4	470074	NFT2	EET CF	10/14/25 14:30
Total/NA	Prep	7470A			469470	RLT9	EET CF	10/09/25 15:00
Total/NA	Analysis	7470A		1	469704	RLT9	EET CF	10/10/25 11:09
Total/NA	Analysis	SM 2540C		1	468573	TGN5	EET CF	10/01/25 14:29
Total/NA	Analysis	SM 4500 H+ B		1	468537	W9YR	EET CF	10/01/25 11:30
Total/NA	Prep	PrecSep-21			739223	AMS	EET SL	10/06/25 08:00
Total/NA	Analysis	9315		1	743002	SWS	EET SL	10/30/25 16:55
Total/NA	Prep	PrecSep_0			739239	AMS	EET SL	10/06/25 08:04
Total/NA	Analysis	9320		1	742990	SWS	EET SL	10/30/25 11:42
Total/NA	Analysis	Ra226_Ra228		1	743094	SCB	EET SL	10/30/25 17:33

Lab Chronicle

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Client Sample ID: LS3-1025

Lab Sample ID: 310-316873-3

Date Collected: 09/30/25 12:00

Matrix: Water

Date Received: 10/01/25 10:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	468800	QTZ5	EET CF	10/02/25 11:53
Total/NA	Analysis	9056A		50	468800	QTZ5	EET CF	10/02/25 15:36
Total/NA	Prep	3005A			468716	F8JX	EET CF	10/03/25 10:00
Total/NA	Analysis	6020B		1	469592	NFT2	EET CF	10/09/25 13:40
Total/NA	Prep	3005A			468716	F8JX	EET CF	10/03/25 10:00
Total/NA	Analysis	6020B		1	469410	NFT2	EET CF	10/08/25 19:48
Total/NA	Prep	7470A			469470	RLT9	EET CF	10/09/25 15:00
Total/NA	Analysis	7470A		1	469704	RLT9	EET CF	10/10/25 11:11
Total/NA	Analysis	SM 2540C		1	468573	TGN5	EET CF	10/01/25 14:29
Total/NA	Analysis	SM 4500 H+ B		1	468537	W9YR	EET CF	10/01/25 11:33
Total/NA	Prep	PrecSep-21			739223	AMS	EET SL	10/06/25 08:00
Total/NA	Analysis	9315		1	743002	SWS	EET SL	10/30/25 16:55
Total/NA	Prep	PrecSep_0			739239	AMS	EET SL	10/06/25 08:04
Total/NA	Analysis	9320		1	742990	SWS	EET SL	10/30/25 11:42
Total/NA	Analysis	Ra226_Ra228		1	743094	SCB	EET SL	10/30/25 17:33

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: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
6020B	3005A	Water	Lithium

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	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

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

Eurofins Cedar Falls

Method Summary

Client: GHD Services Inc.

Job ID: 310-316873-1

Project/Site: MidAmerican WSEC CCR Monofill Leachate

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



310-316873 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>6410</u>			
City/State:	<u>Des Moines</u>	<u>IA</u>	Project
Receipt Information			
Date/Time Received	<u>10/1/25</u>	<u>0930</u>	Received By: <u>SK</u>
Delivery Type: ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID
Multiple Coolers?		☒ Yes ☐ No	If yes: Cooler # <u>1</u> of <u>3</u>
Cooler Custody Seals Present?		☐ Yes ☒ No	If yes Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes. Which VOA samples are in cooler? ↓
Temperature Record			
Coolant. ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other _____ ☐ NONE			
Thermometer ID <u>HA</u>		Correction Factor (°C) <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C) <u>0.9</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? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client <u>GHP</u>			
City/State	<u>Des Moines</u>	STATE <u>IA</u>	Project
Receipt Information			
Date/Time Received	DATE <u>10/1/25</u>	TIME <u>0930</u>	Received By <u>JK</u>
Delivery Type ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID
Multiple Coolers?		☒ Yes ☐ No	If yes: Cooler # <u>2</u> of <u>3</u>
Cooler Custody Seals Present?		☐ Yes ☒ No	If yes: Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes Which VOA samples are in cooler? ↓
Temperature Record			
Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>HA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C) <u>0.3</u>		Corrected Temp (°C) <u>0.3</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>		<u>CONTAINER 2</u>
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client <u>GHP</u>			
City/State	<u>Des Moines</u>	STATE <u>IA</u>	Project
Receipt Information			
Date/Time Received	DATE <u>10/1/25</u>	TIME <u>0930</u>	Received By <u>JK</u>
Delivery Type. ☐ UPS ☒ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		☒ Yes ☐ No	If yes: Cooler ID
Multiple Coolers?		☒ Yes ☐ No	If yes: Cooler # <u>3</u> of <u>3</u>
Cooler Custody Seals Present?		☐ Yes ☒ No	If yes: Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?		☐ Yes ☒ No	If yes: Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?		☐ Yes ☒ No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other: _____ ☐ NONE			
Thermometer ID: <u>HA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>2.3</u>		Corrected Temp (°C): <u>2.3</u>	
• Sample Container Temperature			
Container(s) used.	<u>CONTAINER 1</u>		<u>CONTAINER 2</u>
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No a) If yes: Is there evidence that the chilling process began? ☐ Yes ☐ No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e g , bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			

10/31/2025

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 310-316873-1

Login Number: 316873

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Robison, Jessie

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.	N/A	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Cedar Falls

Tracer/Carrier Summary

Client: GHD Services Inc.
Project/Site: MidAmerican WSEC CCR Monofill Leachate

Job ID: 310-316873-1

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (30-110)	
310-316873-1	LS1-1025	79.9	
310-316873-2	LS2-1025	73.6	
310-316873-3	LS3-1025	90.3	
LCS 160-739223/2-A	Lab Control Sample	82.6	
MB 160-739223/1-A	Method Blank	89.1	
Tracer/Carrier Legend			
Ba = Barium			

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)
310-316873-1	LS1-1025	79.9	77.8
310-316873-2	LS2-1025	73.6	77.8
310-316873-3	LS3-1025	90.3	66.9
LCS 160-739239/2-A	Lab Control Sample	82.6	83.0
MB 160-739239/1-A	Method Blank	89.1	77.4
Tracer/Carrier Legend			
Ba = Barium			
Y = Y Carrier			



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