2024 Annual Groundwater Monitoring and Corrective Action Report

M.L. Kapp Generating Station
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Prepared for:

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OVERVIEW OF CURRENT STATUS

M.L. Kapp Generating Station
2024 Annual Report

In accordance with §257.90(e)(6), this section at the beginning of the annual report provides an overview of the current status of groundwater monitoring and corrective action programs for the coal combustion residual (CCR) unit. The groundwater monitoring system for the capped inactive impoundments at the M.L. Kapp Generating Station (KAP) monitors a capped and closed main ash pond. Supporting information is provided in the text of the annual report.

Category	Rule Requirement	Site Status
Monitoring Status – Start of Year	(i) At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95;	Assessment
Monitoring Status – End of Year	(ii) At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95;	Assessment
Statistically Significant Increases (SSIs)	(iii) If it was determined that there was an SSI over background for one or more constituents listed in Appendix III to this part pursuant to §257.94(e):	
	(A) Identify those constituents listed in Appendix III to this part and the names of the monitoring wells associated with such an increase; and	SSIs initially determined on July 18, 2019, based on April 2019 monitoring results. In 2024, SSIs for semiannual events for compliance wells at the waste boundary included the following; see **Table 5** for complete results. <u>April/May 2024</u> Boron: MW-301, MW-302, MW-303, MW-304, MW-305, MW-306 Chloride: MW-301, MW-306 Sulfate: MW-301, MW-302, MW-303, MW-304, MW-305, MW-306 Total Dissolved Solids: MW-305

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Category	Rule Requirement	Site Status
		October 2024 Boron: MW-301, MW-302, MW-303, MW-304, MW-305, MW-306 Chloride: MW-301, MW-306 Sulfate: MW-301, MW-302, MW-303, MW-304, MW-305, MW-306
	(B) Provide the date when the assessment monitoring program was initiated for the CCR unit.	January 13, 2020
Statistically Significant Levels (SSL) Above Groundwater Protection Standard (GPS)	(iv) If it was determined that there was an SSL above the GPS for one or more constituents listed in Appendix IV to this part pursuant to §257.95(g) include all of the following:	
	(A) Identify those constituents listed in Appendix IV to this part and the names of the monitoring wells associated with such an increase;	Molybdenum: Initially determined to be at an SSL above the GPS on July 13, 2020, at compliance monitoring wells MW-301, MW-302, MW-304, and MW-305. Lithium: Initially determined to be at an SSL above the GPS on August 5, 2021, at compliance monitoring well MW-306. Arsenic: Initially determined to be at an SSL above the GPS following the March 6, 2023 statistical analysis of the November 2022 sampling event at monitoring well MW-303. For the 2024 monitoring events, compliance wells/parameters determined to be at SSLs above the GPS were as follows:

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Category	Rule Requirement	Site Status
	SSLs above the GPS:	April/May 2024 Arsenic: No wells Lithium: No wells Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305 October 2024 Arsenic: No wells Lithium: MW-306 Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305 Note: See **Tables 5A** and **5B** for complete results from 2024.
	(B) Provide the date when the assessment of corrective measures was initiated for the CCR unit;	October 12, 2020
	(C) Provide the date when the public meeting will be held for the assessment of corrective measures for the CCR unit; and	To Be Determined
	(D) Provide the date when the assessment of corrective measures will be completed for the CCR unit.	March 11, 2021 (Molybdenum) Updated ACM information for lithium and arsenic will be included with the Selection of Remedy Report, which is in progress.
Selection of Remedy	(v) Whether a remedy was selected pursuant to §257.97 during the current annual reporting period and, if so, the date of remedy selection; and	Not applicable – Selection of remedy not yet completed
Corrective Action	(vi) Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period.	Not applicable – remedial activities not yet initiated

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1.0 INTRODUCTION

This 2024 Annual Groundwater Monitoring and Corrective Action Report was prepared to support compliance with the groundwater monitoring requirements of the "Coal Combustion Residuals (CCR) Final Rule" published by the U.S. Environmental Protection Agency (U.S. EPA) in the *Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities;* Final Rule, dated April 17, 2015 (U.S. EPA, 2015) and subsequent amendments. Specifically, this report was prepared to fulfill the requirements of 40 CFR 257.100 and 40 CFR 257.90(e). The applicable sections of the Rule are provided below in *italics*, followed by applicable information relative to the 2024 Annual Groundwater Monitoring and Corrective Action Report for the CCR unit.

This report covers the period of groundwater monitoring from January 1, 2024, through December 31, 2024.

The groundwater monitoring system for the M.L. Kapp Generating Station (KAP) monitors a single CCR unit:

- Kapp Main Ash Pond (inactive surface impoundment – closed January 2018)

The system is designed to detect monitored constituents at the waste boundary of the KAP CCR unit as required by 40 CFR 257.91(d). In 2024, the groundwater monitoring system consisted of one upgradient background well, six downgradient compliance wells at the waste boundary, five downgradient delineation wells, one sidegradient/downgradient delineation well, and two sidegradient supplemental background wells (**Table 1**, **Figure 1**, and **Figure 2**).

2.0 BACKGROUND

To provide context for the annual report, the following background information is provided in this section of the report, prior to the annual report requirement sections:

- Geologic and hydrogeologic setting
- CCR Rule monitoring system

2.1 GEOLOGIC AND HYDROGEOLOGIC SETTING

2.1.1 Regional Geologic Information

The uppermost geologic formation beneath KAP that meets the definition of the "uppermost aquifer," as defined under 40 CFR 257.53, is the surficial alluvial aquifer. The alluvial aquifer is composed of glacial drift, sand, silt, and clay. Immediately underlying the surficial alluvial aquifer is the Silurian bedrock aquifer, which consists of limestone and dolomite (Wahl et al., 1978). A map of the regional geology in the area is included in **Appendix A**.

The Mississippi River and associated alluvial aquifers are a major source of surface water and shallow groundwater in the area.

Regional information indicates that groundwater flow within the Silurian dolomite and limestone is to the south-southeast. A map of regional flow is included in **Appendix A**.

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2.1.2 Site Information

Soils at the site are primarily sand, silt, and clay to a depth of approximately 25 feet and overlie weathered limestone bedrock. The shallow unconsolidated materials identified consist primarily of sand, lean clay, and sandy silt. During drilling of background monitoring well MW-307, the shallow unconsolidated materials were identified as primarily clayey sand, silty sand, and silty clay. Limestone bedrock was encountered between a depth of 7 to 20 feet below ground surface (bgs)Limestone was encountered to a total depth of at least 66 bgs in MW-312.The boring logs and well construction forms for monitoring wells MW-301 through MW-314A are provided in **Appendix B**.

Shallow groundwater at the site generally flows to the southeast and east; however, historically the groundwater flow direction has been variable and the hydraulic gradient at the water table is generally relatively flat across the CCR Unit. Shallow groundwater flow on the site is influenced by water levels in a ditch to the south of the pond closure area (MW-303) and a small creek to the east, as well as the Mississippi River to the south and southeast. The groundwater flow patterns for April/May October 2024 are shown on **Figures 3** and **4**, respectively. In April/May and October 2024, the groundwater flow direction was primarily toward the Mississippi River.

The groundwater monitoring well network summary is provided in **Table 1**. The sampling event summary is provided in **Table 2**, and the groundwater elevation data for the monitoring wells is provided in **Table 3**. Estimated horizontal gradients and flow velocities within the aquifer are provided in **Table 4A**, and a vertical gradient summary is provided in **Table 4B**.

2.2 CCR RULE MONITORING SYSTEM

The groundwater monitoring system established in accordance with the CCR Rule to monitor groundwater quality at the waste boundary consists of one upgradient (background) monitoring well and six downgradient monitoring wells (**Table 1** and **Figure 2**). The background well is MW-307, which was installed in 2020 after the recognition that analytical results from MW-306, initially installed as a background well, suggested this well may not represent natural background groundwater conditions at this site. The downgradient compliance wells are MW-301, MW-302, MW-303, MW-304, MW-305, and MW-306.

Following the detection of molybdenum at a statistically significant level (SSL) above the Groundwater Protection Standard (GPS) at four compliance wells, additional downgradient wells were installed to delineate the nature and extent of impacts to groundwater and to support the assessment of corrective measures. The delineation wells include MW-304A, MW-308, MW-309, MW-311, MW-311A, MW-313, MW-314, and MW-314A. Installation dates for the monitoring wells are provided in the notes on **Figure 2**.

Supplemental background monitoring wells MW-310 and MW-312 were installed for the purpose of collecting additional background water quality data in the bedrock aquifer near the site.

The CCR Rule wells were installed in the upper portion of the surficial alluvial aquifer and within the limestone bedrock. Well depths range from approximately 14 to 66 feet bgs.

From 2020 through 2023, multiple attempts were made to negotiate with additional off-site property owners for the installation of delineation wells on their properties. An access agreement was successfully negotiated in 2023 to install an additional off-site nested delineation water table well and piezometer with one neighboring property. MW-314 and MW-314A were installed in February 2024. These wells were installed into sand, gravel, and clay and were primarily intended to provide

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additional information about groundwater flow direction, vertical hydraulic gradient information, and groundwater quality information downgradient of the former impoundment.

3.0 257.100(E)(5) GROUNDWATER MONITORING AND CORRECTIVE ACTION FOR INACTIVE CCR SURFACE IMPOUNDMENTS

The owner or operator of the inactive CCR surface impoundments must: (i) No later than April 17, 2019, comply with groundwater monitoring requirements set forth in §§257.90(b) and 257.94(b); and (ii) No later than August 1, 2019, prepare the initial groundwater monitoring and corrective action report as set forth in §257.90(e).

This report is submitted to fulfill the reporting requirement.

4.0 §257.90(E) ANNUAL REPORT REQUIREMENTS

Annual groundwater monitoring and corrective action report. *For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by §257.105(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:*

4.1 §257.90(E)(1) SITE MAP

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

A map showing the site location is provided on **Figure 1**. A map showing the CCR unit, monitoring system wells, and supplemental and delineation wells with identification numbers for the groundwater monitoring program is provided on **Figure 2**.

4.2 §257.90(E)(2) MONITORING SYSTEM CHANGES

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

Wells MW-314 and MW-314A were installed in February 2024. These wells were installed to provide additional information about groundwater flow direction, vertical hydraulic gradient information, and groundwater quality information downgradient of the former impoundment.

4.3 §257.90(E)(3) SUMMARY OF SAMPLING EVENTS

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

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Two groundwater sampling events were completed for the KAP CCR unit in 2024. Semiannual sampling events were completed in April/May and October 2024, as required by the assessment monitoring program.

A summary of the 2024 groundwater sampling events for each background and downgradient well, and the dates the samples were collected is included in **Table 2**.

Groundwater samples collected in the April/May and October events were analyzed for both Appendix III and Appendix IV constituents.

The sampling results for Appendix III and Appendix IV parameters in 2024 are summarized in **Tables 5A** and **5B**. Field parameter results for the 2024 sampling events are provided in **Table 6**. The analytical laboratory reports for 2024 are provided in **Appendix C**. Historical results for each monitoring well are summarized in **Appendix D**.

4.4 §257.90(E)(4) MONITORING TRANSITION NARRATIVE

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

There was no monitoring program transition in 2024.

Assessment monitoring for KAP was initiated in January 2020 and continued through 2024. An Assessment of Corrective Measures (ACM) was initiated for the KAP CCR Unit in October 2020 and completed in March 2021. The selection of remedy is in progress. Assessment monitoring continued during the ACM and will continue during the selection of remedy and implementation of the corrective action program.

The ACM was initiated in response to the detection of molybdenum at an SSL exceeding the GPS in monitoring wells MW-301, MW-302, MW-304, and MW-305. Lithium was added to the selection of remedy process, following a determination that lithium was at an SSL above the GPS at MW-306 in the evaluation of the April 2021 monitoring event. Arsenic was added to the selection of remedy process, following a determination that arsenic was at an SSL above the GPS at MW-303 in the evaluation of the November 2022 monitoring event.

The statistical evaluation of the April/May 2024 assessment monitoring event was completed in September 2024. Statistical evaluation of the October 2024 assessment monitoring results was completed in March 2025.

In accordance with the Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at Resource Conservation and Recovery Act (RCRA) Facilities (U.S. EPA, 2009), the evaluation of whether a parameter has been detected at an SSL exceeding the GPS is based on comparison of the lower confidence limit (LCL) for the mean, calculated from the assessment monitoring results, to the GPS. The LCL evaluation was completed for each Appendix IV parameter that has been detected at a concentration exceeding the GPS in at least one sample result since assessment monitoring was initiated, which includes arsenic, lithium, and molybdenum. The LCLs were calculated with Sanitas™ using historical concentrations measured in the most recent eight events for each well, or all of the results if less than eight events have been completed. A minimum of four sample results are required for the LCL evaluation. The LCL evaluations completed for the April/May and October 2024

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events are provided in **Appendix E**. Trend evaluations were also performed for selected parameters as part of the evaluation and are also included in **Appendix E**.

Findings of the statistical analyses of the compliance wells for the two events were as follows:

- Molybdenum was determined to be at an SSL above the GPS for compliance wells MW-301, MW-302, MW-303, MW-304, and MW-305 for both semiannual events.
- Lithium was determined to be at an SSL above the GPS at MW-306 in the analysis of the October 2024 results, but not in the analysis of the April/May results'
- Arsenic was not determined to be at an SSL above the GPS.

The selection of remedy process continues, including preparation of an update to the ACM.

4.5 §257.90(E)(5) OTHER REQUIREMENTS

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

Additional potentially applicable requirements for the annual report, and the location of each requirement within the Rule, are provided in the following sections. For each cited section of the Rule, the portion referencing the annual report requirement is provided below in italics, followed by applicable information relative to the 2024 Annual Groundwater Monitoring and Corrective Action Report for the CCR Unit.

4.5.1 §257.90(e) General Requirements

For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year.

Status of Groundwater Monitoring and Corrective Action Program. The groundwater monitoring and corrective action program is currently in the selection of remedy process, with assessment monitoring continuing.

Summary of Key Actions Completed.

- Completed statistical evaluation of October 2023 data.
- Submitted well permit and floodplain permit applications for the installation of monitoring wells MW-314 and MW-314A (January – February 2024).
- Installed and developed downgradient wells MW-314 and MW-314A on neighboring property (February 2024).
- Conducted single well step aquifer pumping tests at MW-301, MW-302, MW-303, MW-305, and MW-311A with groundwater sampling (February 2024).

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- Collected soil boring samples within the Closure Area using roto-sonic drilling methods. CCR materials collected from these borings were used to run porosity tests, and leach tests using groundwater collected from the site (February 2024).

- Completed statistical evaluation of October 2023 sampling event data (March 2024).

- Conducted hydraulic conductivity testing, pump installation, and survey of newly installed wells MW-314 and MW-314A and surveyed CCR borings (March 2024).

- Completed first semiannual groundwater sampling and analysis event (April/May 2024).

- Drafted a technical memorandum summarizing pumping test results for step tests at MW-301, MW-302, MW-303, MW-305, and MW-311A and capture zone analysis (May 2024).

- Prepared Monitoring Well Construction Report for MW-314 and MW-314A (July 2024).

- Completed Annual Groundwater Monitoring and Corrective Action Report (August 2024).

- Completed statistical evaluation for the April/May 2024 assessment monitoring event (September 2024).

- Completed two Semiannual progress reports for Selection of Remedy (March 2024 and September 2024).

- Drafted a technical memorandum summarizing the evaluation and results of the sequential leaching tests with support from geochemical modeling. Updated cross-sections for the selection of remedy evaluation (August 2024).

- Completed second semiannual groundwater sampling and analysis event (October 2024).

- Submitted a final Cap Disturbance Documentation Report related to the repair of boreholes from the ash borings. (November 2024).

Description of Any Problems Encountered. No problems were encountered during the groundwater sampling events in 2024.

Discussion of Actions to Resolve the Problems. Not applicable.

Projection of Key Activities for the Upcoming Year (2025):

- Complete statistical evaluation and determination of any SSLs exceeding the GPS for the October 2024 monitoring event (completed March 5, 2025, and provided in **Appendix E**).

- Collect samples in two semiannual groundwater sampling and analysis events (April and October 2025).

- Complete two Semiannual progress reports for Selection of Remedy (March and September 2025).

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- Complete statistical evaluation and determination of any SSLs exceeding the GPS for the April and October 2025 monitoring events.
- Prepare an ACM Addendum with an updated site conceptual model that includes arsenic in addition to treatment options for molybdenum and lithium.
- Conduct a public meeting for the ACM Addendum.
- Continue to evaluate if additional off-site groundwater delineation wells are necessary and pursue access agreements, if so.

4.5.2 §257.94(d) Alternative Detection Monitoring Frequency

The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by §257.90(e).

Not applicable. KAP is no longer in detection monitoring.

4.5.3 §257.94(e)(2) Alternative Source Demonstration for Detection Monitoring

The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

Not applicable. KAP is no longer in detection monitoring.

4.5.4 §257.95(c) Alternative Assessment Monitoring Frequency

The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by §257.90(e).

Not applicable. Assessment monitoring has been initiated at the site, but no alternative assessment monitoring frequency is proposed at this time.

4.5.5 §257.95(d)(3) Assessment Monitoring Results and Standards

Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under §257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by §257.90(e).

The 2024 assessment monitoring results, background upper prediction limits (UPLs), and GPSs established for the site are provided in **Tables 5A** and **5B**.

The laboratory reports are provided in **Appendix C**. Historical monitoring results are summarized in **Appendix D.**

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4.5.6 §257.95(g)(3)(ii) Alternative Source Demonstration for Assessment Monitoring

The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

Not Applicable. No alternative source demonstration for assessment monitoring was completed in 2024.

4.5.7 §257.96(a) Extension of Time for Corrective Measures Assessment

The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measure due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

Not applicable. No demonstration of the need for additional time was completed in 2024.

The ACM was initiated on October 12, 2020. The ACM was completed on March 11, 2021. A demonstration of need for a deadline extension was completed in January 2021 and included in the 2021 Annual Groundwater Monitoring and Corrective Action Report.

5.0 §257.90(E)(6) OVERVIEW

A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit.

The specific requirements for the overview under §257.90(e)(6) are listed and the information is provided at the beginning of this report, before the Table of Contents.

6.0 REFERENCES

Wahl, K.D., G.A. Ludvigson, G.L. Ryan, W.C. Steinkampf, 1978, Water Resources of East-Central Iowa; U.S. Geologic Survey and Iowa Geologic Survey, Iowa, 1978.

U.S. Environmental Protection Agency (U.S. EPA), 2009, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance, EPA 530-R-09-007, March 2009.

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Table 1. Groundwater Monitoring Well Network
M.L. Kapp Generating Station / SCS Engineers Project #25225077.00

Monitoring Well	Location in Monitoring Network	Role in Monitoring Network
MW-301	Downgradient	Compliance
MW-302	Downgradient	Compliance
MW-303	Downgradient	Compliance
MW-304	Downgradient	Compliance
MW-304A	Downgradient	Delineation
MW-305	Downgradient	Compliance
MW-306	Downgradient	Compliance
MW-307	Upgradient	Background
MW-308	Downgradient	Delineation
MW-309	Downgradient	Delineation
MW-310	Sidegradient	Supplemental Background
MW-311	Downgradient	Delineation
MW-311A	Downgradient	Delineation
MW-312	Sidegradient	Supplemental Background
MW-313	Sidegradient/Downgradient	Delineation
MW-314	Downgradient	Delineation
MW-314A	Downgradient	Delineation

Notes:
(1) Groundwater data from MW-310 and MW-312 are not used in statistical evaluations.
(2) MW-313 can be either sidegradient or downgradient of MW-311, depending on time of sampling event.

Last revision by: BLJ Date: 4/2/2025
Checked by: NLB Date: 4/8/2025

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Table 2. Groundwater Sample Summary
M.L. Kapp Generating Station / SCS Engineers Project #25225077.00

Sample Dates	Background Well	Supplemental Background Wells		Compliance Wells						Delineation Wells							
	MW-307	MW-310	MW-312	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-304A	MW-308	MW-309	MW-311	MW-311A	MW-313	MW-314	MW-314A
4/30-5/2/2024	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
10/28-31/2024	A	A	A	A	A	A	A	A	A	A	A	DRY	A	A	A	A	A
Total Samples	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Abbreviations:
A = Assessment Monitoring Program
DRY - Well did not have sufficient water volume for sample collection.

Last revision by: NLB Date: 3/27/2025
Checked by: BLJ Date: 4/1/2025

I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 2 - GW Samples Summary Table.xlsx]GW Summary

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Table 3. Water Level Summary
IPL - M.L. Kapp / SCS Engineers Project #25225077.00

Ground Water Elevation in feet above mean sea level (amsl)																	
Well Number	**MW-301**	**MW-302**	**MW-303**	**MW-304**	**MW-304A**	**MW-305**	**MW-306**	**MW-307**	**MW-308**	**MW-309**	**MW-310**	**MW-311**	**MW-311A**	**MW-312**	**MW-313**	**MW-314**	**MW-314A**
Top of Casing Elevation (feet amsl)	592.13	591.54	592.40	592.12	591.89	592.60	590.83	603.39	588.78	591.24	597.58	587.59	587.82	594.28	588.24	585.13	585.20
Screen Length (ft)	10.00	10.00	10.00	10.00	5.00	10.00	10.00	10.00	10.00	10.00	5.00	15.00	5.00	5.00	10.00	10.00	5.00
Total Depth (ft from top of casing)	25.20	26.10	27.78	27.25	55.00	27.30	27.20	19.46	19.65	24.11	32.48	27.30	67.53	65.90	26.10	17.00	49.00
Top of Well Screen Elevation (ft)	576.93	575.44	574.62	574.87	541.88	575.30	573.63	593.93	579.13	577.13	570.10	575.29	525.29	533.38	572.14	578.13	541.20
Measurement Date																	
March 28, 2018	577.65	576.62	577.37	577.05	NI	576.58	577.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
May 22, 2018	579.20	579.37	580.00	579.47	NI	579.34	579.47	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
June 25, 2018	578.57	578.04	577.24	570.77	NI	571.28	576.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
July 25, 2018	577.83	577.62	577.83	577.56	NI	577.52	577.97	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
October 5, 2018	580.04	579.88	579.74	579.32	NI	579.15	579.46	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
November 29, 2018	577.55	576.52	578.74	578.43	NI	578.69	579.28	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
January 10, 2019	577.36	577.05	579.06	578.56	NI	578.84	579.47	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
February 13, 2019	577.23	576.51	578.90	578.26	NI	578.45	579.40	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
April 9, 2019	585.25	585.29	584.61	585.25	NI	585.23	585.29	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
September 6, 2019	--	--	--	--	NI	577.42	--	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
October 7, 2019	580.97	580.74	581.39	581.62	NI	581.88	582.28	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
December 10, 2019	577.39	577.41	578.90	578.85	NI	578.89	579.49	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
February 4, 2020	578.07	577.74	579.58	578.73	NI	578.85	579.31	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
April 29, 2020	578.76	579.38	580.82	580.95	NI	580.40	580.70		NI	NI	NI	NI	NI	NI	NI	NI	NI
June 4, 2020	578.62	578.29	579.76	579.19	NI	579.20	579.82	595.06	NI	NI	NI	NI	NI	NI	NI	NI	NI
July 7, 2020	577.04	576.36	577.55	577.15	NI	577.21	577.95	593.85	NI	NI	NI	NI	NI	NI	NI	NI	NI
August 7, 2020	--	--	--	--	NI	--	--	593.06	NI	NI	NI	NI	NI	NI	NI	NI	NI
October 22, 2020	577.42	574.64	575.82	575.32	NI	575.25	576.82	592.77	NI	NI	NI	NI	NI	NI	NI	NI	NI
February 9, 2021	--	--	--	--	570.48	--	--	--	NI	NI	NI	NI	NI	NI	NI	NI	NI
February 22, 2021	--	--	--	573.90	573.92	--	--	592.12	NI	NI	NI	NI	NI	NI	NI	NI	NI
April 5, 2021	577.30	577.47	578.57	577.25	577.36	577.16	578.15	594.32	NI	NI	NI	NI	NI	NI	NI	NI	NI
June 17, 2021	--	--	--	--	--	--	--	593.33	576.05	571.84	NI	NI	NI	NI	NI	NI	NI
July 22, 2021	--	--	--	--	--	--	--	592.65	--	--	NI	NI	NI	NI	NI	NI	NI
October 5, 2021	--	--	--	--	--	--	--	--	--	--	588.92	NI	NI	NI	NI	NI	NI
October 18-19,2021	576.35	573.32	573.97	573.33	573.42	573.20	574.22	590.84	573.43	571.64	589.55	NI	NI	NI	NI	NI	NI
December 30, 2021	--	--	--	--	--	--	--	--	--	--	--	572.33	572.54	NI	NI	NI	NI
February 21, 2022	576.64	573.79	574.31	573.00	573.09	572.94	574.18	591.02	573.13	--	589.10	572.14	572.34	NI	NI	NI	NI
April 18-19, 2022	577.53	577.59	577.70	576.47	576.65	576.10	577.24	592.46	576.93	576.75	590.20	574.77	575.17	NI	NI	NI	NI
August 22, 2022	576.80	573.93	575.51	575.19	575.21	575.16	576.17	591.01	575.53	572.08	589.56	574.51	574.76	NI	NI	NI	NI
November 1-3, 2022	576.16	573.23	574.26	573.39	573.47	573.30	574.63	589.14	573.80	--	578.18	572.54	572.90	NI	NI	NI	NI
February 21, 2023	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	572.53	573.54	NI	NI
May 1-4, 2023	586.13	586.44	585.50	586.17	586.14	586.15	586.28	593.89	585.90	585.33	589.98	583.83	583.44	577.84	577.93	NI	NI
October 24-26, 2023	576.21	573.31	574.45	573.43	573.53	573.29	574.58	590.47	573.76	571.70	589.30	572.75	573.05	573.84	573.34	NI	NI
April 30 - May 2, 2024	577.11	576.29	578.28	576.55	576.81	576.68	575.35	593.40	577.17	574.40	589.12	574.74	574.78	573.25	575.00	574.33	574.38
October 28 - 31, 2024	576.22	573.66	574.59	574.07	574.01	573.99	574.77	589.81	574.22	Dry	588.10	573.37	573.46	573.36	573.28	572.69	572.79
Bottom of Well Elevation (ft)	566.93	565.44	564.62	564.87	536.88	565.30	563.63	583.93	569.13	567.13	565.10	560.29	520.29	528.38	562.14	568.13	536.20

Notes:
-- Location not measured NI = Not Installed Dry - well dry NM - Not Measured

Created by: AJR Date: 10/9/2018
Last rev. by: KMV Date: 11/4/2024
Checked by: NLB Date: 11/5/2024
Sci/Proj Mgr QA/QC: BRK Date: 1/14/2025

I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 3- GW Elevation Summary- M.L. Kapp.xls]levels

09/02/2025 - Classification: Internal - ECRM13574470

Table 4A. Horizontal Gradients and Flow Velocity
M.L. Kapp Generating Station
SCS Engineers Project #25225077.00
January - December 2024

	South - Flow Path "A"				
Sampling Dates	**h1 (ft)**	**h2 (ft)**	**Δl (ft)**	**Δh/Δl (ft/ft)**	**V (ft/d)**
4/30-5/2/2024	578.00	576.00	1,760	0.001	0.07
	Southeast - Flow Path "B"				
10/28-31/2024	576.00	573.99	1,090	0.002	0.11

Wells	**K Values (cm/sec)**	**K Values (ft/d)**
MW-301	5.30E-02	150
MW-302	3.11E-03	8.8
MW-303	3.56E-03	10
MW-304	7.92E-03	22
MW-305	9.92E-04	2.8
MW-306	4.33E-03	12
MW-307	1.74E-03	5
Geometric Mean	5.4E-03	15

Porosity, n
0.25

Groundwater flow velocity equation: V = [K*(Δh/Δl)] / n

ft = feet
ft/d = feet per day
K = hydraulic conductivity
n = effective porosity
V = groundwater flow velocity

h1, h2 = point interpreted groundwater elevation at locations 1 and 2
Δl = distance between location 1 and 2
Δh/Δl = hydraulic gradient

Notes:

1. Hydraulic conductivity (K) is the geometric mean of the slug test results for water table monitoring wells MW-301 to MW-305. Wells MW-306 and MW-307 were excluded because of distance from the CCR Unit and different geological setting.

2. Effective porosity value is the low end of the range of porosity values for sand in Freeze and Cherry, *Groundwater* , 1979, Table 2.4. Lithology in the screened interval for MW-301 through MW-305 is primarily poorly graded sand, sandy silt and clay.

3. Flow paths for horizontal groundwater velocity calculation shown on Figures 3 and 4.

Last revision by: NLB Date: 4/8/2025
Checked by: LH Date: 4/28/2025

I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 4A - Horizontal Gradients and Flow Velocity Table_2024.xlsx]Sheet1

09/02/2025 - Classification: Internal - ECRM13574470

Table 4B. Summary of Vertical Hydraulic Gradients
M.L. Kapp Generating Station
SCS Engineers Project #25225077.00
January - December 2024

				April 2024					October 2024				
Well Nest Location	Well Type	Well Screen Top Elevation	Bottom of Screen Elevation	Groundwater Elevation (h)	Reference Point (L)[1]	Delta h[2]	Delta L[3]	Vertical Hydraulic Gradient	Groundwater Elevation (h)	Reference Point (L)[1]	Delta h[2]	Delta L[3]	Vertical Hydraulic Gradient
		(ft amsl)	(ft amsl)	(ft amsl)	(ft amsl)	(ft)	(ft)	(ft/ft)	(ft amsl)	(ft amsl)	(ft)	(ft)	(ft/ft)
MW-304	WT	574.9	564.9	576.55	569.9	-0.26	30.5	-0.0085	574.07	569.47	0.06	30.09	0.0020
MW-304A	P	541.9	536.9	576.81	539.4				574.01	539.38			
MW-311	WT	575.3	560.3	574.74	567.5	-0.04	44.70	-0.001	573.37	566.83	-0.09	44.04	-0.002
MW-311A	P	525.3	520.3	574.78	522.8				573.46	522.79			
							Average	-0.0047				Average	0.0000

Footnotes:

[1] For water table monitoring wells, the reference point (L) is the midpoint between water table elevation and the bottom of the well screen elevation if the water table intersects the well screen. For water table wells with a saturated screen (water table elevation above the top of screen elevation), the Reference Point (L) is the midpoint between the top and bottom of well screen elevations. For piezometers, reference point (L) is the elevation in the middle of the screen.

[2] Delta h is the difference between water table elevation and potentiometric surface elevation.

[3] Delta L is the difference between water table elevation and the elevation of the mid-point of the piezometer screen.

Notes:

1. Vertical gradient = Delta h/Delta L
2. A negative vertical hydraulic gradient indicates upward flow
3. WT = water table well
4. P = piezometer well
5. ft amsl = feet above mean sea level

Updated by: NLB Date: 4/24/2025
Checked by: LH Date: 4/30/2025

I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 4B_Vertical Hydraulic Gradients_2024_KAP.xlsx]GW Field Data

09/02/2025 - Classification: Internal - ECRM13574470

Table 5A. Groundwater Analytical Results Summary - April 2024
M.L. Kapp Generating Station / SCS Engineers Project #25225077.00

Parameter Name	UPL Method	UPL	GPS	Background Well	Supplemental Background Wells		Compliance Wells						Delineation Wells							
				MW-307	MW-310	MW-312	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-304A	MW-308	MW-309	MW-311	MW-311A	MW-313	MW-314	MW-314A
				5/2/2024	5/1/2024	5/1/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	5/1/2024	5/1/2024	5/2/2024	5/2/2024	5/1/2024	5/1/2024	5/1/2024
Groundwater Elevation, ft amsl				593.40	589.12	573.25	577.11	576.29	578.28	576.55	576.68	575.35	576.81	577.17	574.40	574.74	574.78	575.00	574.33	574.38
Appendix III																				
Boron, µg/L	NP	280		<76	<1.0	110	8000	6100	5600	11000	19000	8900	--	--	--	--	--	--	--	--
Calcium, mg/L	P	294		240	120	77	140	130	140	140	260	210	--	--	--	--	--	61	--	--
Chloride, mg/L	P	91.9		81	71 F1	11	95	9.7	17	21	12	180	--	--	--	--	--	58	--	--
Fluoride, mg/L	DQ	DQ		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--
Field pH, Std. Units	NP	7.71		6.43	6.88	7.13	6.47	7.04	6.76	6.67	6.93	6.65	6.93	6.44	6.74	6.76	7.39	7.16	7.15	7.36
Sulfate, mg/L	P	25.6		17	110	23	130	280	400	410	850	160	--	--	--	--	--	8.7	--	--
Total Dissolved Solids, mg/L	P	1,220		870	680	310	650	650	830	860	1,500	990	--	--	--	--	--	--	--	--
Appendix IV																				
Antimony, ug/L	DQ	DQ	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--	--
Arsenic, ug/L	P	1.85	10	1.0 J	<0.53	<0.53	0.57 J	9.1	15	3.9	1.8 J	<0.53	1.3 J	<0.53	1.2 J	<0.53	<0.53	1.8 J	<0.53	2.3
Barium, ug/L	P	357	2,000	280	36	35	64	78	72	110	110	81	--	--	--	--	--	--	--	--
Beryllium, ug/L	DQ	DQ	4	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	--	--	--	--	--	--
Cadmium, ug/L	P	0.263	5	0.20	<0.10	<0.10	0.46	<0.10	0.10 J	0.35	0.24	<0.10	--	--	--	--	--	--	--	--
Chromium, ug/L	DQ	DQ	100	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	--	--	--	--	--	--	--	--
Cobalt, ug/L	P	7.83	7.83	3.0	0.26 J	<0.17	4.3	0.26 J	1.1	1.1	1.1	<0.17	--	--	--	--	--	--	--	--
Fluoride, mg/L	DQ	DQ	4	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--
Lead, ug/L	NP	0.240	15	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	--	--	--	--	--	--	--	--
Lithium, ug/L	NP	5.3	40	<2.5	3.4 J	<2.5	6.3 J	28	59	2.6 J	29	54	<2.5	<2.5	<2.5	6.7 J	15	<2.5	<2.5	5.4 J
Mercury, ug/L	DQ	DQ	2	<0.11	<0.11	<0.11	<0.11	<0.11 F1, F2	<0.11	<0.11	<0.11	<0.11	--	--	--	--	--	--	--	--
Molybdenum, ug/L	NP	3.40	100	<1.3	<1.3	<1.3	530	150	170	820	490	8.6	3.5	<1.3	<1.3	21	240	<1.3	<1.3	2.4
Selenium, ug/L	NP	1.1	50	<1.4	<1.4	<1.4	<1.4	5.7	1.5 J	<1.4	<1.4	4.0 J	--	--	--	--	--	--	--	--
Thallium, ug/L	DQ	DQ	2	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	--	--	--	--	--	--	--	--
Radium 226/228 Combined, pCi/L	P	5.85	5.85	0.360	0.972	0.0822	0.792	0.624	0.355	0.159	0.979	0.0728	--	--	--	--	--	--	--	--
Additional Parameters - Selection of Remedy																				
Iron, ug/L	UPL or GPS not applicable			450	<36	<36	660	55 J	9,800	780	1,600	<36	420	88 J	31,000	40 J	<36	120	760	2,100
Magnesium, ug/L				--	--	35,000	--	--	--	--	--	--	--	--	--	--	--	25,000	--	--
Manganese, ug/L				--	--	12	--	--	--	--	--	--	--	--	--	--	--	21	--	--
Potassium, ug/L				--	--	690	--	--	--	--	--	--	--	--	--	--	--	3,000	--	--
Sodium, ug/L				--	--	6,200	--	--	--	--	--	--	--	--	--	--	--	74,000	--	--
Total Alkalinity, mg/L				--	--	370	--	--	--	--	--	--	--	--	--	--	--	330	--	--
Carbonate Alkalinity, mg/L				--	--	<2.5	--	--	--	--	--	--	--	--	--	--	--	<2.5	--	--
Bicarbonate Alkalinity, mg/L				--	--	370	--	--	--	--	--	--	--	--	--	--	--	330	--	--

Blue highlighted cell indicates the compliance or delineation well results exceeds the UPL and the LOQ.
Yellow highlighted cell indicates the compliance or delineation well result exceeds the GPS.
Grayscale indicates additional parameters sampled for selection of remedy and evaluation of MNA.

Abbreviations:
UPL = Upper Prediction Limit
ug/L = micrograms per Liter
mg/L = milligrams per Liter
GPS = Groundwater Protection Standard
LOD = Limit of Detection
LOQ = Limit of Quantification
-- = Not measured

Lab Notes/Qualifiers:
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1= MS and/or MSD recovery exceeds control limits
F2= MS/MSD RPD exceeds control limits

Created by: NDK Date: 7/10/2019
Last revision by: GK Date: 6/5/2024
Checked by: RM Date: 6/7/2024
Proj Mgr QA/QC: TK Date: 8/6/2024

Notes:
1. An individual result above the UPL or GPS does not constitute an SSI above background or statistically significant level above the GPS. See the accompanying letter text for identification of statistically significant results.
2. GPS is the United States Environmental Protection Agency (USEPA) Maximum Contamination Level (MCLs), if established; otherwise, the values from 40 CFR 257.95(h)(2). UPL for Total Radium is greater than the MCL and will be used as the GPS.
3. Interwell UPLs calculated based on results from background well MW-307. The UPLs were updated in July 2022.
4. For compliance wells, only results confirmed above the LOQ are evaluated as potential SSIs above background.

I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 5A - 2024 - CCR GW Screening Summary April_ ML Kapp.xlsx]Single event

09/02/2025 - Classification: Internal - ECRM13574470

Table 5B. Groundwater Analytical Results Summary - October 2024
M.L. Kapp Generating Station / SCS Engineers Project #25225077.00

Parameter Name	UPL Method	UPL	GPS	Background Well	Compliance Wells						Delineation Wells								Supplemental Background Wells	
				MW-307	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-304A	MW-308	MW-309	MW-311	MW-311A	MW-313	MW-314	MW-314A	MW-310	MW-312
				10/30/2024	10/30/2024	10/29/2024	10/29/2024	10/29/2024	10/29/2024	10/30/2024	10/29/2024	10/28/2024	10/29/2024	10/30/2024	10/30/2024	10/30/2024	10/31/2024	10/31/2024	10/28/2024	10/31/2024
Groundwater Elevation, ft amsl				589.81	576.22	573.66	574.59	574.07	573.99	574.77	574.01	574.22	DRY	573.37	573.46	573.28	572.69	572.79	588.10	573.36
Appendix III																				
Boron, ug/L	NP	280		<76	8800	10000	5600	9600	16000	11000	--	--	--	--	--	--	--	--	730	<76
Calcium, mg/L	P	294		190	140	180.00	91	130	190	160	--	--	--	--	--	58	--	--	120	72
Chloride, mg/L	P	91.9		73	95	12	21	21	31	210	--	--	--	--	--	50	--	--	63	8.9
Fluoride, mg/L	DQ	DQ		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--	<0.38	<0.38
Field pH, Std. Units	NP	7.71		6.34	6.54	6.99	6.82	6.70	6.90	6.94	7.11	6.39	--	6.89	7.44	7.15	7.06	7.42	6.91	7.16
Sulfate, mg/L	P	25.6		22	140	460	340	420	510	200	--	--	--	--	--	5.8	--	--	120	23
Total Dissolved Solids, mg/L	P	1,220		740	720	810	660	850	1,200	1,000	--	--	--	--	--	--	--	--	670	320
Appendix IV																				
Antimony, ug/L	DQ	DQ	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--	--	<1.0	<1.0
Arsenic, ug/L	P	1.85	10	0.92 J	<0.53	4.4	29	3.2	1.2 J	<0.53	0.85 J	<0.53	--	<0.53	<0.53	1.6 J	0.9 J	2.0	<0.53	<0.53
Barium, ug/L	P	357	2,000	380	60	140	80	130	83	79	--	--	--	--	--	--	--	--	32	30
Beryllium, ug/L	DQ	DQ	4	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	--	--	--	--	--	--	<0.33	<0.33
Cadmium, ug/L	P	0.263	5	<0.10	0.43	0.14 J	0.15 J	0.37	0.19 J	<0.10	--	--	--	--	--	--	--	--	<0.10	<0.10
Chromium, ug/L	DQ	DQ	100	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	--	--	--	--	--	--	--	--	<1.2	<1.2
Cobalt, ug/L	P	7.83	7.83	7.2	4.6	0.84	1.1	1.5	0.81	<0.17	--	--	--	--	--	--	--	--	0.37 J	<0.17
Fluoride, mg/L	DQ	DQ	4	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--	<0.38	<0.38
Lead, ug/L	NP	0.240	15	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	--	--	--	--	--	--	--	--	<0.26	<0.26
Lithium, ug/L	NP	5.3	40	6.2 J	6.5 J	48	53	3.4 J	23	95	<2.5	2.5 J	--	25	15	<2.5	<2.5	3.9 J	3.6 J	<2.5
Mercury, ug/L	DQ	DQ	2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	--	--	--	--	--	--	--	--	<0.11	<0.11
Molybdenum, ug/L	NP	3.40	100	<1.3	540	180	220	800	430	20	2.9	<1.3	--	24	170	<1.3	1.6 J	2.2	<1.3	<1.3
Selenium, ug/L	NP	1.1	50	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	--	--	--	--	--	--	--	--	<1.4	<1.4
Thallium, ug/L	DQ	DQ	2	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	--	--	--	--	--	--	--	--	<0.57	<0.57
Radium 226/228 Combined, pCi/L	P	5.85	5.85	1.01	0.909	0.520	0.357	1.27	0.347	0.531	--	--	--	--	--	--	--	--	1.21	1.01
Additional Parameters - Selection of Remedy																				
Iron, ug/L	UPL or GPS not applicable			1,000	310	37 J	10,000	1,500	910	<36	380	<36	--	<36	<36	90 J	98 J	1,100	<36	<36
Magnesium, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	25,000	--	--	--	34,000
Manganese, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	<3.6
Potassium, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	2,700	--	--	--	650
Sodium, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	64,000	--	--	--	6,000
Total Alkalinity, mg/L				--	--	--	--	--	--	--	--	--	--	--	--	320	--	--	--	270
Carbonate Alkalinity, mg/L				--	--	--	--	--	--	--	--	--	--	--	--	<2.5	--	--	--	<2.5
Bicarbonate Alkalinity, mg/L				--	--	--	--	--	--	--	--	--	--	--	--	320	--	--	--	270

Blue highlighted cell indicates the compliance or delineation well results exceeds the UPL and the LOQ.
Yellow highlighted cell indicates the compliance or delineation well result exceeds the GPS.
Grayscale indicates additional parameters sampled for selection of remedy and evaluation of MNA.

Abbreviations:
UPL = Upper Prediction Limit
GPS = Groundwater Protection Standard
ug/L = micrograms per Liter
mg/L = milligrams per Liter
ft amsl = feet above mean sea level
LOD = Limit of Detection
LOQ = Limit of Quantitation
MCL = Maximum Contaminant Level
DQ = Double Quantitation
-- = Not analyzed
pCi/L = picocuries per Liter
Std. Units = Standard Units
MNA = Monitored Natural Attentuation
P = Parametric
NP = Nonparametric

Lab Notes/Qualifiers:
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Notes:
1. An individual result above the UPL or GPS does not constitute an SSI above background or statistically significant level above the GPS. See the accompanying report text for identification of statistically significant results.
2. GPS is the United States Environmental Protection Agency (USEPA) Maximum Contamination Level (MCLs), if established; otherwise, the values from 40 CFR 257.95(h)(2). The UPL for Total Radium is greater than the MCL and will be used as the GPS.
3. Interwell UPLs calculated based on results from background well MW-307. The UPLs were updated in July 2022.
4. For compliance wells, only results confirmed above the LOQ are evaluated as potential SSIs above background.

Created by: RM Date: 12/5/2024
Last revision by: RM Date: 12/5/2024
Checked by: KMV Date: 1/13/2024

I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 5B - 2024 - CCR GW Screening Summary October_ ML Kapp.xlsx]Single event

Table 6. Groundwater Monitoring Results - Field Parameters
IPL - M.L. Kapp / SCS Engineers Project #25225077.00
January - December 2024

Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
MW-301	4/30/2024	577.11	12.6	6.47	0.26	1,258	103.4	19.01
	10/30/2024	576.22	15.8	6.54	0.51	1,187	215.9	8.86
MW-302	4/30/2024	576.29	11.7	7.04	0.69	1,115	41.5	28.45
	10/29/2024	573.66	17.3	6.99	0.92	1,194	196.3	4.85
MW-303	4/30/2024	578.28	12.5	6.76	0.23	1,518	-27.1	28.42
	10/29/2024	574.59	15.9	6.82	0.53	1,104	88.1	13.58
MW-304	4/30/2024	576.55	12.0	6.67	0.18	1,440	7.6	16.08
	10/29/2024	574.07	14.5	6.70	0.41	1,274	173.3	18.22
MW-304A	4/30/2024	576.81	12.6	6.93	0.27	785	2.8	16.08
	10/29/2024	574.01	20.0	7.11	3.71	699	139.2	4.93
MW-305	4/30/2024	576.68	11.5	6.93	0.32	2,308	-33.6	24.90
	10/29/2024	573.99	16.7	6.90	0.52	1,656	104.9	9.83
MW-306	4/30/2024	575.35	11.1	6.65	1.83	1,921	104.6	22.99
	10/30/2024	574.77	14.9	6.94	0.95	1,794	208.7	5.53
MW-307	5/2/2024	593.40	10.8	6.43	0.30	2,140	85.1	12.71
	10/30/2024	589.81	15.9	6.34	1.56	1,421	240.1	5.63
MW-308	5/1/2024	577.17	11.8	6.44	1.35	1,037	30.8	14.12
	10/28/2024	574.22	15.5	6.39	0.47	804	222.3	4.74
MW-309	5/1/2024	574.40	11.9	6.74	0.24	1,324	-117.9	7.69
	10/28/2024	DRY	--	--	--	--	--	--
MW-310	5/1/2024	589.12	13.4	6.88	0.57	1,324	35.5	12.98
	10/28/2024	588.10	15.0	6.91	1.91	1,171	210.4	4.14
MW-311	5/2/2024	574.74	11.6	6.76	6.73	1,290	188.2	51.40
	10/30/2024	573.37	15.3	6.89	4.85	941	231.2	9.54
MW-311A	5/2/2024	574.78	12.8	7.39	0.30	1,292	128.6	10.30
	10/30/2024	573.46	16.2	7.44	1.88	987	196.6	4.79
MW-312	5/1/2024	573.25	12.9	7.13	0.69	699	81.3	9.55
	10/31/2024	573.36	13.7	7.16	2.60	629	198.1	1.67
MW-313	5/1/2024	575.00	11.5	7.16	2.61	877	144.2	9.9
	10/30/2024	573.28	16.4	7.15	2.14	779	204.1	6.52
MW-314	5/1/2024	574.33	9.5	7.15	5.68	518	115.9	64.34
	10/31/2024	572.69	13.5	7.06	2.75	826	210.3	7.21
MW-314A	5/1/2024	574.38	11.6	7.36	1.60	2,153	-69.4	163.3
	10/31/2024	572.79	12.2	7.42	2.92	1,924	121.7	6.61

Abbreviations:
mg/L = milligrams per liter mV = millivolts amsl = above mean sea level

Last revision by: BLJ Date: 3/31/2025
Checked by: NLB Date: 4/7/2025

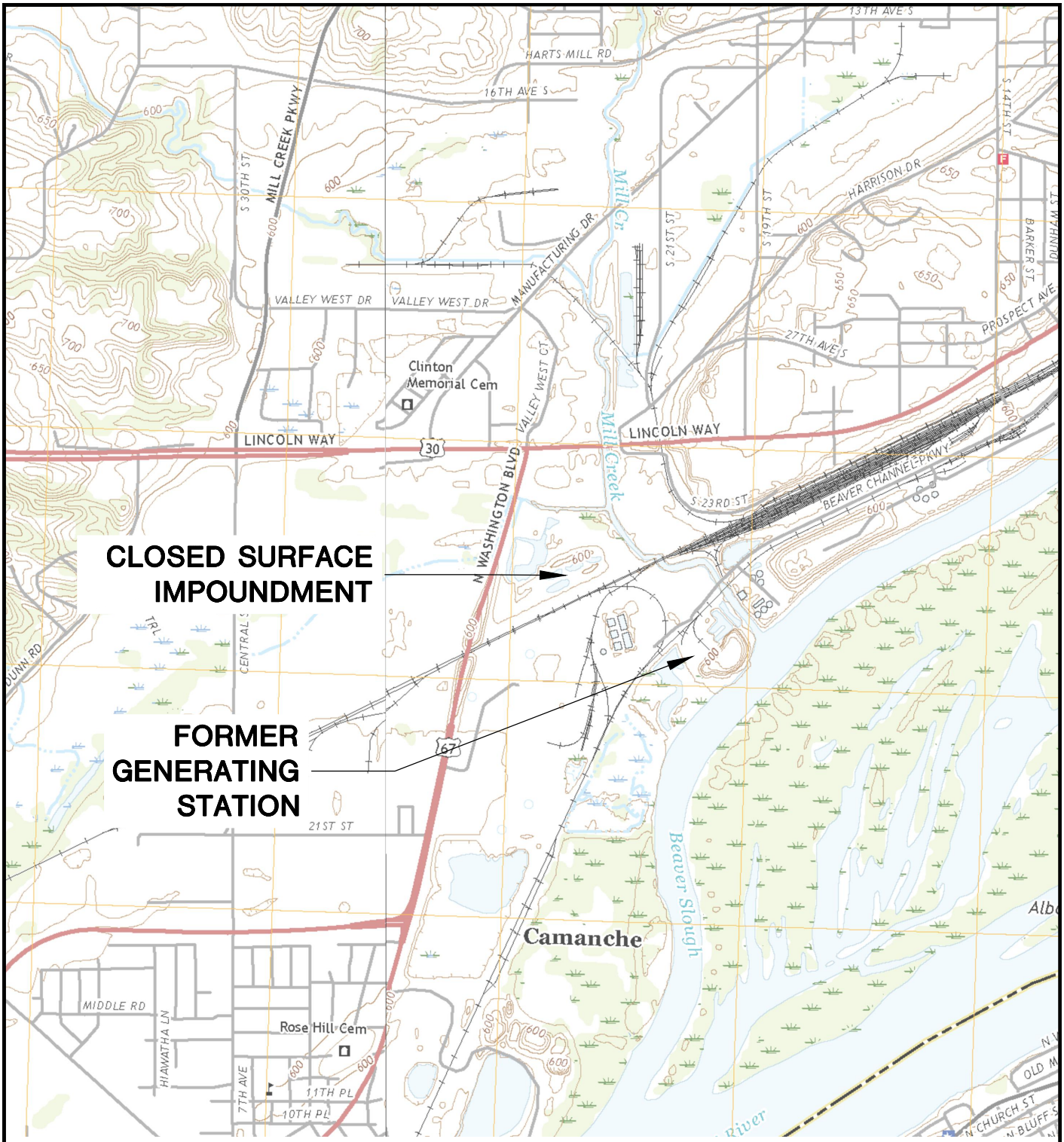
I:\25225077.00\Deliverables\2024 - Federal CCR Annual Report\Tables\[Table 6 - 2024 Field Parameters.xlsx]GW Field Parameters

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Figures

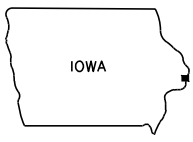
1 Site Location Map
2 Site Plan and Monitoring Well Location Map
3 Water Table Map – April/May 2024
4 Water Table Map – October 2024

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CLINTON QUADRANGLE
IOWA–ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)
2018
SCALE: 1" = 2,000'

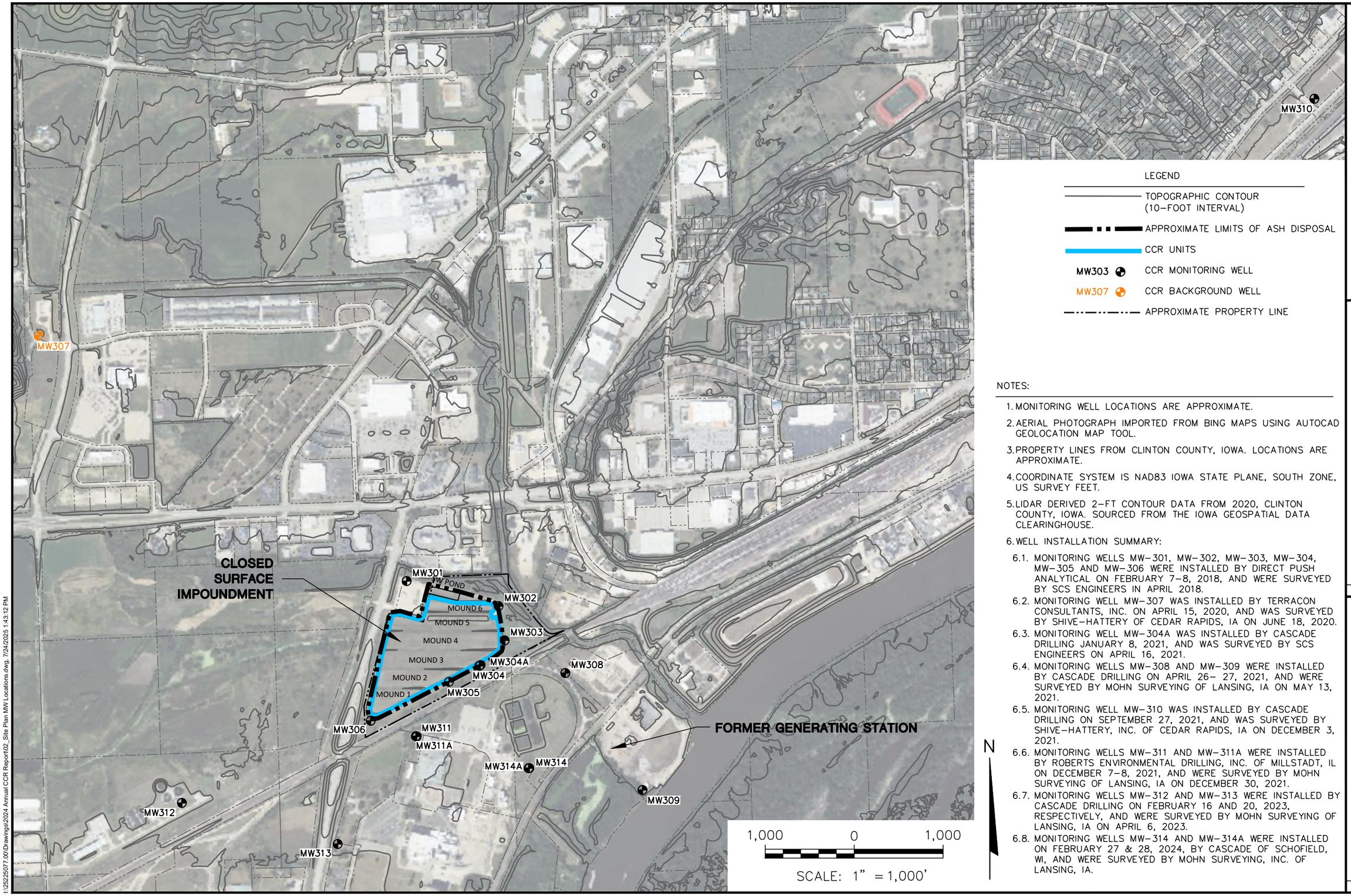


CLIENT	ALLIANT ENERGY ML-KAPP GENERATING STATION 2001 BEAVER CHANNEL PKWY CLINTON, IA 52732	SITE	M.L. KAPP GENERATING STATION 3301 HIGHWAY 67 S CLINTON, IA 52732		SITE LOCATION MAP

PROJECT NO.	25224077.00	DRAWN BY:	BSS	ENGINEER	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830
DRAWN:	11/20/2019	CHECKED BY:	NLB		FIGURE 1
REVISED:	05/17/2024	APPROVED BY:	TK 7/30/2024		

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09/02/2025 - Classification: Internal - ECRM13574470



LEGEND

- TOPOGRAPHIC CONTOUR (10-FOOT INTERVAL)
- APPROXIMATE LIMITS OF ASH DISPOSAL
- CCR UNITS
- MW303 CCR MONITORING WELL
- MW307 CCR BACKGROUND WELL
- APPROXIMATE PROPERTY LINE

NOTES:

1. MONITORING WELL LOCATIONS ARE APPROXIMATE.
2. AERIAL PHOTOGRAPH IMPORTED FROM BING MAPS USING AUTOCAD GEOLOCATION MAP TOOL.
3. PROPERTY LINES FROM CLINTON COUNTY, IOWA. LOCATIONS ARE APPROXIMATE.
4. COORDINATE SYSTEM IS NAD83 IOWA STATE PLANE, SOUTH ZONE, US SURVEY FEET.
5. LIDAR DERIVED 2-FT CONTOUR DATA FROM 2020, CLINTON COUNTY, IOWA. SOURCED FROM THE IOWA GEOSPATIAL DATA CLEARINGHOUSE.
6. WELL INSTALLATION SUMMARY:
   - 6.1. MONITORING WELLS MW-301, MW-302, MW-303, MW-304, MW-305 AND MW-306 WERE INSTALLED BY DIRECT PUSH ANALYTICAL ON FEBRUARY 7-8, 2018, AND WERE SURVEYED BY SCS ENGINEERS IN APRIL 2018.
   - 6.2. MONITORING WELL MW-307 WAS INSTALLED BY TERRACON CONSULTANTS, INC. ON APRIL 15, 2020, AND WAS SURVEYED BY SHIVE-HATTERY OF CEDAR RAPIDS, IA ON JUNE 18, 2020.
   - 6.3. MONITORING WELL MW-304A WAS INSTALLED BY CASCADE DRILLING JANUARY 8, 2021, AND WAS SURVEYED BY SCS ENGINEERS ON APRIL 16, 2021.
   - 6.4. MONITORING WELLS MW-308 AND MW-309 WERE INSTALLED BY CASCADE DRILLING ON APRIL 26- 27, 2021, AND WERE SURVEYED BY MOHN SURVEYING OF LANSING, IA ON MAY 13, 2021.
   - 6.5. MONITORING WELL MW-310 WAS INSTALLED BY CASCADE DRILLING ON SEPTEMBER 27, 2021, AND WAS SURVEYED BY SHIVE-HATTERY, INC. OF CEDAR RAPIDS, IA ON DECEMBER 3, 2021.
   - 6.6. MONITORING WELLS MW-311 AND MW-311A WERE INSTALLED BY ROBERTS ENVIRONMENTAL DRILLING, INC. OF MILLSTADT, IL ON DECEMBER 7-8, 2021, AND WERE SURVEYED BY MOHN SURVEYING OF LANSING, IA ON DECEMBER 30, 2021.
   - 6.7. MONITORING WELLS MW-312 AND MW-313 WERE INSTALLED BY CASCADE DRILLING ON FEBRUARY 16 AND 20, 2023, RESPECTIVELY, AND WERE SURVEYED BY MOHN SURVEYING OF LANSING, IA ON APRIL 6, 2023.
   - 6.8. MONITORING WELLS MW-314 AND MW-314A WERE INSTALLED ON FEBRUARY 27 & 28, 2024, BY CASCADE OF SCHOFIELD, WI, AND WERE SURVEYED BY MOHN SURVEYING, INC. OF LANSING, IA.

SITE PLAN AND MONITORING WELL LOCATIONS

FIGURE 2

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

ENGINEER

SB | TK | TK 08/01/2025

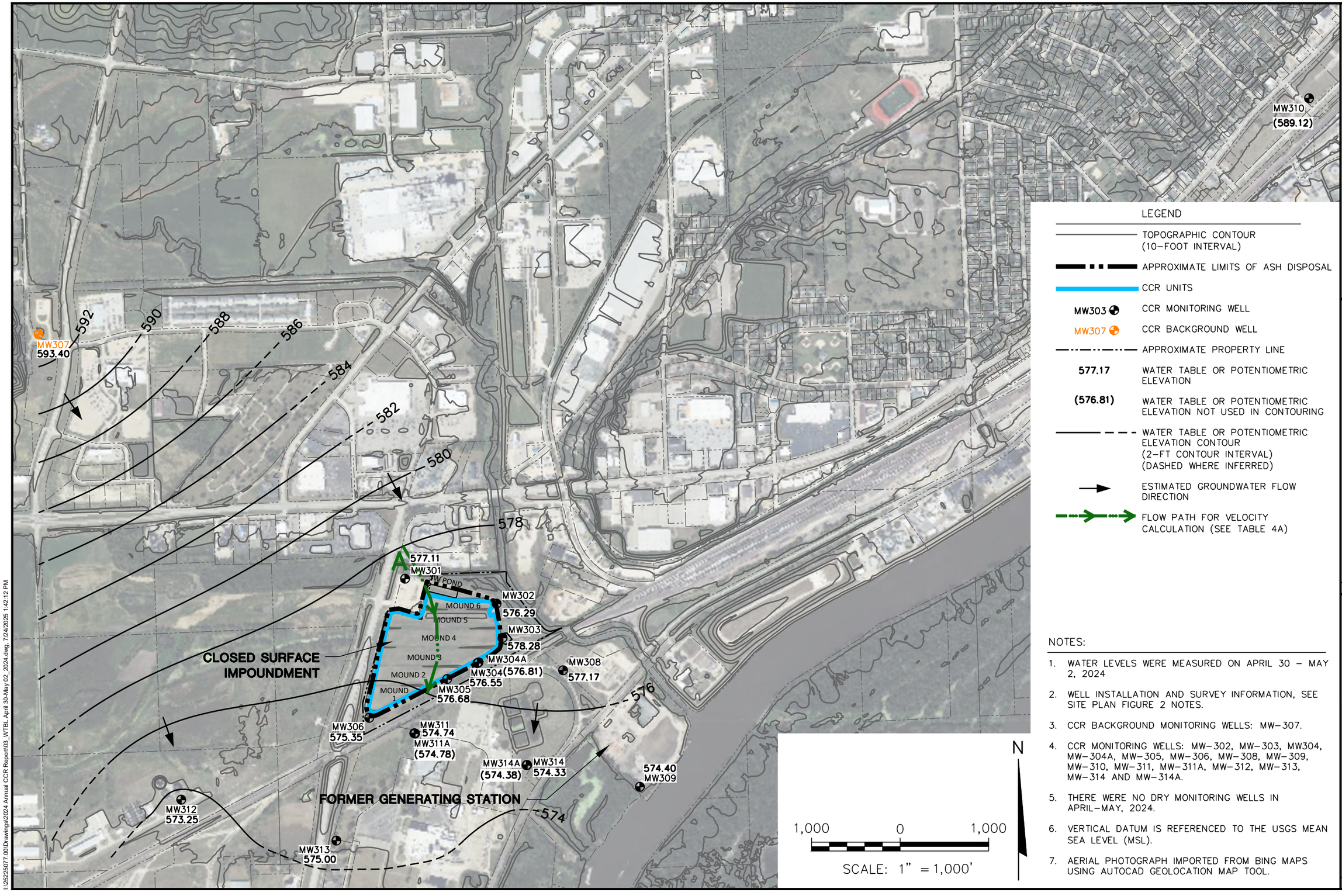
SITE
M.L. KAPP
3301 HIGHWAY 67 S, CLINTON, IA 52732

CLIENT
ALLIANT ENERGY
ML-KAPP GENERATING STATION
2001 BEAVER CHANNEL PKWY
CLINTON, IA 52732

PROJECT NO.	25225077.00
DRAWN:	06/04/2025
REVISED:	07/24/2025
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	

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LEGEND

- TOPOGRAPHIC CONTOUR (10-FOOT INTERVAL)
- APPROXIMATE LIMITS OF ASH DISPOSAL
- CCR UNITS
- MW303 — CCR MONITORING WELL
- MW307 — CCR BACKGROUND WELL
- APPROXIMATE PROPERTY LINE
- 577.17 — WATER TABLE OR POTENTIOMETRIC ELEVATION
- (576.81) — WATER TABLE OR POTENTIOMETRIC ELEVATION NOT USED IN CONTOURING
- WATER TABLE OR POTENTIOMETRIC ELEVATION CONTOUR (2-FT CONTOUR INTERVAL) (DASHED WHERE INFERRED)
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FLOW PATH FOR VELOCITY CALCULATION (SEE TABLE 4A)

NOTES:

1. WATER LEVELS WERE MEASURED ON APRIL 30 – MAY 2, 2024
2. WELL INSTALLATION AND SURVEY INFORMATION, SEE SITE PLAN FIGURE 2 NOTES.
3. CCR BACKGROUND MONITORING WELLS: MW-307.
4. CCR MONITORING WELLS: MW-302, MW-303, MW304, MW-304A, MW-305, MW-306, MW-308, MW-309, MW-310, MW-311, MW-311A, MW-312, MW-313, MW-314 AND MW-314A.
5. THERE WERE NO DRY MONITORING WELLS IN APRIL-MAY, 2024.
6. VERTICAL DATUM IS REFERENCED TO THE USGS MEAN SEA LEVEL (MSL).
7. AERIAL PHOTOGRAPH IMPORTED FROM BING MAPS USING AUTOCAD GEOLOCATION MAP TOOL.

WATER TABLE CONTOUR MAP
APRIL 30 – MAY 2, 2024

SITE
M.L. KAPP GENERATING STATION
3301 HIGHWAY 67 S, CLINTON, IA 52732

CLIENT
ALLIANT ENERGY
ML-KAPP GENERATING STATION
2001 BEAVER CHANNEL PKWY
CLINTON, IA 52732

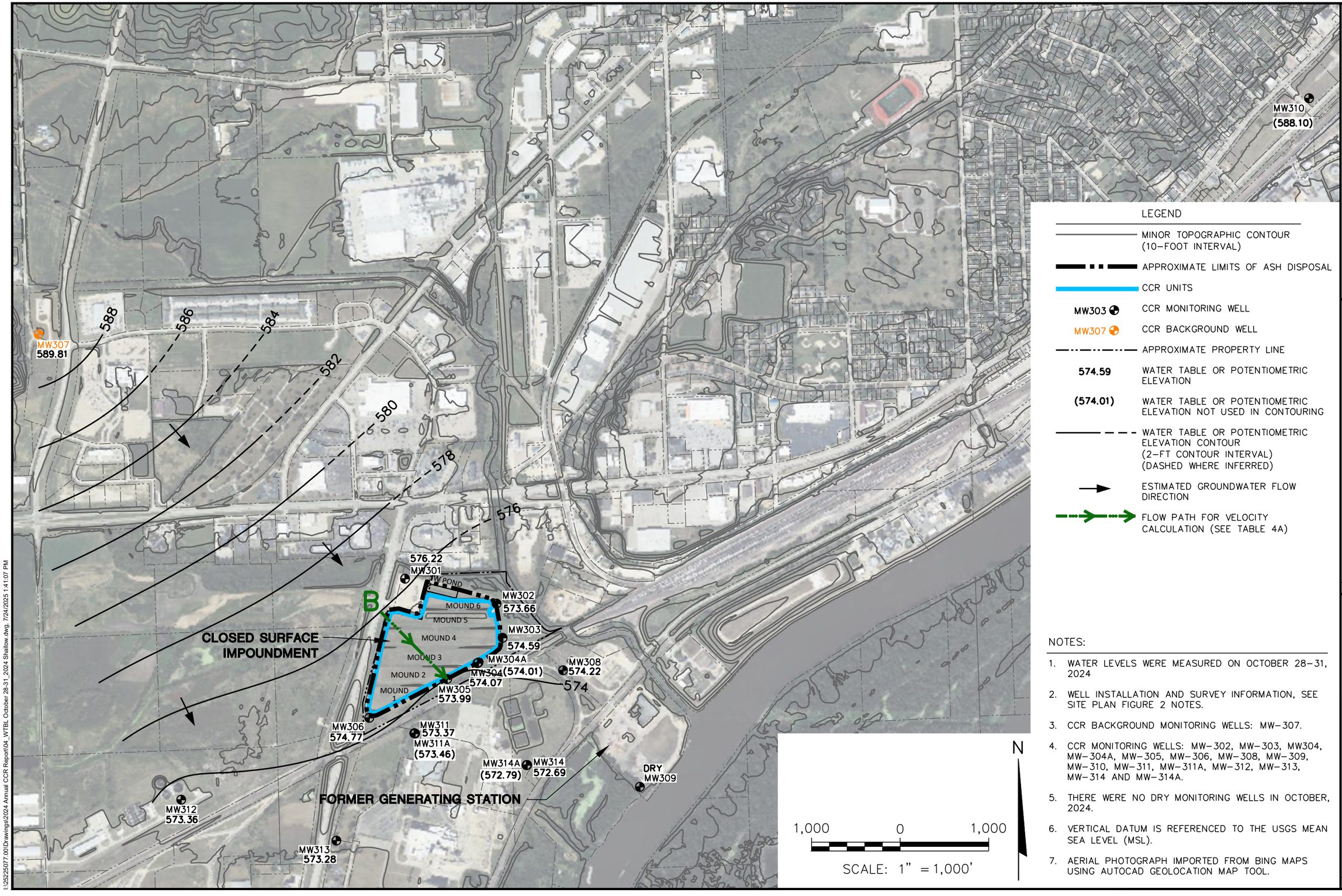
FIGURE 3

ENGINEER
SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

PROJECT NO.	25225077.00
DRAWN:	06/04/2025
REVISED:	07/24/2025
DRAWN BY:	SB
CHECKED BY:	TK
APPROVED BY:	TK 08/01/2025

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WATER TABLE CONTOUR MAP
OCTOBER 28–31, 2024

LEGEND

- MINOR TOPOGRAPHIC CONTOUR (10–FOOT INTERVAL)
- APPROXIMATE LIMITS OF ASH DISPOSAL
- CCR UNITS
- MW303 — CCR MONITORING WELL
- MW307 — CCR BACKGROUND WELL
- APPROXIMATE PROPERTY LINE
- 574.59 — WATER TABLE OR POTENTIOMETRIC ELEVATION
- (574.01) — WATER TABLE OR POTENTIOMETRIC ELEVATION NOT USED IN CONTOURING
- WATER TABLE OR POTENTIOMETRIC ELEVATION CONTOUR (2–FT CONTOUR INTERVAL) (DASHED WHERE INFERRED)
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FLOW PATH FOR VELOCITY CALCULATION (SEE TABLE 4A)

NOTES:

1. WATER LEVELS WERE MEASURED ON OCTOBER 28–31, 2024
2. WELL INSTALLATION AND SURVEY INFORMATION, SEE SITE PLAN FIGURE 2 NOTES.
3. CCR BACKGROUND MONITORING WELLS: MW–307.
4. CCR MONITORING WELLS: MW–302, MW–303, MW304, MW–304A, MW–305, MW–306, MW–308, MW–309, MW–310, MW–311, MW–311A, MW–312, MW–313, MW–314 AND MW–314A.
5. THERE WERE NO DRY MONITORING WELLS IN OCTOBER, 2024.
6. VERTICAL DATUM IS REFERENCED TO THE USGS MEAN SEA LEVEL (MSL).
7. AERIAL PHOTOGRAPH IMPORTED FROM BING MAPS USING AUTOCAD GEOLOCATION MAP TOOL.

SITE
M.L. KAPP GENERATING STATION
3301 HIGHWAY 67 S, CLINTON, IA 52732

CLIENT
ALLIANT ENERGY
ML–KAPP GENERATING STATION
2001 BEAVER CHANNEL PKWY
CLINTON, IA 52732

FIGURE 4

ENGINEER
SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718–6751
PHONE: (608) 224–2830

PROJECT NO.	25225077.00
DRAWN:	06/04/2025
REVISED:	07/24/2025
DRAWN BY:	SB
CHECKED BY:	TK
APPROVED BY:	TK 08/01/2025

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Appendix A

Summary of Regional Hydrogeologic Stratigraphy

09/02/2025 - Classification: Internal - ECRM13574470

Table 2. — Hydrologic units in east-central Iowa

Hydrologic unit	General thickness in feet	Age of rocks	Name of rock units	Type of rock
Surficial aquifers alluvial buried-channel drift	0 to 400	Quaternary (0 to 1 million years old)	Quaternary deposits, undifferentiated	Sand, gravel, silt, and clay Sand, gravel, silt, and clay Till (sandy, pebbly clay) sand, and silt
Pennsylvanian rocks principally confining beds; locally contains waterbearing sandstone	0 to 70	Pennsylvanian (280 to 310 million years old)	Pennsylvanian rocks, undifferentiated	Shale, sandstone, limestone, and coal
Mississippian aquifer	0 to 220	Mississippian (310 to 345 million years old)	Meramecian Series Osagean Series Kinderhookian Series	Limestone and sandstone Dolomite, limestone, and shale Limestone, dolomite, and siltstone
Devonian confining beds	0 to 350	Devonian (345 to 400 million years old)	Yellow Spring Group Lime Creek Shale	Shale, dolomite and siltstone Dolomite and shale
Devonian aquifer	0 to 400		Cedar Valley Limestone Wapsipinicon Limestone	Limestone and dolomite Dolomite, limestone, and shale
Silurian aquifer	0 to 450	Silurian (400 to 425 million years old)	Gower Dolomite * Hopkinton Dolomite Kankakee Limestone Edgewood Dolomite	Dolomite, with some chert and limestone
Ordovician confining beds	300 - 600	Ordovician (425 to 500 million years old)	Maquoketa Shale Galena Dolomite Decorah Formation Platteville Formation	Dolomite and shale Dolomite and chert Limestone and shale Limestone and shale
Cambrian-Ordovician aquifer	400 to 650		St. Peter Sandstone Prairie du Chien Formation Jordan Sandstone St. Lawrence Dolomite	Sandstone Dolomite, sandstone, and shale Sandstone Dolomite
Cambrian confining beds	90 - 290	Cambrian (500 to 600 million years old)	Franconia Sandstone	Shale, siltstone, and sandstone
Dresbach aquifer	157 to 1644		Dresbach Group Galesville Sandstone Eau Claire Sandstone Mt. Simon Sandstone	Sandstone Sandstone, shale, and dolomite Sandstone
Precambrian rocks		Precambrian (600 to more than 2 billion years old)	Crystalline rocks, undifferentiated	Sandstone, igneous and metamorphic rocks.

*Upper part includes the LaPorte City Chert in the northwest part of the report area.

The nomenclature and classification of rock units in this report are those of the Iowa Geological Survey and do not necessarily coincide with those accepted by the U.S. Geological Survey.

09/02/2025 - Classification: Internal - ECRM13574470

Surficial Aquifers

The surficial aquifers are located within the unconsolidated materials above the bedrock surface. They are subdivided into alluvial, buried-channel, and drift aquifers.

The alluvial aquifers are deposits located along present-day watercourses. They consist of sands and gravels interbedded with less-permeable silts and clays and lie beneath the flood plains of larger rivers and creeks. In the eastern half of the report area, the Iowa, Cedar, Wapsipinicon, and Maquoketa Rivers as well as Buffalo Creek alternately flow through narrow bedrock gorges and wide flood plains (fig. 22). Thus the alluvial aquifers occur irregularly in the valleys of these rivers.

The buried-channel aquifers (fig. 23) are the unconsolidated material deposited by ancient streams that carved valleys prior to or between glacial advances. Many of these ancient valleys were scoured deeply into the bedrock and are much wider than the valleys of present streams (fig. 24). Buried channels may be easily recognized on the bedrock topography map (fig. 25), but are only poorly expressed in the modern landscape. While they are not generally expressed as primary features of present topography, they exert noticeable influences on modern drainage. Prairie Creek near Cedar Rapids, Deep Creek near Preston, and the lower stretches of the Cedar, Wapsipinicon, and Maquoketa Rivers follow the courses of buried channels. See figures 22 and 23. In addition, most of the irregularly occurring alluvial aquifers in the eastern half of the report area are located where modern stream valleys intersect buried bedrock channels.

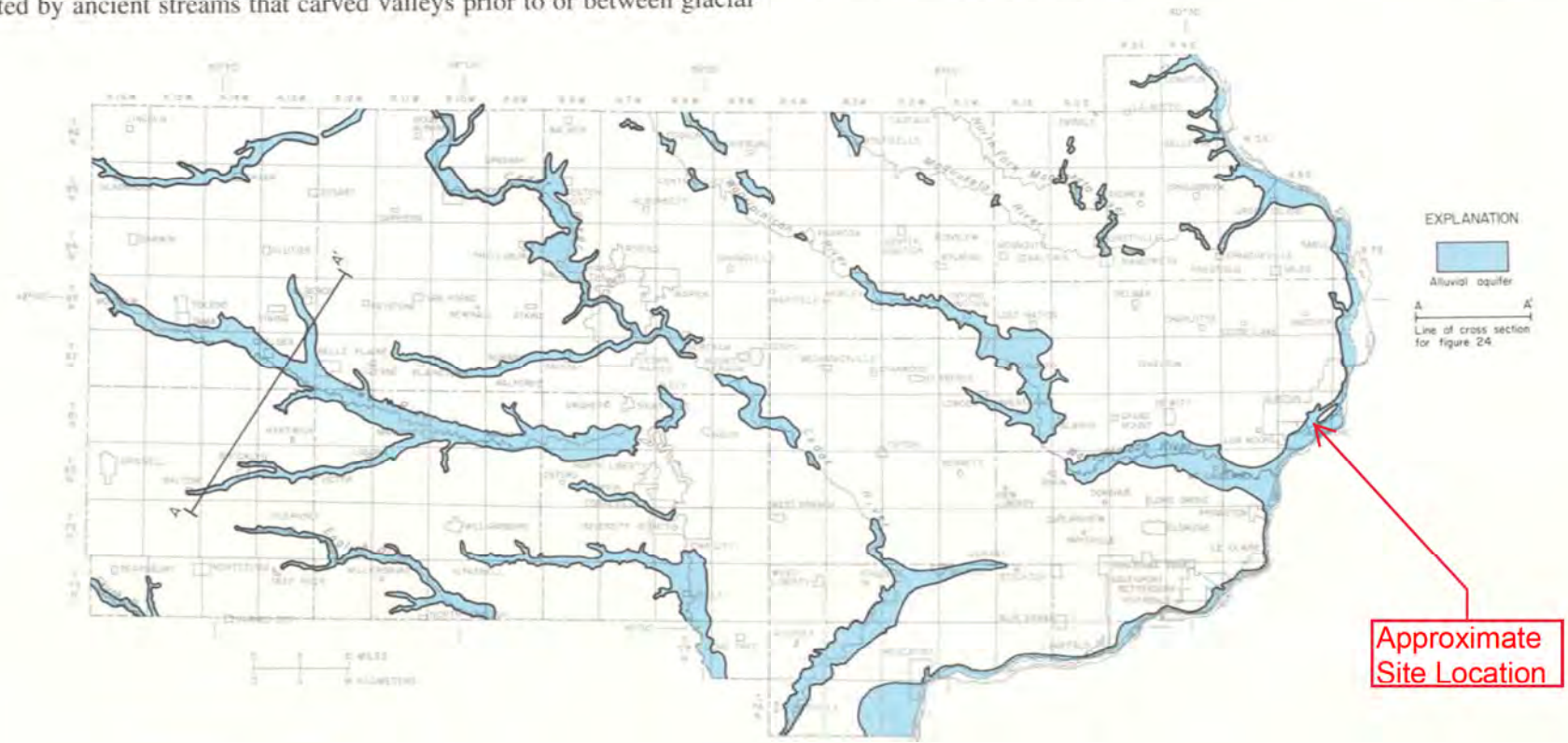


Figure 22.—Areal distribution of alluvial aquifers in east-central Iowa

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Bedrock Aquifers

The bedrock hydrogeologic map (fig. 26) shows the aquifers and confining beds that make up the bedrock surface in east-central Iowa. Pennsylvanian confining beds are the bedrock in the extreme southwest corner of the area, in southeast Muscatine County and southwest Scott County, and in other small outlying localities. The Mississippian aquifer is found beneath the surficial deposits in most of the southwest part of the region. The Devonian confining beds comprise the bedrock surface in an area about 25 miles wide extending from the northwest corner to the south-central part of the report area. They have been partly or completely removed in parts of the Belle Plaine and Poweshiek buried bedrock channels.

The Devonian aquifer is the bedrock in a broad belt that parallels the northeast side of the Devonian confining beds. This belt is from 12 to 25 miles wide and extends from northern Benton and Linn Counties to the southern border of Muscatine County. The Devonian and Silurian aquifers are separated by an irregular zone of relatively thin shale occurring near the base of the Devonian and represented by a single line on figure 26.

The Silurian aquifer comprises the bedrock surface over most of the eastern half of the area. In the extreme northeastern border area the Ordovician confining beds are found at the bedrock surface. They also appear in several buried bedrock channels where the Silurian aquifer has been removed locally by erosion.

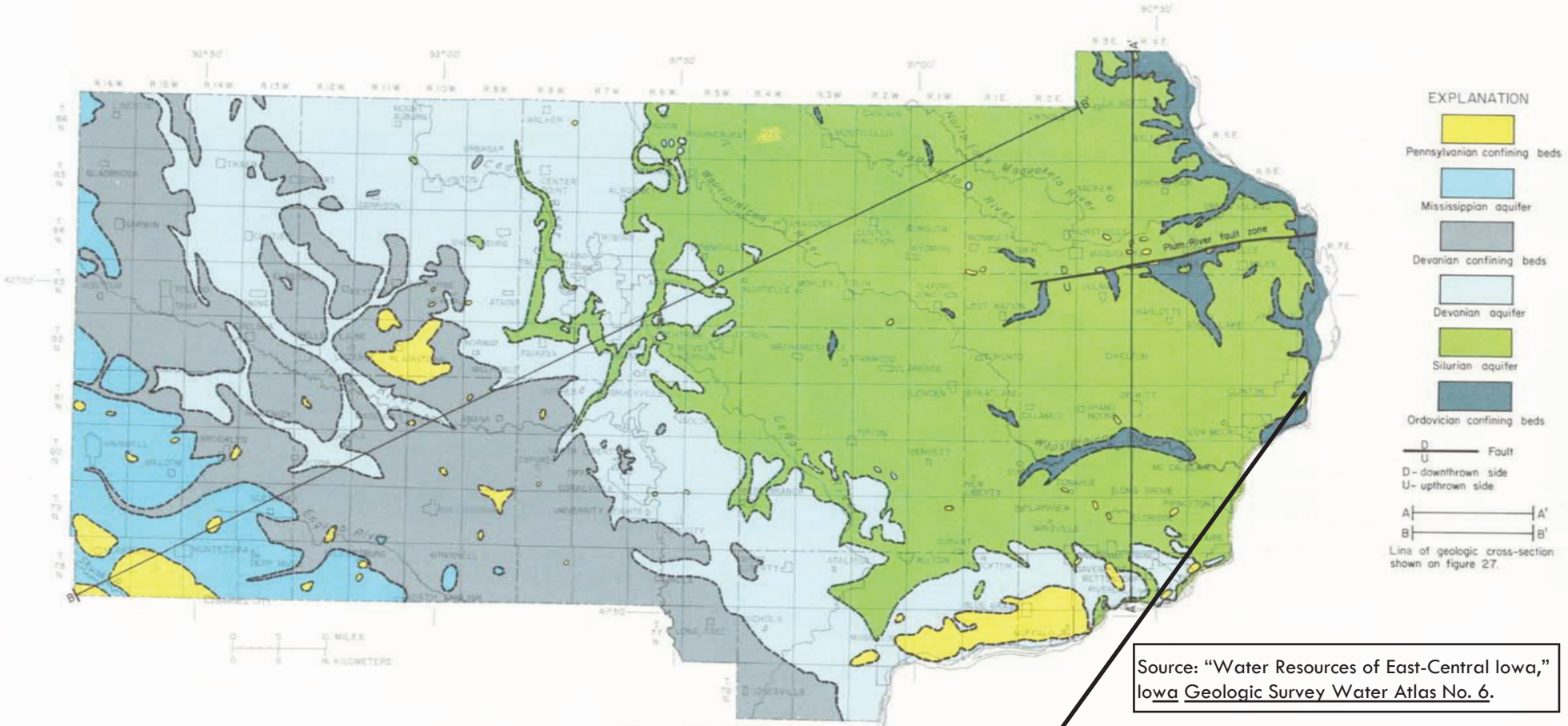


Figure 26.—Bedrock hydrogeologic map

Source: "Water Resources of East-Central Iowa," Iowa Geologic Survey Water Atlas No. 6.

Approximate Site Location

09/02/2025 - Classification: Internal - ECRM13574470

Appendix B

Boring Logs and Well Construction Documentation

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
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SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL - Alliant M.L. Kapp SCS#: 25216127.00		MW-301

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Patrick Goetz Direct Push Analytical	2/8/2018	2/8/2018	HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-301	Feet	589.3 Feet	8.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 677,257 N, 2,528,287 E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	POORLY GRADED SAND, fine to coarse, tan, (fill). Hydrovaced hole to 8 feet. Blind drilled to 8 feet.	SP									
			2											
			3											
			4											
			5											
			6											
			7											
			8	LEAN CLAY, dark gray, (10YR 4/1), soft, low plasticity, few organic fibers.										
S1	48		9											
			10							M				
			11		CL									
			12											
			13											
S2	42		14							M/W				Depth to water at ~13 feet.
			15		ML									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI 53711
Tel: (608) 224-2830
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-301

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	SANDY SILT, fine grains, dark yellow-brown, (10YR 4/6), soft. *(continued)*	ML									
			17	POORLY GRADED SAND, fine to coarse, brown, (10YR 4/3).										
S3	36		18							W				
			19		SP									
			20											
			21											
S4	36		22	LEAN CLAY, dark gray, (10YR 4/1), soft, medium plasticity.	CL					W				
			23	SILT, dark gray, (10YR 4/1), stiff, trace organic fibers (wood chips).	ML									
			24	End of Boring at 24 feet.										

09/02/2025 - Classification: Internal - ECRM13574470

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SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL - Alliant M.L. Kapp SCS#: 25216127.00		MW-302

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Patrick Goetz Direct Push Analytical	2/8/2018	2/8/2018	HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-302	Feet	588.6 Feet	8.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 676,976 N, 2,529,320 E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
	96		1–7	POORLY GRADED SAND, fine to coarse, tan, (fill). Hydrovaced hole to 8 feet. Bling drilled to 8 feet.	SP									
S1	48		8–12	LEAN CLAY, dark yellow brown, (10YR 4/4), medium stiffness, low to medium plasticity.	CL					M				
S2	36		13–15	POORLY GRADED SAND, fine, yellow-brown, (10YR 4/4). LEAN CLAY with fine sand, brown, (7.5YR 4/3), medium plasticity,	SP CL					M/W				Depth to water at ~14 feet.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI 53711
Tel: (608) 224-2830
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-302

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	LEAN CLAY with fine sand, brown, (7.5YR 4/3), medium plasticity, *(continued)*	CL									
			17											
S3	42		18	SANDY SILT, fine, dark gray, (10YR 4/1), soft, low plasticity.	ML					W				
			19											
			20											
			21											
S4	42		22	LEAN CLAY, soft, medium plasticity.	CL					W				
			23											
			24	POORLY GRADED SAND, fine to coarse.	SP									
				End of boring at 24 feet.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
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SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL - Alliant M.L. Kapp SCS#: 25216127.00		MW-303

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Patrick Goetz Direct Push Analytical	2/8/2018	2/8/2018	HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-303	Feet	589.7 Feet	8.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 676,590 N, 2,529,389 E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	POORLY GRADED SAND, fine to coarse, tan, (fill). Hydrovaced hole to 8 feet. Blind drilled to 8 feet.	SP									
			2											
			3											
			4											
			5											
			6											
			7											
			8	LEAN CLAY, very dark brown, (10YR 2/2), stiff, medium plasticity.										
S1	48		9											
			10							M				
			11	Same as above but dark gray (5YR 4/1) mottled with reddish brown (5YR 4/4).	CL									
			12											
			13											
S2	42		14							M/W				Depth to water at ~15 feet.
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
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Tel: (608) 224-2830
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-303 Page 2 of 2

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	POORLY GRADED SAND with silt, fine to medium sand, dark gray, (7YR 4/1).	SP									
			17											
			18	POORLY GRADED SAND, fine to coarse, brown, (7YR 4/4).	SP									
			19											
			20											
			21											
			22											
			23	LEAN CLAY, very dark gray, (10YR 3/1), soft, medium plasticity, trace organic fibers (wood chips).	CL									
			24											
			25											
				End of Boring at 25.5 feet.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
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SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL - Alliant M.L. Kapp SCS#: 25216127.00		MW-304

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Patrick Goetz Direct Push Analytical	2/7/2018	2/7/2018	HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-304	Feet	589.4 Feet	8.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 676,306 N, 2,529,104 E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	POORLY GRADED SAND, fine to coarse, tan, (fill). Hydrovaced hole to 8 feet. Blind drilled to 8 feet.	SP									
			2											
			3											
			4											
			5											
			6											
			7											
			8	LEAN CLAY, very dark brown, (7.5YR 2.5/2), stiff, trace organic fibers (wood chips) at 10 feet.										
S1	48		9		CL					M				
			10											
			11											
			12	LEAN CLAY with trace silt, very dark gray, (10YR 3/1), medium stiffness, medium plasticity.										
			13		CL									
S2	48		14							M				
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
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09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-304

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	SANDY SILT, fine sand, brown, (10YR 4/3), soft.	ML									
				SILT, brown, (7.5YR 4/3), soft, low plasticity.										
S3	48		17 18 19		ML					W				Depth to water at ~16 feet.
			20 21											
S4	12		22							W				
			23	POORLY GRADED SAND, fine to coarse, dark grayish/brown, (10YR 4/2).	SP									
			24 25	End of Boring at 25.0 feet.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
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SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL-Alliant M.L. Kapp SCS#: 25220117.00		MW-304A

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Randy Radke Cascade Drilling	1/8/2021	1/9/2021	rotary (air or mud)

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			17.8 Feet	Feet	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton, Iowa

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1–15	Hydrovaced to ~8' below ground surface										
S1	60		10–13	LEAN CLAY, dark gray to black with trace sand.	CL					M				Driller noted starting Depth was ~9 -10 feet bgs.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm SCS Engineers Tel: Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-304A

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	LEAN CLAY, dark gray to black with trace sand. *(continued)*	CL									
			17	SANDY SILT, fine grain, gray to brown with trace gravel.										
S2	60		18		ML					M				Switched to water @ 15' bgs.
			19											
			20											
			21	POORLY GRADED SAND, fine to coarse grain, grayish brown with gravel and cobbles.										
			22											
S3	60		23		SP					W				
			24	SILTY SAND, fine grain, light brown to brwon with trace gravel and cobbles.										
			25											
			26	Same as above but less silt.										
			27											
S4	60		28		SM					W/M				From 22 to 26' bgs, soil was wet, from 26 to 30'
			29											
			30	Same as above but dense.										
			31											
			32											
S5	60		33							W				
			34	POORLY GRADED SAND, fine grain, light brown to brown with lenses of silt and less dense than above.										
			35	Same as above.										
			36	POORLY GRADED SAND, fine to coarse grain, brown with gravel (36 to 39' bgs).	SP									
			37											
S6	60		38							W				Slight petroleum odor at 35 to 40' bgs.
			39	Same as above but fine grain with cobbles (39 TO 40' bgs).										
			40											

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-304A

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			41	POORLY GRADED SAND, fine grain, light brown to brown with lenses of silt and less dense than above. *(continued)* Same as above but fine to coarse grain, brown with lots gravel and cobbles.										
S7	60		42		SP					W				Stronger petroleum odor from 40 to 44' bgs.
			43											
			44	SANDY SILT, fine grain, brown with gravel and cobbles.	ML									
			45	LEAN CLAY, dark brown with trace gravel and sticks, very dense.										
			46											
S8	60		47		CL					W				
			48											
			49											
			50	POORLY GRADED SAND, fine to medium grain, orangish brown, very trace gravel.	SP									
			51											
			52	SANDY LEAN CLAY, dark brownish gray, very dense with gravel.										
S9	72		53							W				
			54											
			55		CL									
			56	Same as above but dark gray										
			57											
S10	48		58							W				Soil from 59 to 60' bgs reacts with HCL.
			59	SILTY SAND, fine grain, light gray to tannish orange, with gravel (possibly weathered limestone bedrock).	SM									
			60	SILT, reddish orange.										
			61											
S11	60		62		ML					W				
			63											
			64											
			65											

Boring Number MW-304A

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			66	SILT, reddish orange. *(continued)*										
			67	SILT, reddish orange.										
S12	60		68		ML					W				
			69											
			70											
				End of Boring at 70' below ground surface.										
				Abandoned to 57' below ground surface with bentonite chips.										
				Monitoring well installed to a depth of 55' below ground surface.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL - Alliant M.L. Kapp SCS#: 25216127.00		MW-305

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Patrick Goetz Direct Push Analytical	2/7/2018	2/7/2018	HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-305	Feet	589.4 Feet	8.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 676,126 N, 2,528,763 E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	POORLY GRADED SAND, fine to coarse, tan, (fill).										
			2	Hydrovaced hole to 8 feet. Blind drilled to 8 feet.										
			3											
			4		SP									
			5											
			6											
			7											
			8	LEAN CLAY, very dark brown, (7.5YR 2.5/2), soft, low plasticity.										
			9	Same as above but with trace silt (10-11') and dark brown (7.5YR 3/3).										
S1	48		10							M				
			11		CL									
			12											
			13											
S2	48		14							M				
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI 53711
Tel: (608) 224-2830
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-305 Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16		CL									
			17	SANDY SILT with gravel, fine to medium sand, fine to coarse gravel, dark yellowish-brown, (10YR 4/6), sub-rounded gravel.	ML									
S3	42		18	POORLY GRADED SAND AND GRAVEL, fine to medium sand, fine to coarse gravel, dark yellowish-brown, (10YR 4/4), subrounded grains.	SP					W					Depth to water at 16 feet.
			19											
			20	POORLY GRADED SAND, fine, very pale brown, (10YR 3/3), (sandstone bedrock).										
			21											
S4	24		22		SP					W				
			23											
			24											
				End of Boring at 24.5 feet.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL - Alliant M.L. Kapp SCS#: 25216127.00		MW-306

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Patrick Goetz Direct Push Analytical	2/7/2018	2/7/2018	HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-306	Feet	588.1 Feet	8.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 675,687 N, 2,527,883 E S/C/N
SE 1/4 of NE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	POORLY GRADED SAND, fine to coarse, tan, (fill). Hydrovaced hole to 8 feet. Blind drilled to 8 feet.										
			2											
			3											
			4		SP									
			5											
			6											
			7											
			8	SILTY SAND, brownish yellow, (10YR 6/6).										
			9		SM									
S1	24		10	(Weathered Limestone Bedrock).						M				Hit refusal with geoprobe at 10 feet, switched to HSA.
			11											
			12											
			13		LIMESTONE									
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel: (608) 224-2830
	SCS Engineers 2830 Dairy Drive Madison, WI 53711	Fax:

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-306 Page 2 of 2

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	(Weathered Limestone Bedrock). *(continued)*										
			17											Depth to water at ~17 feet.
			18											
			19											
			20		LIMESTONE									
			21											
			22											
			23											
			24											
			25	End of Boring at 25 feet.										

09/02/2025 - Classification: Internal - ECRM13574470

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
ML-Kapp SCS#: 25220117.00		MW-307

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Zeien Terracon	4/15/2020	4/15/2020	4.25' hollow stem auger

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			6.63 Feet	601.69 Feet	8.5" in.

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 680017.03 N, 2524149.7 E S/C/N
NE 1/4 of SW 1/4 of Section 15, T 81 N, R 6 E
Lat ___° ___' ___"
Long ___° ___' ___"
Local Grid Location
Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Clinton		Clinton, Iowa

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	CLAYEY SAND, fine grained, yellowish brown (10YR, 5/6) with some silt and trace gravel, non-cohesive to slightly cohesive, slightly moist, and loose.	SP									
			2							M				Collected 2 samples from the sidewall of the hydrovac borhole between 0 and 8 feet bgs.
			3	SILTY SAND, fine grained, dark yellowish brown (10YR, 3/4), trace gravel, cohesive, loose.										
			4											
			5											
			6		SM					W				No recovery from 4-8 feet bgs
			7											
			8	SILTY CLAY, dark brown to very dark brown (10YR, 3/3 to 10YR, 2/2) with trace fine sand, cohesive, very soft to soft.										
1	23	0 0 3 4	9							W				
			10		CL									
2	24	0 2 2 3	11							W				
			12											
3	24	0 2 3 4	13	Same, with more sand, oxidized color.	CL					W				
			14	SANDY LEAN CLAY, yellowish brown to grayish brown, slight green hue (10YR, 5/4 to 10YR, 5/2),	CL									
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Meghan Blodgett for Matthew Cahalan	Firm SCS Engineers	Tel: Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-307 to 4400-122. Page 2 of 2

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
4	16	0 0 2 3	16	cohesive, very soft to soft.						W				
5	24	0 0 0 0	17 18		CL					W				
6	21	0 0 0 3	19							W				
			20	CLAYEY SAND, dark grayish brown, (10YR, 4/2), fine to medium grained, cohesive, very soft to soft.	SC-SM									
7	19	0 0 2 3	21	SILTY CLAY with sand, very dark grayish brown (10YR, 3/2), non-cohesive, very loose, sand is fine to medium grained.	CL					W				
			22	POORLY GRADED SAND, fine to medium grained, dark grayish brown (10YR, 4/2), some clay, very loose.	SP									
				End of boring at 22' bgs.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L. Kapp SCS#: 25220117.00		MW-308

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Mike Mueller Cascade Drilling	4/26/2021	4/27/2021	rotosonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-308	579.1 Feet MSL	586.1 Feet MSL	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 676,224 N, 2,530,071 E (S) C / N
1/4 of 1/4 of Section , T N, R
Lat 41 ° 48 ' 36.7 "
Long -90 ° 14 ' 9.5 "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton, IA

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Hydrovaced to 8' bgs.										Hydrovac hole caved, bottom of hole is at 5 feet
S1	48		5	POORLY GRADED SAND, fine to coarse grained, brown, with trace gravel.	SP				2.25	W				Depth to water at ~7'
			8	LEAN CLAY, dark grayish brown, (2.5Y 4/1), dense, with trace sand, gravel, and roots.	CL									
S2	56		10	POORLY GRADED SAND, fine to coarse grained, brown, (7.5YR 4/3), with lenses of clay, clay is dark grayish brown, (2.Y 4/1).	SP					W					
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm SCS Engineers Tel: Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-308 Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
S3	34		16 17 18	POORLY GRADED SAND, fine to coarse grained, brown, (7.5YR 4/3), with lenses of clay, clay is dark grayish brown, (2.Y 4/1). *(continued)*	SP					W				
				End of Boring at 18' below ground surface. Welll set at 17' below ground surface, screened to 7'										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L. Kapp SCS#: 25220117.00		MW-309

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Mike Mueller Cascade Drilling	4/27/2021	4/27/2021	rotosonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-309	575.5 Feet MSL	589.0 Feet MSL	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 674,909 N, 2,530,939 E (S) C / N
1/4 of 1/4 of Section , T N, R
Lat 41° 48' 23.4"
Long -90° 13' 58.7"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton, IA

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			0	POORLY GRADED SAND AND GRAVEL, fine to coarse grained, brown.	SP									
			1	SILTY SAND, fine grained, yellowish brown, (10YR 5/4).										
S1	50		2							M				
			3											
			4											
			5	Same as above but with more sand.	ML									
			6											
			7											
S2	60		8						2.25	W				Depth to water at ~ 6.5' bgs. Sampled at 5 - 8.5' and 8.5 - 10' bgs.
			9	SANDY LEAN CLAY, black, (2.5Y 2.5/1), trace gravel/rock.										
			10	Same as above but with more sand and gravel/rock.	CL									
			11											
			12	CLAYEY SAND, fine to coarse grained, black, (2.5Y 2.5/1), with trace gravel/rock.										
S3	60		13		SC				2.5	W				Sampled 10 - 12' bgs and 12 - 15' bgs
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm SCS Engineers Tel: Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-309 Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	CLAYEY SAND, fine to coarse grained, black, (2.5Y 2.5/1), with trace gravel/rock. *(continued)*										
			17											
S4	60		18							W				Switched to drilling with water at 15' bgs
			19		SC									
			20											
			21											
			22											
S5	60		23						1.5	W				
				LEAN CLAY, black, (2.5Y 2.5/1), with trace sand and gravel.	CL									
			24	POORLY GRADED SAND, fine to coarse grained, black, (2.5Y 2.5/1), with trace gravel and clay.	SP									
			25	End of boring at 25' below ground surface.										
				Set well at 22' Below ground surface and screened to 12'.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
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SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L. Kapp SCS#: 25220117.00		MW-310

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Todd Schmalfeldt Cascade Drilling	9/27/2021	9/27/2021	rotosonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-310	589.08 Feet MSL	595.1 Feet MSL	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 682,681 N, 2,538,494 E S / C / N
NW 1/4 of NE 1/4 of Section 13, T 81N, R 06E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton, IA

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Hydrovaced hole to 8 feet below ground surface (bgs) in unconsolidated sediment.										
S1	0		2.5							M				
			5.0											
			7.5	SILT, light brown, trace gravel.										
S2	24		10.0	Same as above but dark brown with some gray, and with trace fine sand and roots.						W				Depth to water at 8'
S3	60		12.5		ML					W				
			15.0											
S4	60		17.5							W				
			20.0	POORLY GRADED SAND, fine to coarse grained, dark brown.	SP									
				Limestone bedrock, tan with red and gray mottling, weathered.										
S5	60		22.5							W				
			25.0	Same as above but consolidated with fractures.										
S7	22		27.5							W				
			30.0											
				End of boring at 31 feet.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm SCS Engineers Tel: Fax:

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L. Kapp SCS#: 25220117.00		MW-311A

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Eric Wetzel Roberts Environmental Services	12/7/2021	12/8/2021	Air Rotary

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			572.54 Feet	585.29 Feet	6" in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 675510.55 N, 2528400.63 E Ⓢ/C/N
NW 1/4 of SE 1/4 of Section 22, T 81 N, R 6 E
Lat 41° 48' 30.2323"
Long -90° 14' 31.8888"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1–7	SILT, dark brown (10YR 2/2) with flaky fine grain sand.	ML					M				Hydrovaced to 8' below ground surface.
			8–15	LIMESTONE, yellow/gold (10YR 7/6) with pores and thin bedding (less than 1mm) of yellow and rust colored layers. Many dissolution pores.						W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Zach Watson
Firm SCS Engineers
3900 Kilroy Airport Way Long Beach, CA 90806
Tel:
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-311A

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	Same as above.										
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26											
			27											
			28							W				
			29											
			30											
			31											
			32	Same as above.										
			33											
			34											
			35											
			36											
			37											
			38											
			39											
			40											

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-311A

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			40	Same as above.										
			41											
			42											
			43											
			44											
			45											
			46											
			47											
			48											
			49											
			50											
			51											
			52											
			53							W				Boring produced a lot of water.
			54											
			55											
			56											
			57											
			58	Same as above.										
			59											
			60											
			61											
			62											
			63											
			64											
			65											

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-311A

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				Same as above.						W				
			66	End of boring at 66' below ground surface.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L. Kapp SCS#: 25220117.00		MW-311

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Eric Wetzel Roberts Environmental Services	12/7/2021	12/7/2021	Air Rotary

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			572.33 Feet	585.29 Feet	6" in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 675512.71 N, 2,528,391.23 E Ⓢ/C/N
NW 1/4 of SE 1/4 of Section 22, T 81 N, R 6 E
Lat 41° 48' 30.2571"
Long -90° 14' 32.0117"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1–15	SILT, dark brown (10YR 2/2) with very fine grain sand, some sand is micaceous.	ML					M				Hydrovaced to 8' below ground surface.
			8–15	LIMESTONE, yellow/gold (10YR 7/6) with pores and thin bedding (less than 1mm) of yellow and rust colored layers. Many dissolution pores.						W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
Zach Watson	SCS Engineers 3900 Kilroy Airport Way Long Beach, CA 90806	Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-311 Page 2 of 2

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	Same as above.										
			17											
			18											
			19											
			20											
			21											
			22											
			23							W				
			24											
			25											
			26											
			27											
			28											
			29											
			30											
			31	End of boring at 31' below ground surface.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L Kapp Generating Station SCS#: 25222249		MW-312

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Adam Jochimsen Cascade Drilling	2/13/2023	2/16/2023	Rotosonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-312	Feet	Feet	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 674761.12 N, 2525740.79 E S / C / N
NW 1/4 of SE 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	ORGANIC SILT, fine, dark brown, with roots and grass, (topsoil).	FILL									
			1	SILT, tan, trace gravel (limestone), (fill).	FILL									
S1	60		2							M				
			3											
			4	SILTY SAND, trace gravel (limestone), dark brown	SM									
			5											
			6											
S2	60		7							M				
			8											
			9											
			10	POORLY GRADED SAND, fine to course grained, black, trace amounts of gravel.	SP									
			11											
			12	LEAN CLAY, medium brown.	CL									
S3	60		13							M				
			14	POORLY GRADED SAND, fine to course, medium brown.	SP									
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	SCS Engineers 3900 Kilroy Airport Way Long Beach, CA 90806	Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-312

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	POORLY GRADED SAND, fine to course, medium brown.	SP									
			17											
S4	60		18	LIMESTONE BEDROCK (highly weathered), tan to light brown.						M				
			19											
			20											
			21											
			22											
S5	48		23							M				
			24											
			25											
			26	LIMESTONE BEDROCK, tan to light brown.										
S6	60		27							M				
			28											
			29											
			30											
			31											
S7	60		32							M				
			33											
			34											
			35											
			36											
S8	60		37							M				
			38											
			39											
S9	60		40											

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-312 Page 3 of 4

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			40	LIMESTONE BEDROCK, tan to light brown.										
S9	60		41							M				
			42											
			43											
			44											
			45											
			46											
S10	60		47							M				
			48											
			49											
			50											
			51											Depth to water at 51' bgs.
S11	60		52							W				
			53											
			54											
			55											
			56											
S12	60		57							W				
			58											
			59											
			60											
			61											
			62											
S13	74		63							W				
			64											
			65											Sample was dry below 65'.

Boring Number MW-312 Page 4 of 4

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
S13	74		66	LIMESTONE BEDROCK, tan to light brown.										
				End of Boring at 66 feet below ground surface.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
M.L Kapp Generating Station SCS#: 25222249		MW-313

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Adam Jochimsen Cascade Drilling	2/20/2023	2/20/2023	Rotosonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-313	Feet	Feet	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane 674329.75 N, 2527464.68 E S / C / N
NE 1/4 of SW 1/4 of Section 22, T 81 N, R 6 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	TOPSOIL, dark brown.	OL									
S1	24		2–5	SILTY SAND, fine to medium grained, dark brown.	SM					M				
S2	30		7–10	LIMESTONE BEDROCK (highly weathered), tan to light brown.						M				
S3	48		12–13	SILTY SAND, fine to medium grained, dark brown.	SM					M				
			13–15	LIMESTONE BEDROCK, tan to light brown.										Depth to water at 15' bgs.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	SCS Engineers 3900 Kilroy Airport Way Long Beach, CA 90806	Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-313 Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	LIMESTONE BEDROCK, tan to light brown.										
			17											
S4	72		18							W				
			19											
			20											
			21											
S5	12		22							W				
			23											
			24											
S6	60		25							W				
			26											
			27	End of Boring at 27 feet below ground surface.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Alliant, ACM M.L. Kapp SCS#: 25221050.00		MW-314

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Paul Dickinson Cascade	2/27/2024	2/27/2024	roto-sonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			9.1 Feet	582.9 Feet	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
NW 1/4 of SW 1/4 of Section 23, T 81 N, R 6 E

Lat 41° 48' 26.2"
Long -90° 14' 15.4"

Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Hydrovaced to 10' bgs - No Samples										
H	-		5											Hydrovac only, no samples
			10	POORLY GRADED SAND (SP), fine to coarse,less fines at depth, some gravel, subrounded to rounded.										
1	24		13		SP									
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI. 53718

Tel:
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-314 Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	POORLY GRADED SAND (SP), fine to coarse,less fines at depth, some gravel, subrounded to rounded. *(continued)*	SP									
			17	LEAN CLAY (CL), grey (5Y 4/1), silty, some olive green mottling, very dense but soft.	CL									
2	41		18						0.25					
			19	color change to dark yellowish brown (10YR 4/4).	CL									
			20											
			21	End of Boring at 21' bgs. Monitoring well MW-314 constructed with bentonite chips from 21-18' bgs, filter pack from 18-6' bgs, screen from 17-7' bgs, bentonite chips from 6-0.5' bgs, and concrete surface seal.										

09/02/2025 - Classification: Internal - ECRM13574470

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Alliant, ACM M.L. Kapp SCS#: 25221050.00		MW-314A

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Paul Dickinson Cascade	2/27/2024	2/27/2024	roto-sonic

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			7.5 Feet	582.8 Feet	6.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
NW 1/4 of SW 1/4 of Section 23, T 81 N, R 6 E

Lat 41° 48' 26.2"
Long -90° 14' 15.5"

Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Clinton	Clinton

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Hydrovaced to 10' bgs - No Samples										
H			5											
			10	POORLY GRADED SAND (SP), dark yellowish brown (10YR 4/4), rounded, trace subrounded gravel.	SP									
			11	POORLY GRADED GRAVEL (GP), with some cobbles, fine to coarse sand, and trace clay/silt, yellowish brown (10YR 5/4), gravel and cobbles subrounded, sand grains rounded to subrounded.	GP									
1	60		12	Same as above, but black, organic odor.	GM									
			13	LEAN CLAY (CL), dark grey (2.5Y 4/1), soft, trace sand.	CL									
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI. 53718

Tel:
Fax:

09/02/2025 - Classification: Internal - ECRM13574470

Boring Number MW-314A

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	LEAN CLAY (CL), dark grey (2.5Y 4/1), soft, trace sand. *(continued)*										
			17											
2	60		18		CL									
			19											
			20	Same as above with trace subrounded gravel and cobbles.										
			21											
			22		CL									
3	50		23											
			24	POORLY GRADED GRAVEL and COBBLES (GP), fine gravel to cobbles, olive gray (10YR 4/2).	GP									
			25											
			26	WELL GRADED GRAVEL and COBBLES (GW), with sand, angular.	GW									
			27	POORLY GRADED SAND (SP), fine to medium, brown (10YR 4/3), rounded.										
4	48		28											
			29											
			30		SP									
			31											
			32											
5	49		33											
			34											
			35	POORLY GRADED SAND (SP), fine to coarse, brown (10YR 4/3), mostly subrounded and rounded with angular fragments.										
			36		SP									
			37											
6	55		38											
			39	WELL GRADED SAND (SW), with gravel and some silt, fine gravel to cobbles, mostly subrounded and rounded with some anglular grains.	SW									
			40											

Boring Number MW-314A

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			41	POORLY GRADED GRAVEL (GP), mostly fine with coarse gravel from 40.5-41' bgs, trace cobbles, trace to no fines, subrounded to subangular.	GP									
7	52		42											
			43	POORLY GRADED SAND (SP), with gravel, fine to coarse, dark yellowish brown (10YR 4/6), rounded to subrounded, slight organic odor near top of sample.	SP									
			44											
			45											
			46											
			47	POORLY GRADED SAND (SP), with silt and trace clay, fine, dark yellowish brown (10YR 4/4)	SP/SM									
8	40		48						3.75					
			49											
			50											
			51	SILTY CLAY, trace sand, brown (10YR 4/3).	CL/ML									
				End of Boring at 51' bgs. Monitoring well MW-314A constructed with filter pack from 51-41' bgs, screen from 49-44' bgs, bentonite chips from 41-35' bgs, grout from 35-0.5' bgs, and concrete surface seal.										

09/02/2025 - Classification: Internal - ECRM13574470

Print Form

IOWA DEPARTMENT OF NATURAL RESOURCES

MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station - Main Ash Pond Permit No.:

Well or Piezometer No: MW-301

Dates Started: 2/8/2018 Date Completed: 2/8/2018

A. SURVEYED LOCATIONS AND ELEVATIONS

Locations (± 0.5 ft): 677257.43 N, 2528287.27 E

Specify corner of site: NW of parcel 8071940000

Distance & direction along boundary: 146' S

Distance & direction from boundary to wall: 22' E

Elevations (± 0.01 ft MSL):

Ground Surface: 589.32

Top of protective casing: 592.36

Top of well casing: 592.13

Benchmark elevation: 590.75

Benchmark description: BM-1

B. SOIL BORING INFORMATION

Name & Address of Construction Company:
Direct Push Analytical
4N969 Old LaFox Road, Unit E
St. Charles, IL 60175

Name of Driller: Patrick Goetz

Drilling Method: 4.5" Auger

Drilling Fluid: N/A

Bore Hole Diameter: 8.25"

Soil Sampling Method: Geoprobe

Depth of Boring: 24.0'

C. MONITORING WELL INSTALLATION

Casing material: PVC

Length of casing: 15.19

Outside casing diameter: 2.38"

Inside casing diameter: 2"

Casing joint type: Flush Threaded

Casing/screen joint type: Flush Threaded

Screen material: PVC

Screen opening size: 0.010"

Screen length: 10'

Depth of well: 22.39

Filter Pack: 10.39' -23.39' bgs

Material: R.W. Sidley

Grain size: #5

Volume: 4.2 cu/ft

Seal (minimum 3 ft length above filter pack): 2'- 10.39' bgs

Material: 3/8 inch bentonite chips

Placement method: Gravity

Volume: 1.75 ft3

Backfill (if different from seal): N/A

Material: N/A

Placement method: N/A

Volume: N/A

Surface seal design: 0'-2' bgs

Material of protective casing: Steel, 4" diameter

Material of grout between protective casing and well casing: sand

Protective cap: 6 inch diameter

Material: Steel

Vented: ☐ Yes ☐ No Locking: ☑ Yes ☐ No

Well Cap: 2 inch diameter

Material: plastic with rubber gasket

Vented: ☐ Yes ☑ No

D. GROUNDWATER MEASURMENT (± 0.01 ft below top of inner well casing)

Water level: 14.08 Stabilization Time: 48 days

Well development method: N/A

Average depth of frostline: 4 feet

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½x11 inch map showing locations of all monitoring wells and piezometers.

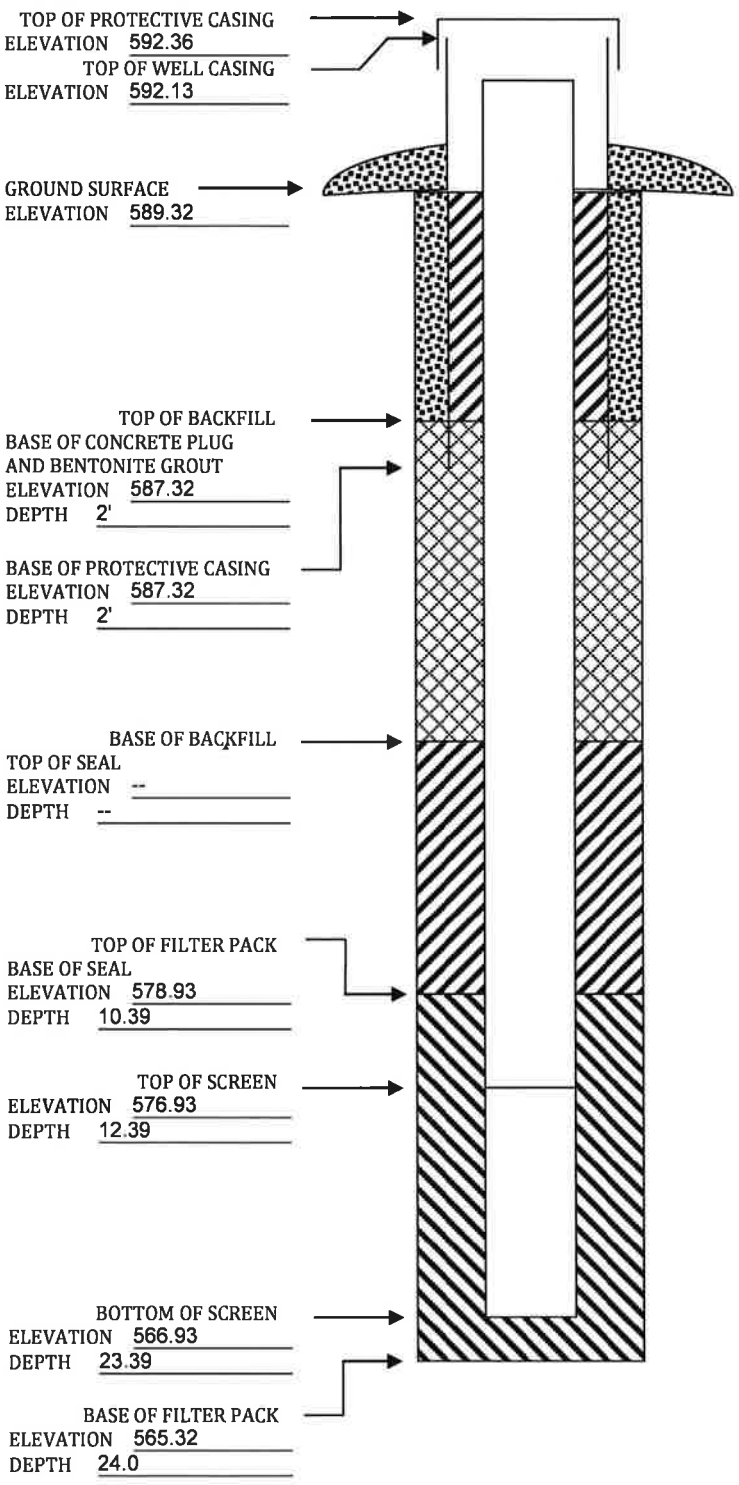
Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



09/02/2025 - Classification: Internal - ECRM13574470

Print Form

IOWA DEPARTMENT OF NATURAL RESOURCES

MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station - Main Ash Pond Permit No.:

Well or Piezometer No: MW-302

Dates Started: 2/8/2018 Date Completed: 2/8/2018

A. SURVEYED LOCATIONS AND ELEVATIONS

Locations (± 0.5 ft): 676976.06 N, 2529320.21 E

Specify corner of site: NW of parcel 8071930000

Distance & direction along boundary: 700' E

Distance & direction from boundary to wall: 329' S

Elevations (± 0.01 ft MSL):

Ground Surface: 588.58

Top of protective casing: 591.81

Top of well casing: 591.54

Benchmark elevation: 590.75

Benchmark description: BM-1

B. SOIL BORING INFORMATION

Name & Address of Construction Company:
Direct Push Analytical
4N969 Old LaFox Road, Unit E
St. Charles, IL 60175

Name of Driller: Patrick Goetz

Drilling Method: 4.5" Auger

Drilling Fluid: N/A

Bore Hole Diameter: 8.25"

Soil Sampling Method: Geoprobe

Depth of Boring: 24.0'

C. MONITORING WELL INSTALLATION

Casing material: PVC

Length of casing: 15.83

Outside casing diameter: 2.38"

Inside casing diameter: 2"

Casing joint type: Flush Threaded

Casing/screen joint type: Flush Threaded

Screen material: PVC

Screen opening size: 0.010"

Screen length: 10'

Depth of well: 23.14

Filter Pack: 11.14' -23.14' bgs

Material: R.W. Sidley

Grain size: #5

Volume: 4.2 cu/ft

Seal (minimum 3 ft length above filter pack): 2'-11.14' bgs

Material: 3/8 inch bentonite chips

Placement method: Gravity

Volume: 1.86 ft3

Backfill (if different from seal): N/A

Material: N/A

Placement method: N/A

Volume: N/A

Surface seal design: 0'-2' bgs

Material of protective casing: Steel, 4" diameter

Material of grout between protective casing and well casing: sand

Protective cap: 6 inch diameter

Material: Steel

Vented: ☐ Yes ☐ No Locking: ☑ Yes ☐ No

Well Cap: 2 inch diameter

Material: plastic with rubber gasket

Vented: ☐ Yes ☑ No

D. GROUNDWATER MEASURMENT (± 0.01 ft below top of inner well casing)

Water level: 16.00

Stabilization Time: 48 days

Well development method: N/A

Average depth of frostline: 4 feet

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½x11 inch map showing locations of all monitoring wells and piezometers.

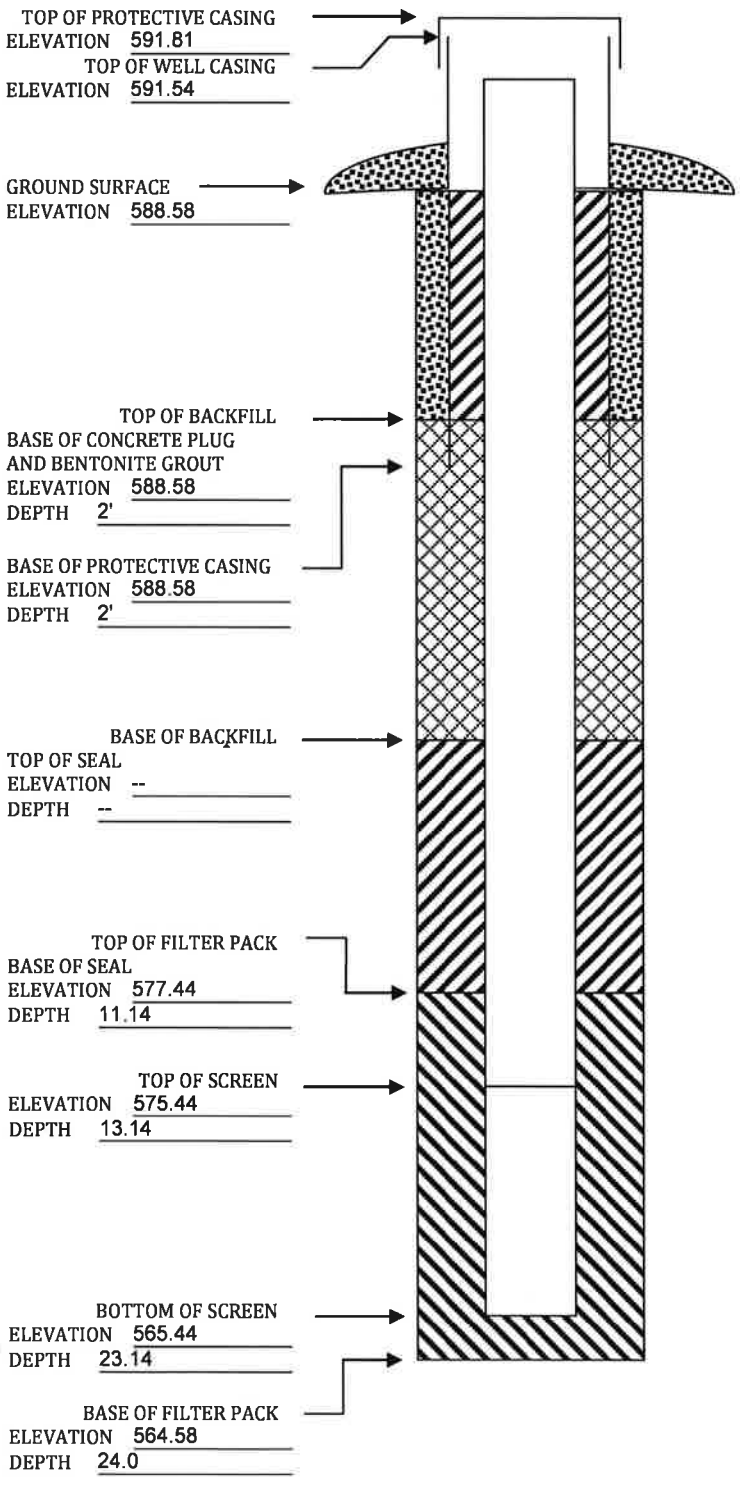
Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



09/02/2025 - Classification: Internal - ECRM13574470

Print Form

IOWA DEPARTMENT OF NATURAL RESOURCES

MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station - Main Ash Pond Permit No.:

Well or Piezometer No: MW-303

Dates Started: 2/8/2018 Date Completed: 2/8/2018

A. SURVEYED LOCATIONS AND ELEVATIONS

Locations (± 0.5 ft): 676590.31 N, 2529388.67 E

Specify corner of site: NW of parcel 8071930000

Distance & direction along boundary: 687' E

Distance & direction from boundary to wall: 730' S

Elevations (± 0.01 ft MSL):

Ground Surface: 589.73

Top of protective casing: 592.69

Top of well casing: 592.40

Benchmark elevation: 590.75

Benchmark description: BM-1

B. SOIL BORING INFORMATION

Name & Address of Construction Company:
Direct Push Analytical
4N969 Old LaFox Road, Unit E
St. Charles, IL 60175

Name of Driller: Patrick Goetz

Drilling Method: 4.5" Auger

Drilling Fluid: N/A

Bore Hole Diameter: 8.25"

Soil Sampling Method: Geoprobe

Depth of Boring: 25.5'

C. MONITORING WELL INSTALLATION

Casing material: PVC

Length of casing: 15.11'

Outside casing diameter: 2.38"

Inside casing diameter: 2"

Casing joint type: Flush Threaded

Casing/screen joint type: Flush Threaded

Screen material: PVC

Screen opening size: 0.010"

Screen length: 10'

Depth of well: 25.11'

Filter Pack: 13.11'-25.11' bgs

Material: R.W. Sidley

Grain size: #5

Volume: 4.2 cu/ft

Seal (minimum 3 ft length above filter pack): 2'-13.11' bgs

Material: 3/8 inch bentonite chips

Placement method: Gravity

Volume: 2.43 cubic feet

Backfill (if different from seal): N/A

Material: N/A

Placement method: N/A

Volume: N/A

Surface seal design: 0'-2' bgs

Material of protective casing: Steel, 4" diameter

Material of grout between protective casing and well casing: sand

Protective cap: 6 inch diameter

Material: Plastic

Vented: ☐ Yes ☐ No Locking: ☑ Yes ☐ No

Well Cap: 2 inch diameter

Material: plastic with rubber gasket

Vented: ☐ Yes ☑ No

D. GROUNDWATER MEASURMENT (± 0.01 ft below top of inner well casing)

Water level: 15.47 Stabilization Time: 47 days

Well development method: N/A

Average depth of frostline: 4 feet

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½x11 inch map showing locations of all monitoring wells and piezometers.

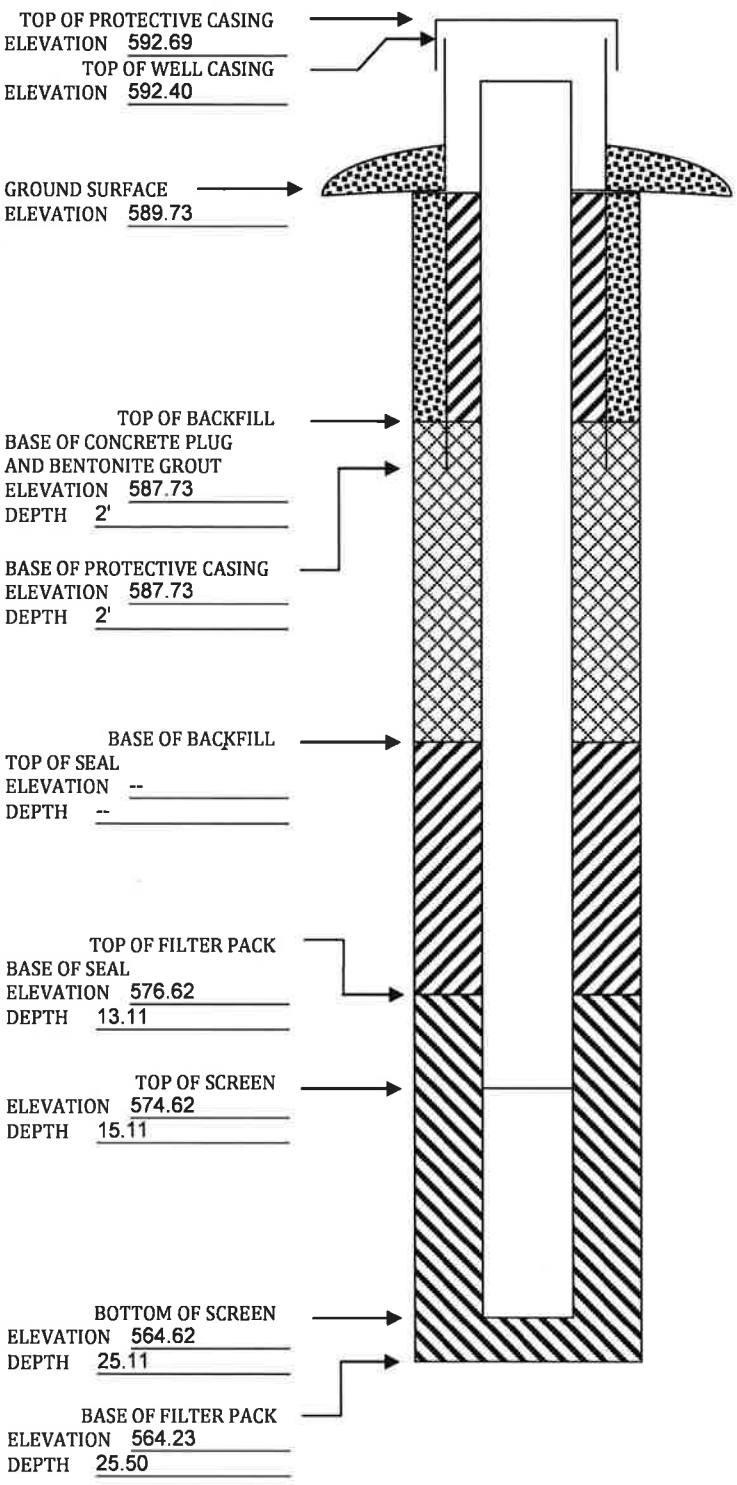
Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Alliant M.L. Kapp | Permit No.:
Well or Piezometer No.: MW - 304A | Dates Started: 2/8/2021 | Date Completed: 2/8/2021

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: SW of Parcel 8071930000 | Distance and direction along boundary: 152' N
Distance and direction from boundary to surface monitoring well: 1,474' E
Elevation (+0.01 ft. MSL)
Ground Surface: 589.527 | Top of protective casing: 592.134
Top of well casing: 591.89 | Benchmark elevation: 592.124
Benchmark description: MW-304

B. SOIL BORING INFORMATION

Construction Company Name: Cascade Drilling
Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI 54776
Name of driller: Michael Mueller
Drilling method: Rotosonic | Drilling fluid: Water | Bore Hole diameter: 6"
Soil sampling method: Bagged | Depth of boring: 70'

C. MONITORING WELL INSTALLATION

Casing material: Sch. 40 PVC | Placement method: Poured
Length of casing: 52.61' | Volume: 0.67 cu. ft
Outside casing diameter: 2.4" | Backfill (if different from seal):
Inside casing diameter: 2" | Material: Bentonite grout & Bentonite chips
Casing joint type: Threaded | Placement method: Pumped & Poured
Casing/screen joint type: Threaded | Volume: 55 gallons grout & 2 cu. ft chips
Screen material: Sch. 40 PVC | Surface seal design:
Screen opening size: 0.01" | Material of protective casing: Steel
Material of grout between protective casing and well casing: Sand
Screen length: 5'
Depth of Well: 55' | Protective cap:
Filter Pack: | Material: Aluminum
Material: Red Flint Sand | Vented?: ☒ Y ☐ N | Locking?: ☒ Y ☐ N
Grain Size: # 40 | Well cap:
Volume: 1.5 cu. ft | Material: Plastic
Seal (minimum 3 ft. length above filter pack): | Vented?: ☐ Y ☒ N
Material: Bentonite chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 17.8' | **Stabilization time**: < 5 minutes
Well development method: Surge and purge with bailer and pump
Average depth of frost line: 4' bgs

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature _____ **Certification #**: 9362 **Date**: 2-8-2021

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

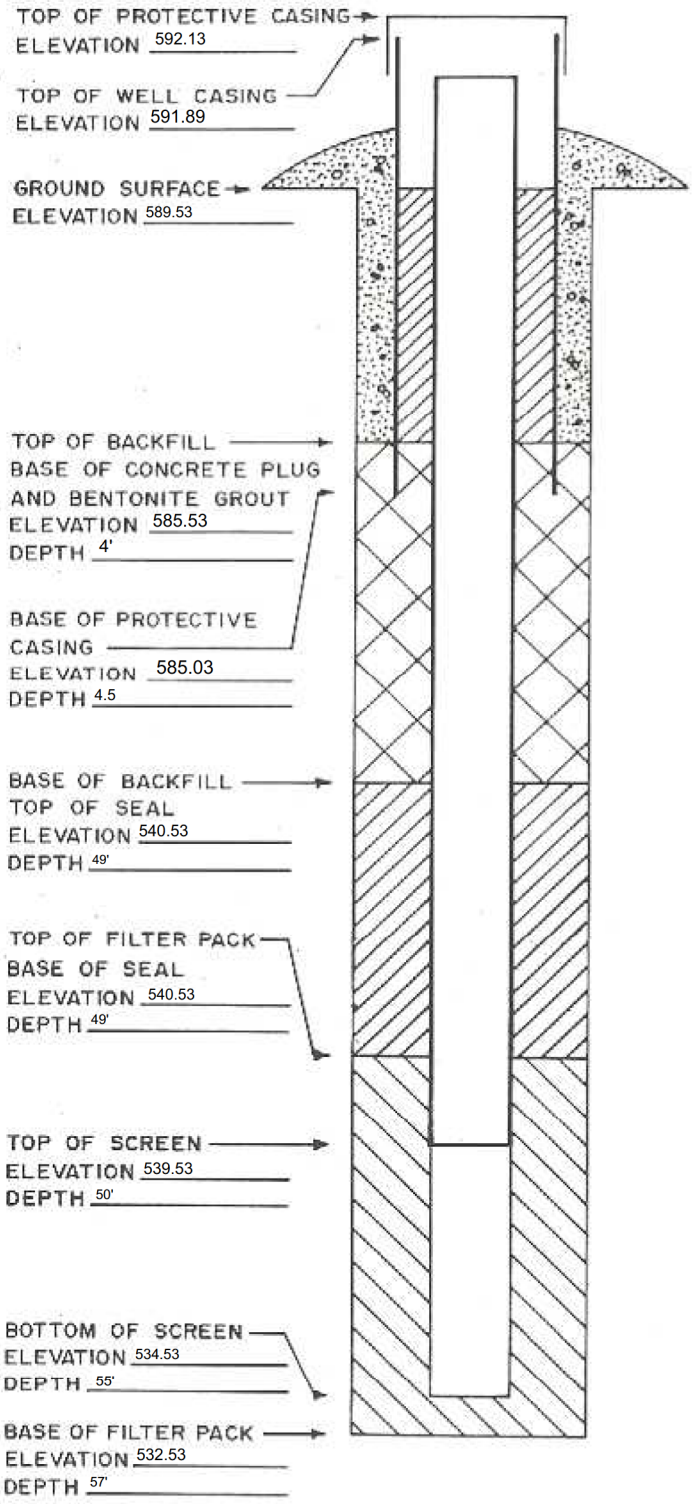
Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

Print Form

IOWA DEPARTMENT OF NATURAL RESOURCES

MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station - Main Ash Pond Permit No.:

Well or Piezometer No: MW-304

Dates Started: 2/7/2018 Date Completed: 2/7/2018

A. SURVEYED LOCATIONS AND ELEVATIONS

Locations (± 0.5 ft): 676305.68 N, 2529103.87 E

Specify corner of site: SW of parcel 8071930000

Distance & direction along boundary: 152' N

Distance & direction from boundary to wall: 1,487' E

Elevations (± 0.01 ft MSL):

Ground Surface: 589.42

Top of protective casing: 592.35

Top of well casing: 592.12

Benchmark elevation: 590.75

Benchmark description: BM-1

B. SOIL BORING INFORMATION

Name & Address of Construction Company:
Direct Push Analytical
4N969 Old LaFox Road, Unit E
St. Charles, IL 60175

Name of Driller: Patrick Goetz

Drilling Method: 4.5" Auger

Drilling Fluid: N/A

Bore Hole Diameter: 8.5"

Soil Sampling Method: Geoprobe

Depth of Boring: 25.0'

C. MONITORING WELL INSTALLATION

Casing material: PVC

Length of casing: 14.54'

Outside casing diameter: 2.38"

Inside casing diameter: 2"

Casing joint type: Flush Threaded

Casing/screen joint type: Flush Threaded

Screen material: PVC

Screen opening size: 0.010"

Screen length: 10'

Depth of well: 24.0'

Filter Pack: 12.54'-24.54' bgs

Material: R.W. Sidley

Grain size: #5

Volume: 4.2 cu/ft

Seal (minimum 3 ft length above filter pack): 2'-12.54' bgs

Material: 3/8 inch bentonite chips

Placement method: Gravity

Volume: 2.0 ft3

Backfill (if different from seal): N/A

Material: N/A

Placement method: N/A

Volume: N/A

Surface seal design: 0'-2' bgs

Material of protective casing: Steel, 4" diameter

Material of grout between protective casing and well casing: sand

Protective cap: 6 inch diameter

Material: Plastic

Vented: ☐ Yes ☐ No Locking: ☑ Yes ☐ No

Well Cap: 2 inch diameter

Material: plastic with rubber gasket

Vented: ☐ Yes ☑ No

D. GROUNDWATER MEASURMENT (± 0.01 ft below top of inner well casing)

Water level: 15.35

Stabilization Time: 48 days

Well development method: N/A

Average depth of frostline: 4 feet

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½x11 inch map showing locations of all monitoring wells and piezometers.

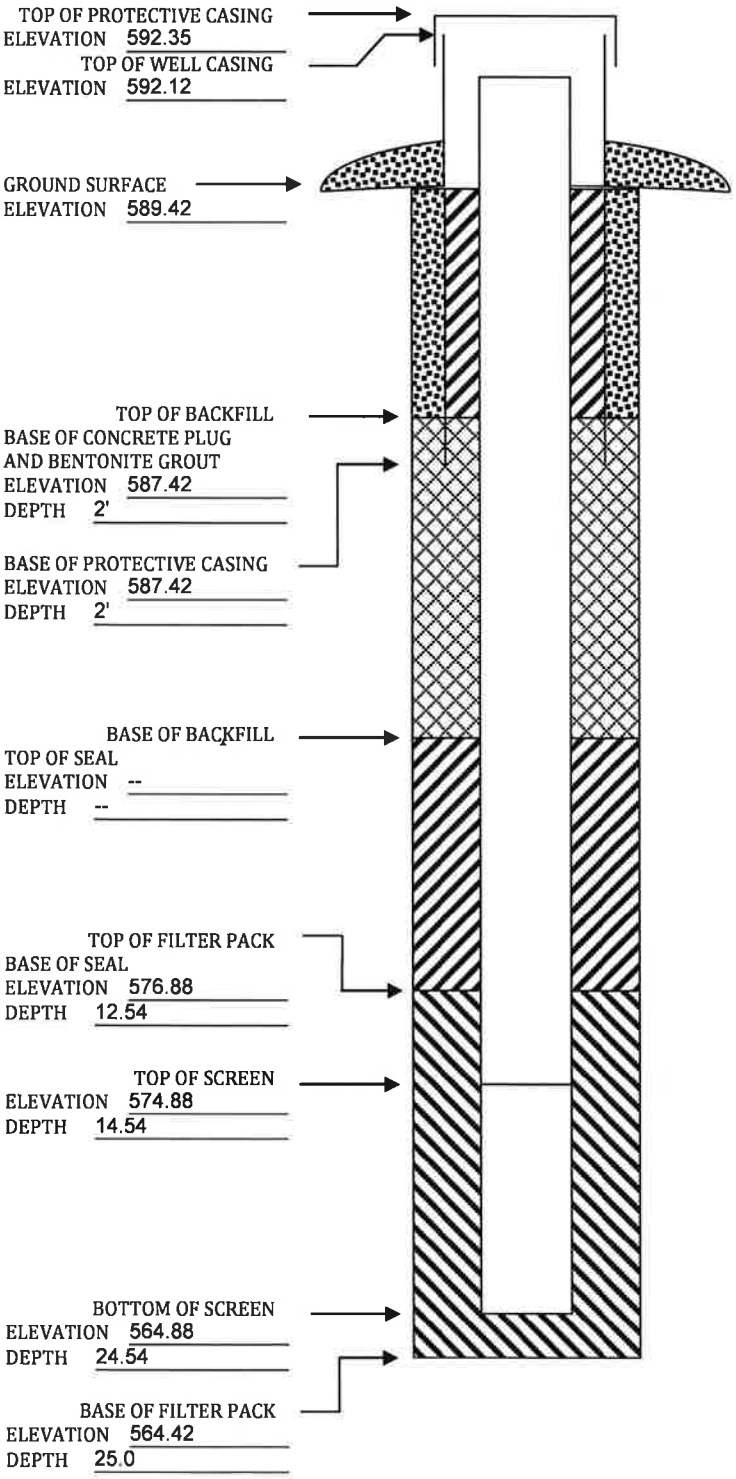
Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



09/02/2025 - Classification: Internal - ECRM13574470

Print Form

IOWA DEPARTMENT OF NATURAL RESOURCES

MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station - Main Ash Pond Permit No.:

Well or Piezometer No: MW-305

Dates Started: 2/7/2018 Date Completed: 2/7/2018

A. SURVEYED LOCATIONS AND ELEVATIONS

Locations (± 0.5 ft): 676125.82 N,2528762.6 E

Specify corner of site: SW of parcel 8071930000

Distance & direction along boundary: 137' N

Distance & direction from boundary to wall: 1,084' E

Elevations (± 0.01 ft MSL):

Ground Surface: 589.39

Top of protective casing: 592.86

Top of well casing: 592.60

Benchmark elevation: 590.75

Benchmark description: BM-1

B. SOIL BORING INFORMATION

Name & Address of Construction Company:
Direct Push Analytical
4N969 Old LaFox Road, Unit E
St. Charles, IL 60175

Name of Driller: Patrick Goetz

Drilling Method: 4.5" Auger

Drilling Fluid: N/A

Bore Hole Diameter: 8.25"

Soil Sampling Method: Geoprobe

Depth of Boring: 24.5'

C. MONITORING WELL INSTALLATION

Casing material: PVC

Length of casing: 17.30

Outside casing diameter: 2.38"

Inside casing diameter: 2"

Casing joint type: Flush Threaded

Casing/screen joint type: Flush Threaded

Screen material: PVC

Screen opening size: 0.010"

Screen length: 10'

Depth of well: 24.09

Filter Pack: 12.09' -24.09' bgs

Material: R.W. Sidley

Grain size: #5

Volume: 4.2 cu/ft

Seal (minimum 3 ft length above filter pack): 2'-12.09' bgs

Material: 3/8 inch bentonite chips

Placement method: Gravity

Volume: 2.21 ft 3

Backfill (if different from seal): N/A

Material: N/A

Placement method: N/A

Volume: N/A

Surface seal design: 0'-2' bgs

Material of protective casing: Steel, 4" diameter

Material of grout between protective casing and well casing: sand

Protective cap: 6 inch diameter

Material: Steel

Vented: ☐ Yes ☐ No Locking: ☑ Yes ☐ No

Well Cap: 2 inch diameter

Material: plastic with rubber gasket

Vented: ☐ Yes ☑ No

D. GROUNDWATER MEASURMENT (± 0.01 ft below top of inner well casing)

Water level: 16.24 Stabilization Time: 48 days

Well development method: N/A

Average depth of frostline: 4 feet

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½x11 inch map showing locations of all monitoring wells and piezometers.

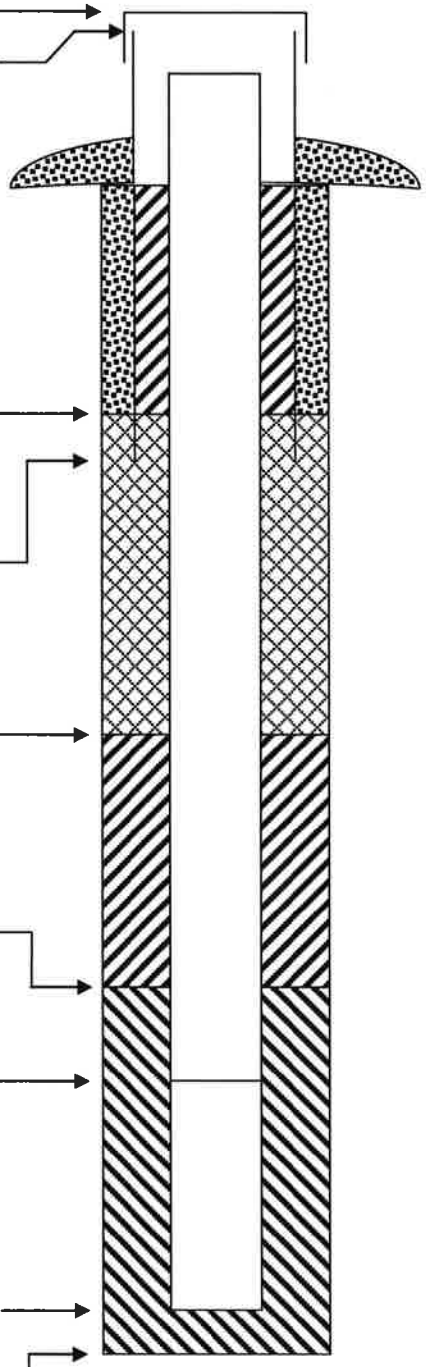
Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



TOP OF PROTECTIVE CASING
ELEVATION 592.86
TOP OF WELL CASING
ELEVATION 592.60

GROUND SURFACE
ELEVATION 589.39

TOP OF BACKFILL
BASE OF CONCRETE PLUG
AND BENTONITE GROUT
ELEVATION 587.39
DEPTH 2'

BASE OF PROTECTIVE CASING
ELEVATION 587.39
DEPTH 2'

BASE OF BACKFILL
TOP OF SEAL
ELEVATION --
DEPTH --

TOP OF FILTER PACK
BASE OF SEAL
ELEVATION 577.30
DEPTH 12.09

TOP OF SCREEN
ELEVATION 575.30
DEPTH 14.09

BOTTOM OF SCREEN
ELEVATION 0565.3
DEPTH 24.09

BASE OF FILTER PACK
ELEVATION 564.89
DEPTH 24.5'

09/02/2025 - Classification: Internal - ECRM13574470

Print Form

IOWA DEPARTMENT OF NATURAL RESOURCES

MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station - Main Ash Pond Permit No.:

Well or Piezometer No: MW-306

Dates Started: 2/7/2018 Date Completed: 2/7/2018

A. SURVEYED LOCATIONS AND ELEVATIONS

Locations (± 0.5 ft): 675686.88 N, 2527883.15 E

Specify corner of site: SW of Parcel 8071930000

Distance & direction along boundary: 130' N

Distance & direction from boundary to wall: 81' E

Elevations (± 0.01 ft MSL):

Ground Surface: 588.14

Top of protective casing: 591.09

Top of well casing: 590.83

Benchmark elevation: 590.75

Benchmark description: BM-1

B. SOIL BORING INFORMATION

Name & Address of Construction Company:
Direct Push Analytical
4N969 Old LaFox Road, Unit E
St. Charles, IL 60175

Name of Driller: Patrick Goetz

Drilling Method: 4.5" Auger

Drilling Fluid: N/A

Bore Hole Diameter: 8.25"

Soil Sampling Method: Geoprobe

Depth of Boring: 25.0'

C. MONITORING WELL INSTALLATION

Casing material: PVC

Length of casing: 17.20

Outside casing diameter: 2.38"

Inside casing diameter: 2"

Casing joint type: Flush Threaded

Casing/screen joint type: Flush Threaded

Screen material: PVC

Screen opening size: 0.010"

Screen length: 10'

Depth of well: 24.51'

Filter Pack: 12.51'-24.51' bgs

Material: Native (slough)

Grain size: R.W. Sidley #5

Volume: 4.2 cu/ft

Seal (minimum 3 ft length above filter pack): 2'-12.51' bgs

Material: 3/8 inch bentonite chips

Placement method: Gravity

Volume: 2.30 ft3

Backfill (if different from seal): N/A

Material: N/A

Placement method: N/A

Volume: N/A

Surface seal design: 0'-2'

Material of protective casing: Steel, 4" diameter

Material of grout between protective casing and well casing: sand

Protective cap: 6 inch diameter

Material: Steel

Vented: ☐ Yes ☐ No Locking: ☑ Yes ☐ No

Well Cap: 2 inch diameter

Material: plastic with rubber gasket

Vented: ☐ Yes ☑ No

D. GROUNDWATER MEASURMENT (± 0.01 ft below top of inner well casing)

Water level: 13.26

Stabilization Time: 48 days

Well development method: N/A

Average depth of frostline: 4 feet

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½x11 inch map showing locations of all monitoring wells and piezometers.

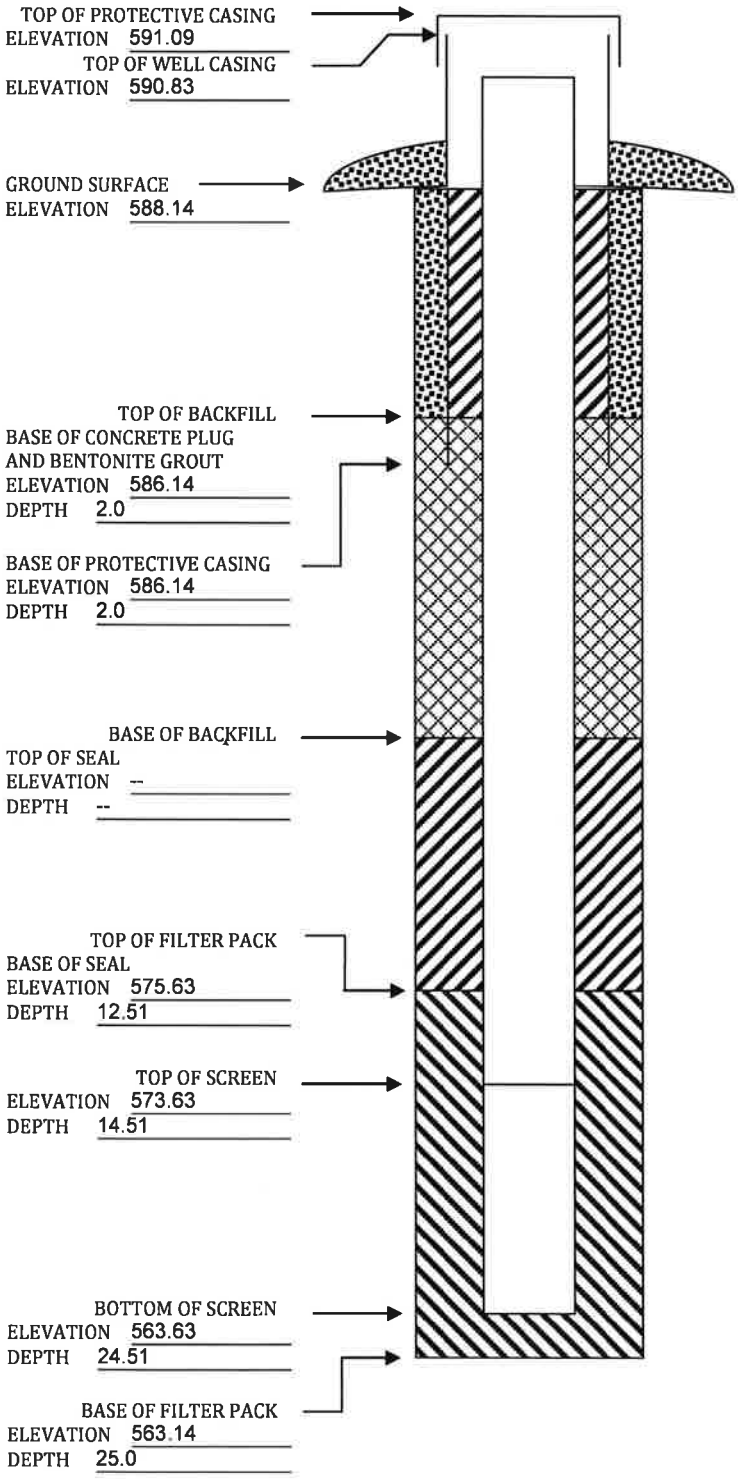
Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Substation — Permit No.:
Well or Piezometer No.: MW-307 — Dates Started: 4/15/2020 — Date Completed: 4/15/2020

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: SW — Distance and direction along boundary:
Distance and direction from boundary to surface monitoring well: 268' NW from SE corner
Elevation (+0.01 ft. MSL):
Ground Surface: 601.69' — Top of protective casing: 603.80'
Top of well casing: 603.39' — Benchmark elevation: 599.04'
Benchmark description: Benchmark is in the north east corner of the property, named Top Conc structure.

B. SOIL BORING INFORMATION

Construction Company Name: Terracon Consultants Inc.
Address: 2640 12th St. SW — City, State, Zip Code: Cedar Rapids, IA 52404
Name of driller: Scott Zeien
Drilling method: Hollow Stem Auger — Drilling fluid: none — Bore Hole diameter: 8.5"
Soil sampling method: Continuous split-spoon — Depth of boring: 22'

C. MONITORING WELL INSTALLATION

Casing material: Sch. 40 PVC
Length of casing: 9.46'
Outside casing diameter: 2.4
Inside casing diameter: 2
Casing joint type: Threaded
Casing/screen joint type: Threaded
Screen material: Sch. 40 PVC
Screen opening size: 0.01"
Screen length: 10'
Depth of Well: 17.76' below ground surface
Filter Pack:
Material: sand
Grain Size: coarse
Volume: ~5.23 ft^3
Seal (minimum 3 ft. length above filter pack):
Material: 3/8" hydrated bentonite chips

Placement method: Poured
Volume: ~0.6 ft^3
Backfill (if different from seal):
Material:
Placement method:
Volume:
Surface seal design:
Material of protective casing: Steel
Material of grout between protective casing and well casing: Coarse Sand
Protective cap:
Material: Steel
Vented?: ☒ Y ☐ N — Locking?: ☒ Y ☐ N
Well cap:
Material: PVC
Vented?: ☒ Y ☐ N

D. GROUNDWATER MEASUREMENT (+0.01 foot below top of inner well casing)

Water level: 8.33 — **Stabilization time:** 2.5 hours
Well development method: Surged & bailed to remove turbidity
Average depth of frost line: 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature: Scott Zeien — **Certification #:** 5978 — **Date:** 9-21-2020

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

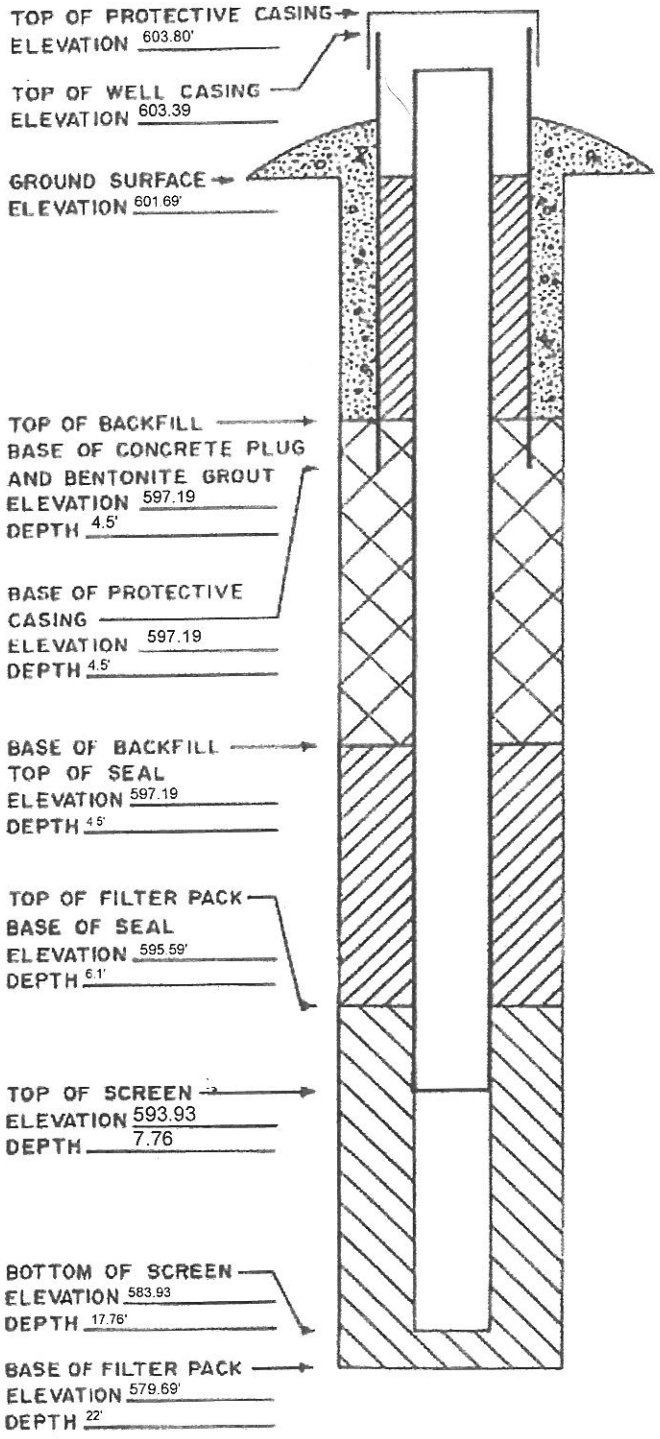
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Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL M.L. Kapp | Permit No.: IDNR #56263, County #1647

Well or Piezometer No.: MW-308 | Dates Started: 4/26/2021 | Date Completed: 4/27/2021

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: NW | Distance and direction along boundary: 300' SE

Distance and direction from boundary to surface monitoring well: 40' NE

Elevation (+0.01 ft. MSL)

Ground Surface: 586.10 | Top of protective casing: 589.01

Top of well casing: 588378 | Benchmark elevation: 588.78

Benchmark description: Cut "x" in top of dock wall

B. SOIL BORING INFORMATION

Construction Company Name: Cascade Drilling

Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI. 54476

Name of driller: Mike Mueller

Drilling method: Roto-Sonic | Drilling fluid: Water | Bore Hole diameter: 6"

Soil sampling method: Bagged | Depth of boring: 18'

C. MONITORING WELL INSTALLATION

Casing material: Sch 40 PVC | Placement method: Poured

Length of casing: 19.5' | Volume: 0.3 cu. ft.

Outside casing diameter: 2.4" | Backfill (if different from seal):

Inside casing diameter: 2.05" | Material:

Casing joint type: Threaded | Placement method:

Casing/screen joint type: Threaded | Volume:

Screen material: Sch. 40 PVC | Surface seal design:

Screen opening size: 0.01" | Material of protective casing: Steel

Material of grout between protective casing and well casing: Bentonite chips and sand

Screen length: 10'

Depth of Well: 17' | Protective cap:

Filter Pack: | Material: Aluminum

Material: Red Flint Filter Sand | Vented?: ☒ Y ☐ N | Locking?: ☒ Y ☐ N

Grain Size: #40 | Well cap:

Volume: 1.5 cu. ft. | Material: Plastic

Seal (minimum 3 ft. length above filter pack): | Vented?: ☐ Y ☒ N

Material: Bentonite chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 9.68 | **Stabilization time**: <5 min

Well development method: Purged and surged with pump

Average depth of frost line: 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature: [signature] | **Certification #**: 9362 | **Date**: 4-27-2021

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

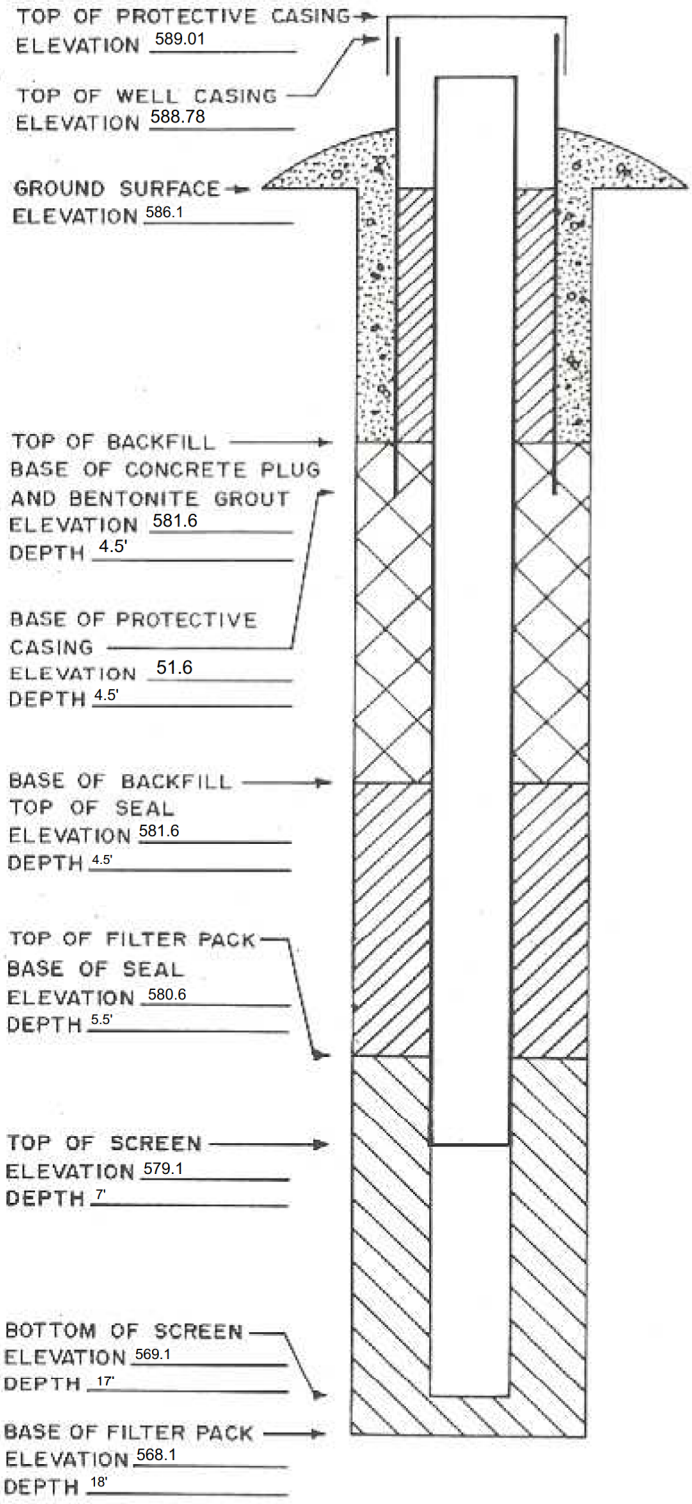
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL M.L. Kapp | Permit No.: IDNR #56263, County #1647

Well or Piezometer No.: MW-309 | Dates Started: 4/27/2021 | Date Completed: 4/27/2021

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: SW | Distance and direction along boundary: 150' NW

Distance and direction from boundary to surface monitoring well: 50' NE

Elevation (+0.01 ft. MSL)

Ground Surface: 589.00 | Top of protective casing: 591.45

Top of well casing: 591.24 | Benchmark elevation: 588.78

Benchmark description: Cut "x" in top of PCC Dock Wall

B. SOIL BORING INFORMATION

Construction Company Name: Cascade Drilling

Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI. 54476

Name of driller: Mike Mueller

Drilling method: Roto-Sonic | Drilling fluid: Water | Bore Hole diameter: 6"

Soil sampling method: Bagged | Depth of boring: 25'

C. MONITORING WELL INSTALLATION

Casing material: Sch 40 PVC | Placement method: Poured

Length of casing: 24.5' | Volume: 1 cu. ft.

Outside casing diameter: 2.4" | Backfill (if different from seal):

Inside casing diameter: 2.05" | Material:

Casing joint type: Threaded | Placement method:

Casing/screen joint type: Threaded | Volume:

Screen material: Sch. 40 PVC | Surface seal design:

Screen opening size: 0.01" | Material of protective casing: Steel

Material of grout between protective casing and well casing: Bentonite chips and sand

Screen length: 10'

Depth of Well: 22' | Protective cap:

Filter Pack: | Material: Aluminum

Material: Red Flint Filter Sand | Vented?: ☒ Y ☐ N | Locking?: ☒ Y ☐ N

Grain Size: #40 | Well cap:

Volume: 2 cu. ft. | Material: Plastic

Seal (minimum 3 ft. length above filter pack): | Vented?: ☐ Y ☒ N

Material: Bentonite chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 15.75 | **Stabilization time**: < 5 min

Well development method: Purged and surged with pump

Average depth of frost line: 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature | **Certification #**: 9362 | **Date**: 4-27-2021

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

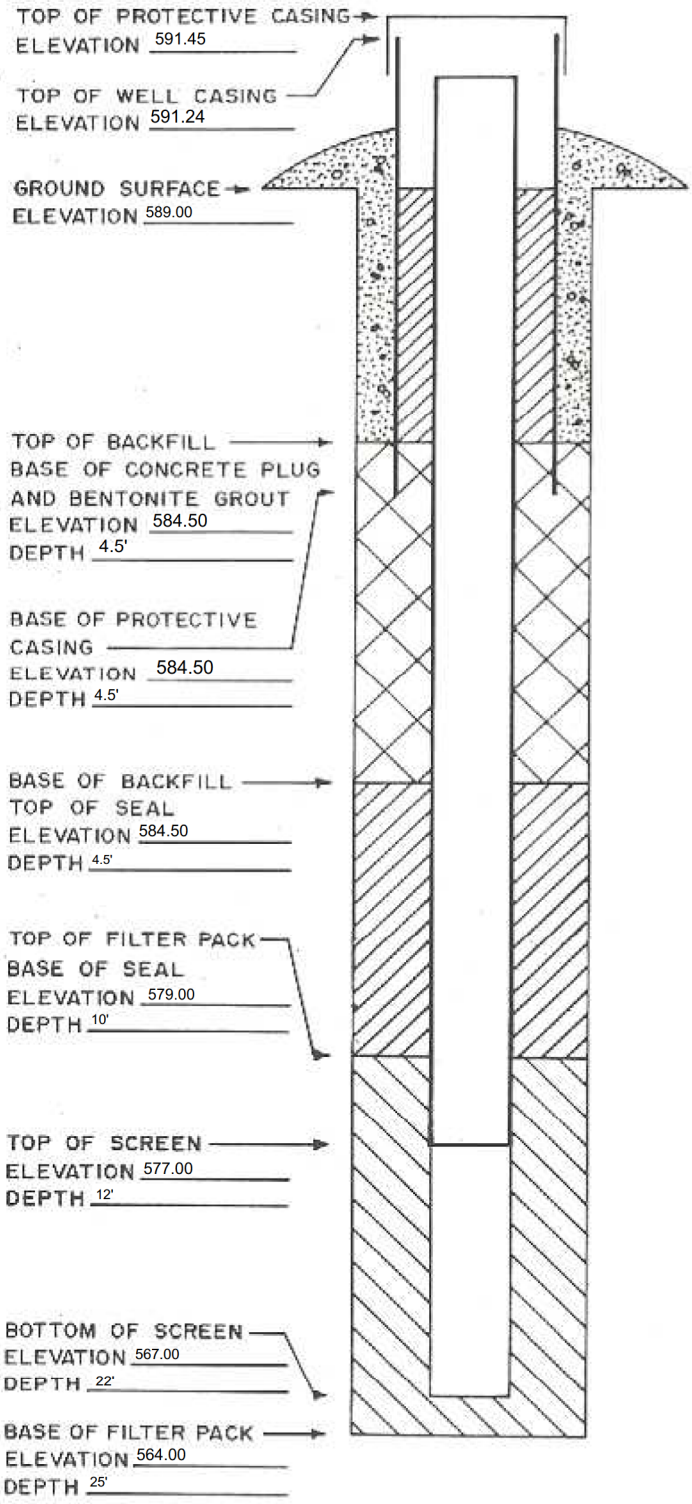
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL M.L. Kapp | Permit No.: IDNR #56263, County #1647

Well or Piezometer No.: MW-310 | Dates Started: 9/27/2021 | Date Completed: 9/27/2021

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: Southern | Distance and direction along boundary: 90' northwest

Distance and direction from boundary to surface monitoring well: 50' northeast perpendicular from boundary

Elevation (+0.01 ft. MSL)

Ground Surface: 595.14' | Top of protective casing: 597.91'

Top of well casing: 597.58' | Benchmark elevation:

Benchmark description:

B. SOIL BORING INFORMATION

Construction Company Name: Cascade Drilling

Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI 54476

Name of driller: Todd Schmalfeldt

Drilling method: Sonic | Drilling fluid: Water | Bore Hole diameter: 6"

Soil sampling method: Grab | Depth of boring: 31'

C. MONITORING WELL INSTALLATION

Casing material: PVC | Placement method: Gravity

Length of casing: 27' | Volume: 7 bags

Outside casing diameter: 2.38" | Backfill (if different from seal): Same as seal

Inside casing diameter: 2.01" | Material:

Casing joint type: Flush threaded | Placement method:

Casing/screen joint type: Flush threaded | Volume:

Screen material: PVC | Surface seal design:

Screen opening size: 0.010" Factory slotted | Material of protective casing: Steel

Material of grout between protective casing and well casing: Concrete

Screen length: 5'

Depth of Well: 30' | Protective cap:

Filter Pack: | Material: Steel

Material: Sand | Vented?: ☐ Y ☒ N | Locking?: ☒ Y ☐ N

Grain Size: #40 | Well cap: Plastic with expandable rubber gasket

Volume: 3 bags (1.5 cubic feet) | Material:

Seal (minimum 3 ft. length above filter pack): | Vented?: ☐ Y ☒ N

Material: 3/8" bentonite chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 8.93' | **Stabilization time**: <20 minutes

Well development method: Surged and purged. Total of 55 gallons removed during well development

Average depth of frost line: 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature:  **Certification #**: 9362 **Date**: 9-27-2021

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

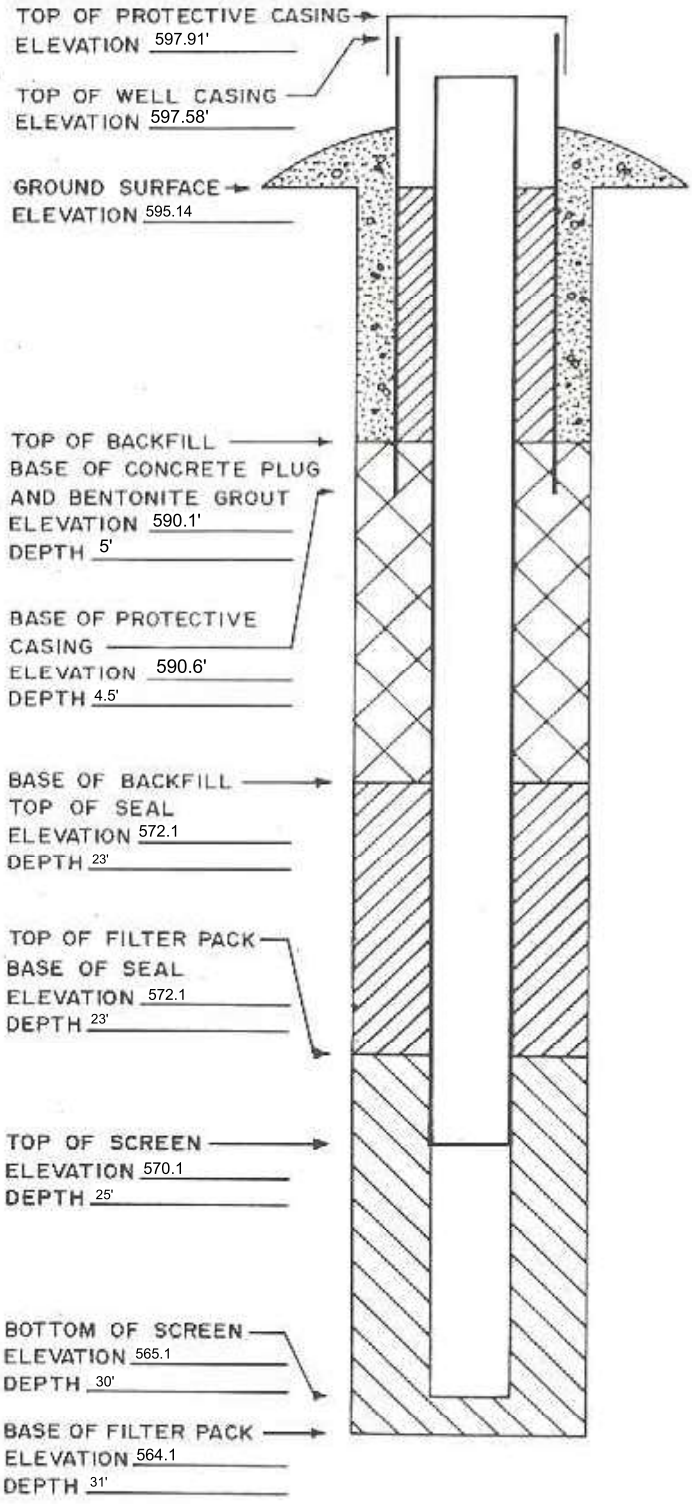
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL M.L. Kapp | Permit No.: IDNR #56263, County #1647

Well or Piezometer No.: MW-311A | Dates Started: 12/7/2021 | Date Completed: 12/8/2021

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: NE | Distance and direction along boundary: 75' WNW

Distance and direction from boundary to surface monitoring well: 35' WSW

Elevation (+0.01 ft. MSL)

Ground Surface: 585.29 | Top of protective casing: 588.09

Top of well casing: 587.82 | Benchmark elevation: 585.29

Benchmark description: Benchmark "B," cut X in concrete

B. SOIL BORING INFORMATION

Construction Company Name: Roberts Environmental Drilling

Address: 1107 S Mulberry St | City, State, Zip Code: Millstadt IL, 62260

Name of driller: Eric Wetzel

Drilling method: Air Rotary | Drilling fluid: Air | Bore Hole diameter: 6"

Soil sampling method: Screened rock cuttings | Depth of boring: 66'

C. MONITORING WELL INSTALLATION

Casing material: Sch 40 PVC

Length of casing: 67.65'

Outside casing diameter: 2.4"

Inside casing diameter: 2.05"

Casing joint type: Threaded

Casing/screen joint type: Threaded

Screen material: Sch. 40 PVC

Screen opening size: 0.01"

Screen length: 5'

Depth of Well: 65'

Filter Pack:

Material: Filter Sand

Grain Size: #40

Volume: 1.3 cu. ft.

Seal (minimum 3 ft. length above filter pack):

Material: Bentonite grout

Placement method: Tremie Pumped

Volume: 9.0 cu. ft.

Backfill (if different from seal): Filter Sand

Material: Filter Sand

Placement method: Poured

Volume: 0.2 cu. ft.

Surface seal design: Concrete

Material of protective casing: Steel

Material of grout between protective casing and well casing: Bentonite chips and sand

Protective cap:

Material: Steel

Vented?: ☒ Y ☐ N | Locking?: ☒ Y ☐ N

Well cap:

Material: Plastic

Vented?: ☒ Y ☐ N

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 18.62' | **Stabilization time**: < 5 min

Well development method: Purged and surged by Roberts

Average depth of frost line: 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature | **Certification #**: 11509 | **Date**: 2.7.22

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

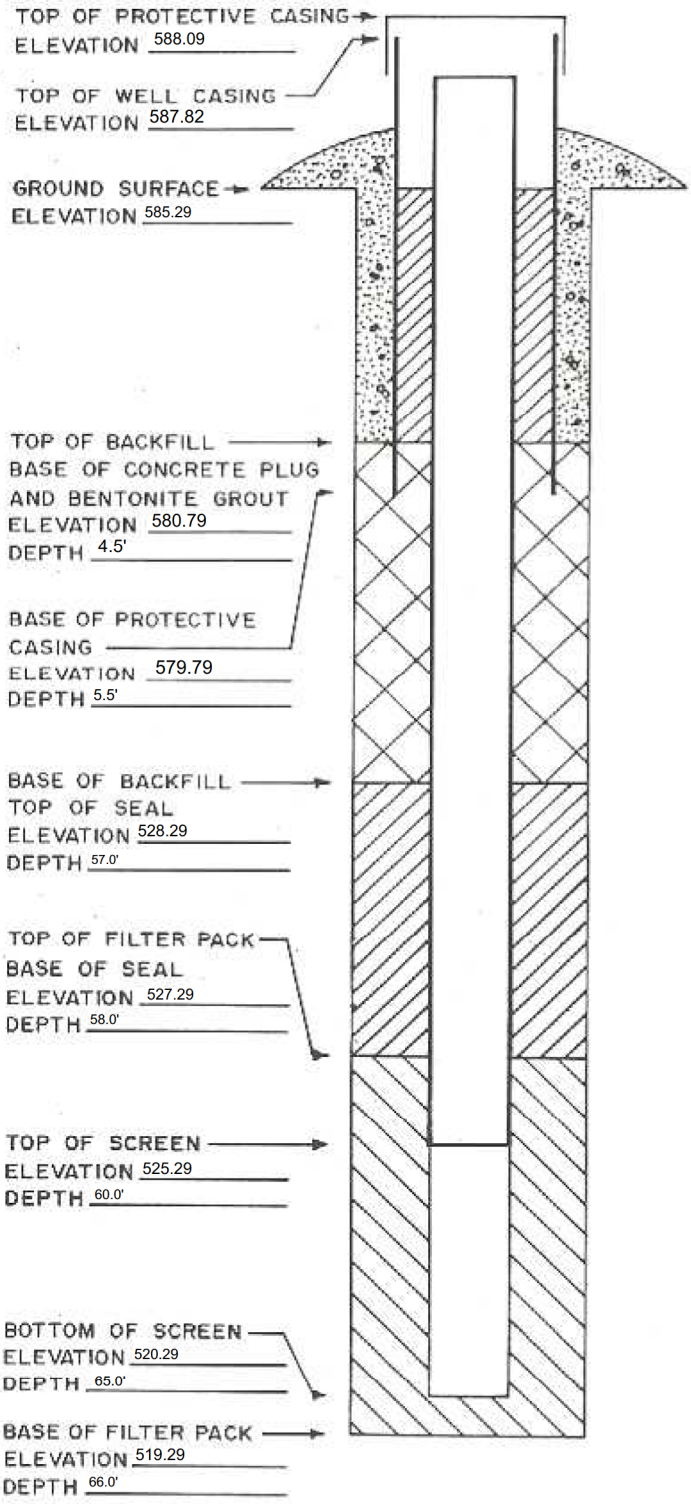
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp | Permit No.: IDNR #56263, County #1647

Well or Piezometer No.: MW-311 | Dates Started: 12/6/2021 | Date Completed: 12/7/2021

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: NE | Distance and direction along boundary: 75' WNW

Distance and direction from boundary to surface monitoring well: 35' WSW

Elevation (+0.01 ft. MSL)

Ground Surface: 585.29 | Top of protective casing: 587.89

Top of well casing: 587.59 | Benchmark elevation: 585.29

Benchmark description: Benchmark "A," cut X in concrete

B. SOIL BORING INFORMATION

Construction Company Name: Roberts Environmental Drilling

Address: 1107 S Mulberry St | City, State, Zip Code: Millstadt IL, 62260

Name of driller: Eric Wetzel

Drilling method: Air Rotary | Drilling fluid: Air | Bore Hole diameter: 6"

Soil sampling method: Screened | Depth of boring: 31'

C. MONITORING WELL INSTALLATION

Casing material: Sch 40 PVC | Placement method: Poured

Length of casing: 27.8' | Volume: 0.8 cu. ft.

Outside casing diameter: 2.4" | Backfill (if different from seal): Bentonite Chips

Inside casing diameter: 2.05" | Material: Bentonite Chips

Casing joint type: Threaded | Placement method: Poured

Casing/screen joint type: Threaded | Volume: 0.2 cu. ft.

Screen material: Sch. 40 PVC | Surface seal design: Cement

Screen opening size: 0.01" | Material of protective casing: Steel

Material of grout between protective casing and well casing: Bentonite chips and sand

Screen length: 15'

Depth of Well: 25' | Protective cap:

Filter Pack: | Material: Steel

Material: Filter Sand | Vented?: ☒ Y ☐ N | Locking?: ☒ Y ☐ N

Grain Size: #40 | Well cap:

Volume: 3.6 cu. ft. | Material: Plastic

Seal (minimum 3 ft. length above filter pack): | Vented?: ☒ Y ☐ N

Material: Bentonite chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 15.68' | **Stabilization time**: < 5 min

Well development method: Purged and surged by Roberts

Average depth of frost line: 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature [signature] **Certification #**: 11509 **Date**: 2.7.22

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

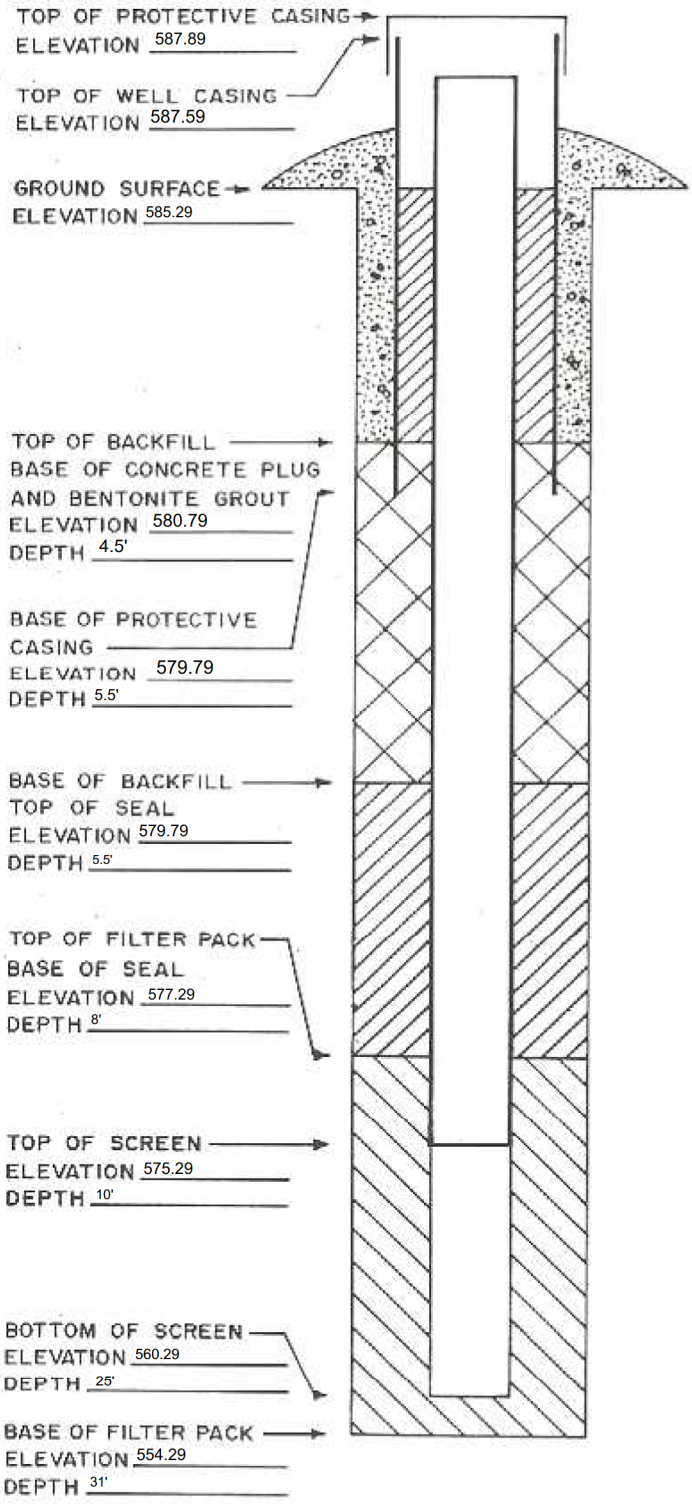
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station | Permit No.: 60483

Well or Piezometer No.: MW-312 | Dates Started: 2/13/2023 | Date Completed: 2/20/2023

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: East parcel 8071850000 | Distance and direction along boundary: 546' south

Distance and direction from boundary to surface monitoring well: 1136' west

Elevation (+0.01 ft. MSL): 591.66

Ground Surface: 591.66 | Top of protective casing: 594.42

Top of well casing: 594.28 | Benchmark elevation:

Benchmark description:

B. SOIL BORING INFORMATION

Construction Company Name: Cascade Environmental

Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI 54476

Name of driller: Adam Jochimsen

Drilling method: Sonic | Drilling fluid: Water | Bore Hole diameter: 6"

Soil sampling method: Grab/Bagged | Depth of boring: 66'

C. MONITORING WELL INSTALLATION

Casing material: PVC | Placement method: Gravity

Length of casing: 58' | Volume: 0.5 cu ft

Outside casing diameter: 2.37 | Backfill (if different from seal):

Inside casing diameter: 2.01 | Material: Grout

Casing joint type: Threaded | Placement method: Tremie

Casing/screen joint type: Threaded | Volume: 50 gallons

Screen material: PVC | Surface seal design:

Screen opening size: 0.010" | Material of protective casing: Steel

Material of grout between protective casing and well casing: Filter Sand

Screen length: 5'

Depth of Well: 63' | Protective cap: Yes

Filter Pack: | Material: Aluminum

Material: Sand | Vented?: ☐ Y ☒ N | Locking?: ☒ Y ☐ N

Grain Size: Red Flint #40 | Well cap: Yes

Volume: 2 cu ft | Material: Plastic

Seal (minimum 3 ft. length above filter pack): | Vented?: ☐ Y ☒ N

Material: 3/8" Bentonite Chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 21.75 | **Stabilization time**:

Well development method: Surge and Purge with Pump

Average depth of frost line:

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature | **Certification #**: 9361 | **Date**: 2-20-2023

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

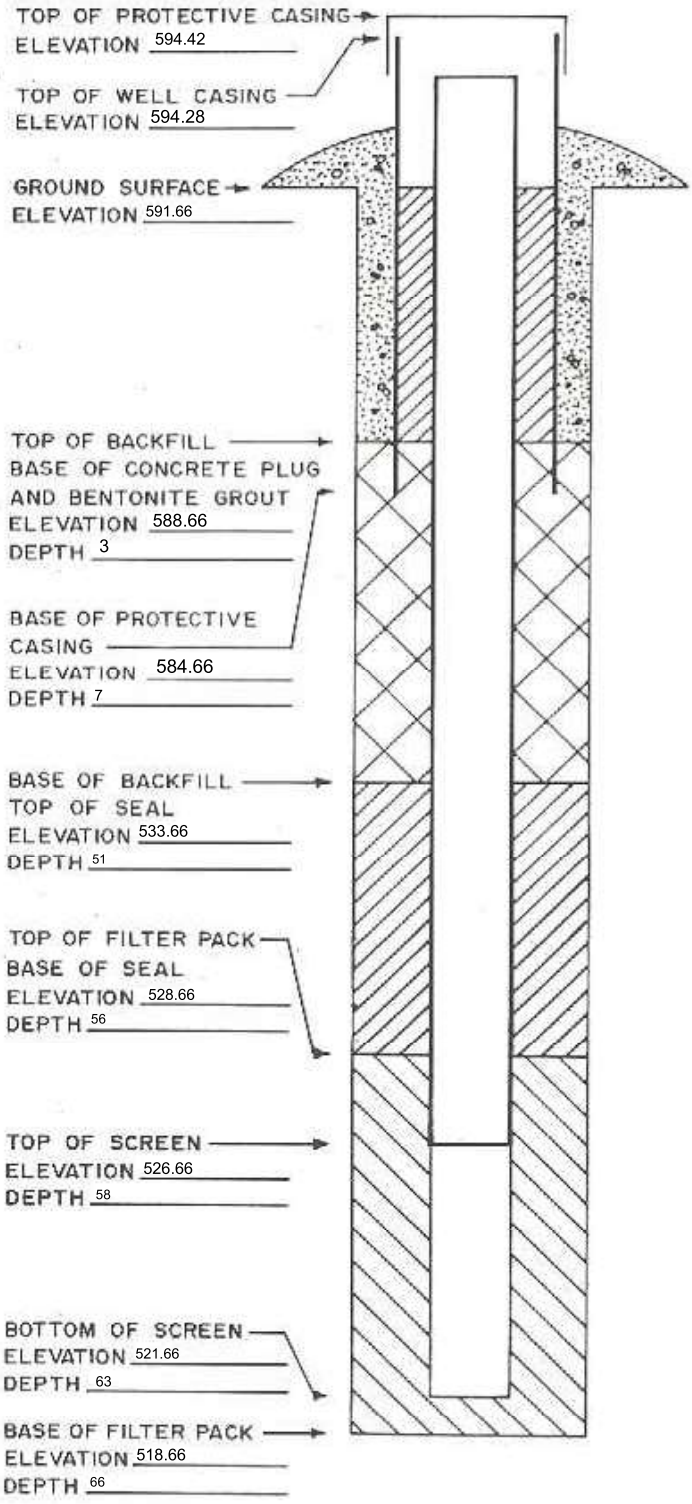
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: M.L. Kapp Generating Station | Permit No.: 60483

Well or Piezometer No.: MW-313 | Dates Started: 2/20/2023 | Date Completed: 2/20/2023

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site: Inside ROW NW SE 22-81-06 | Distance and direction along boundary: 236' north NW 1/4 SE 1/4

Distance and direction from boundary to surface monitoring well: 593' east NW 1/4 SE 1/4

Elevation (+0.01 ft. MSL): 588.65

Ground Surface: 588.65 | Top of protective casing: 588.73

Top of well casing: 588.24 | Benchmark elevation:

Benchmark description:

B. SOIL BORING INFORMATION

Construction Company Name: Cascade Environmental

Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI 54476

Name of driller: Adam Jochimsen

Drilling method: Sonic | Drilling fluid: Water | Bore Hole diameter: 6"

Soil sampling method: Grab/Bagged | Depth of boring: 27'

C. MONITORING WELL INSTALLATION

Casing material: PVC | Placement method: Gravity

Length of casing: 16' | Volume: 2 cu ft

Outside casing diameter: 2.37 | Backfill (if different from seal): N/A

Inside casing diameter: 2.01 | Material:

Casing joint type: Threaded | Placement method:

Casing/screen joint type: Threaded | Volume:

Screen material: PVC | Surface seal design:

Screen opening size: 0.010" | Material of protective casing: Steel

Material of grout between protective casing and well casing: Filter Sand

Screen length: 10'

Depth of Well: 26' | Protective cap: Yes

Filter Pack: | Material: Steel

Material: Sand | Vented?: ☐ Y ☒ N | Locking?: ☒ Y ☐ N

Grain Size: Red Flint #40 | Well cap: Yes

Volume: 2.5 cu ft | Material: Plastic

Seal (minimum 3 ft. length above filter pack): | Vented?: ☐ Y ☒ N

Material: 3/8" Bentonite Chips

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 14.70 | **Stabilization time**:

Well development method: Surge and Purge with Pump

Average depth of frost line:

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature: [signature] | **Certification #**: 9361 | **Date**: 2-20-2023

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 ½ inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

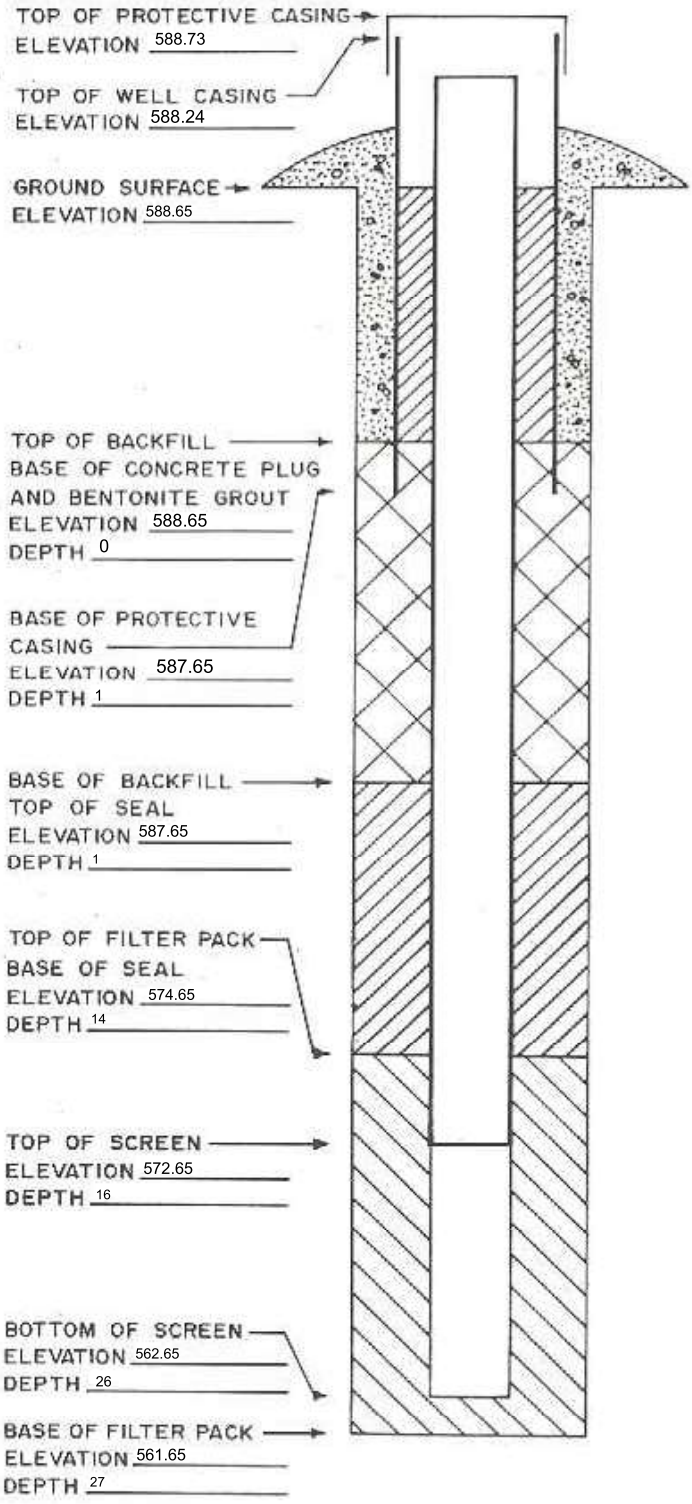
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/02/2025 - Classification: Internal - ECRM13574470

ELEVATIONS: ± 0.01 FT. MSL

DEPTHS: ± 0.1 FT. FROM GROUND SERFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).



09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: ML Kapp Permit No.: 1771

Well/Piezometer No.: MW-314A Date Started: 02/27/2024 Date Completed: 02/28/2024

Applicable Requirements[1]: ☐ 567 IAC 113 ☐ 567 IAC 115 ☐ Site Permit ☐ 567 IAC 114 ☐ 567 IAC 139 ☐ Other:

A. SURVEYED LOCATION[2] AND ELEVATION OF POINT

Elevations (MSL): Ground Surface: 582.79 Top of Protective Casing: 585.32

Top of Well Casing: 585.20

Site Coordinates: Northing: 675154.147 Easting: 2529658.55

World Coordinates: Latitude: 41.80729° Longitude: 90.23763°

Elevation and Coordinate Systems: H: IOWA STATE PLANE COOR V: NAVD 1988

B. SOIL BORING INFORMATION

Certified Well Contractor Cascade

Address 301 Alderson St. City, State, Zip Code Schofield, WI 54476

Name of driller Paul Dickinson Cert No. 9361

Drilling method Rotosonic Drilling fluid Water Bore hole diameter 6"

Soil sampling method Bag Depth of boring 51'

C. MONITORING WELL INSTALLATION

Casing material: Sch. 40 PVC

Length of casing: 47'

Casing diameter: 2"

Casing joint type: Threaded

Casing/screen joint type: Threaded

Screen material: Sch. 40 PVC

Screen opening size: 10 slot

Screen length: 5'

Depth of Well: 49'

Filter Pack: 51'-41'

Material: Red Flint Filter and Industrial Sand

Grain Size: 40

Quantity: 50 lbs bag (x4)

Seal (minimum 3 ft. length above filter pack): 41'-35'

Material: 3/8 Bentonite Chips

Placement method: Gravity

Quantity: 50 lbs bag (x6)

Backfill (if different from seal): 35'-0.5'

Material: Bentonite grout (Quick Gel)

Placement method: Tremie pipe

Quantity: 50 lbs bag (x4)

Surface seal design: Concrete

Material of protective casing: Steel

Material of grout between protective casing and well casing: Bentonite grout

Protective cap: Yes

Material: Steel

Vented?: ☒ Y ☐ N Locking?: ☒ Y ☐ N

Well cap: Yes

Material: Rubber

Vented?: ☐ Y ☒ N

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level 12.44' Stabilization time < 5 minutes

Well development method 10 well volume purge while surging mega monsoon or until well goes clear

Average depth of frost line 4.5'

[1] Refer to the site's permit to determine applicable requirements. Note that some sites may only be regulated by their permit versus current landfill chapters. If the permit and rule are silent regarding applicable requirements, then 567 IAC Chapter 39 shall apply, which requires use of the Well Log (Well Record) Form, not this form. If the applicable requirements have been modified and approved by the DNR, then note under Other.

[2] The location does not need to be surveyed by a licensed surveyor. A handheld GPS reading accurate to +/- 30 feet is acceptable when an aerial photograph showing the location (pin) is included with this form. The site coordinates should be the same coordinate system currently used for survey control and mapping of the site.

09/02/2025 - Classification: Internal - ECRM13574470

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature Paul Dickinson **Certification #** 9361 **Date** 2/28/2024

Note: Attach well log, boring log, and map showing new monitoring well/piezometer location in relation to existing wells or piezometers.

Complete one form for each well plugged and submit within 30 days to the local county agent, DNR project officer, and Erik Day with the DNR's Water Supply Section at erik.day@dnr.iowa.gov. DNR prefers that the forms be completed and submitted electronically.

09/02/2025 - Classification: Internal - ECRM13574470

Well and Boring Logs

Elevations: ±0.01 ft. MSL

Depths: ±0.1 ft from Ground Surface

Top of protective casing (TOP)
Elevation C 585.32
Top of Well Casing (TOC)
Elevation B 585.2
Ground surface (GS)
Elevation A 582.79
Depth Use 0

Top of backfill
Base of concrete plug and bentonite grout
Elevation A-W 582.29
Depth W 0.5

Base of Protective Casing
Elevation C-A = 577.32
Depth PC-C-A = 5'

Base of Backfill, Top of Seal
Elevation A-X = 547.79
Depth X 35'

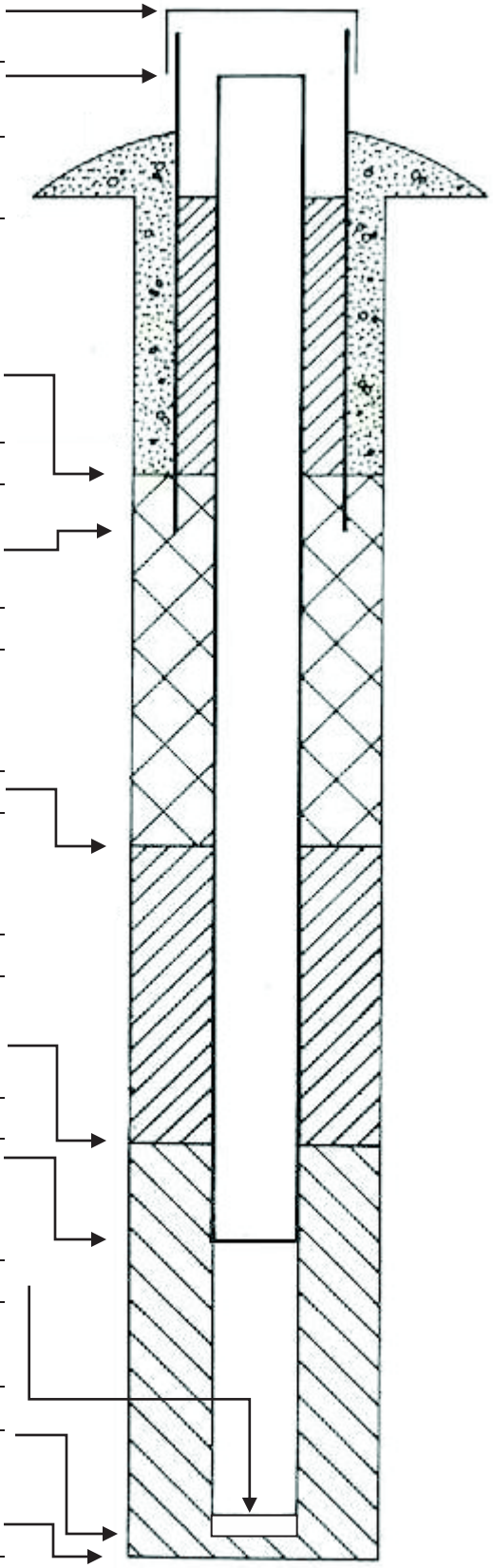
Top of Filter Pack, Base of Seal
Elevation A-Y = 541.79
Depth Y 41'

Top of Screen (TOS)
Elevation B-TD-S-WP = 538.79
Depth A-TOS^{elev} = 44'

Bottom of Screen (BOS)
Elevation B-TD-WP = 533.79
Depth A-BOS^{elev} = 49'

Bottom of Well
Elevation 533.79
Depth 49'

Bottom of Filter Pack
Elevation A-Z = 531.79
Depth Z 51'



Required Data:

- Elevations for A, B, and C shall be surveyed.
- Depths for W, X, Y, and Z shall be field measured following completion of each item.
- Lengths of the Protective Casing (PC), Screen (S), and Well Point (WP) shall be field measured prior to installation of each item.
- The total Depth (TD) from the Top of Well Casing to the Bottom of Well Point shall be field measured following installation.

PC: 8 S: 5
WP: 49 TD: 51

09/02/2025 - Classification: Internal - ECRM13574470

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: ML Kapp | Permit No.: 1771

Well/Piezometer No.: MW-314 | Date Started: 02/27/2024 | Date Completed: 02/27/2024

Applicable Requirements[1]: ☐ 567 IAC 113 ☐ 567 IAC 115 ☐ Site Permit ☐ 567 IAC 114 ☐ 567 IAC 139 ☐ Other:

A. SURVEYED LOCATION[2] AND ELEVATION OF POINT

Elevations (MSL): Ground Surface: 582.94 | Top of Protective Casing: 585.42

Top of Well Casing: 585.13

Site Coordinates: Northing: 675154.877 | Easting: 2529666.27

World Coordinates: Latitude: 41.80729° | Longitude: 90.23760°

Elevation and Coordinate Systems: H: IOWA STATE PLANE COOR V: NAVD 1988

B. SOIL BORING INFORMATION

Certified Well Contractor: Cascade

Address: 301 Alderson St. | City, State, Zip Code: Schofield, WI 54476

Name of driller: Paul Dickinson | Cert No.: 9361

Drilling method: Rotosonic | Drilling fluid: Water | Bore hole diameter: 6"

Soil sampling method: Bag | Depth of boring: 21'

C. MONITORING WELL INSTALLATION

Casing material: Sch. 40 PVC

Length of casing: 10'

Casing diameter: 2"

Casing joint type: Threaded

Casing/screen joint type: Threaded

Screen material: Sch. 40 PVC

Screen opening size: 10 slot

Screen length: 10'

Depth of Well: 17'

Filter Pack: 18'-6'

Material: Red Flint Filter and Industrial Sand

Grain Size: 40

Quantity: 50 lbs bag (x6)

Seal (minimum 3 ft. length above filter pack): 6'-surface

Material: 3/8/ Bentonite Chips

Placement method: Gravity

Quantity: 50 lbs bag (x4)

Backfill (if different from seal):

Material:

Placement method:

Quantity:

Surface seal design: Concrete

Material of protective casing: Steel

Material of grout between protective casing and well casing: 3/8 Bentonite Chips

Protective cap: Yes

Material: Steel

Vented?: ☒ Y ☐ N Locking?: ☒ Y ☐ N

Well cap: Yes

Material: Rubber

Vented?: ☐ Y ☒ N

D. GROUNDWATER MEASUREMENT (±0.01 foot below top of inner well casing)

Water level: 9.8' | Stabilization time: < 5 minutes

Well development method: 10 well volume purge while surging mega monsoon or until well goes clear

Average depth of frost line: 4.5'

[1] Refer to the site's permit to determine applicable requirements. Note that some sites may only be regulated by their permit versus current landfill chapters. If the permit and rule are silent regarding applicable requirements, then 567 IAC Chapter 39 shall apply, which requires use of the Well Log (Well Record) Form, not this form. If the applicable requirements have been modified and approved by the DNR, then note under Other.

[2] The location does not need to be surveyed by a licensed surveyor. A handheld GPS reading accurate to +/- 30 feet is acceptable when an aerial photograph showing the location (pin) is included with this form. The site coordinates should be the same coordinate system currently used for survey control and mapping of the site.

09/02/2025 - Classification: Internal - ECRM13574470

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature Paul Dickinson **Certification #** 9361 **Date** 2/28/2024

Note: Attach well log, boring log, and map showing new monitoring well/piezometer location in relation to existing wells or piezometers.

Complete one form for each well plugged and submit within 30 days to the local county agent, DNR project officer, and Erik Day with the DNR's Water Supply Section at erik.day@dnr.iowa.gov. DNR prefers that the forms be completed and submitted electronically.

09/02/2025 - Classification: Internal - ECRM13574470

Well and Boring Logs

Elevations: ±0.01 ft. MSL

Depths: ±0.1 ft from Ground Surface

Top of protective casing (TOP)
Elevation C 585.42
Top of Well Casing (TOC)
Elevation B 585.13
Ground surface (GS)
Elevation A 582.94
Depth Use 0

Top of backfill
Base of concrete plug and bentonite grout
Elevation A-W 582.44
Depth W 0.5

Base of Protective Casing
Elevation C-A = 577.94
Depth PC-C-A = 5'

Base of Backfill, Top of Seal
Elevation A-X = 576.94
Depth X 6'

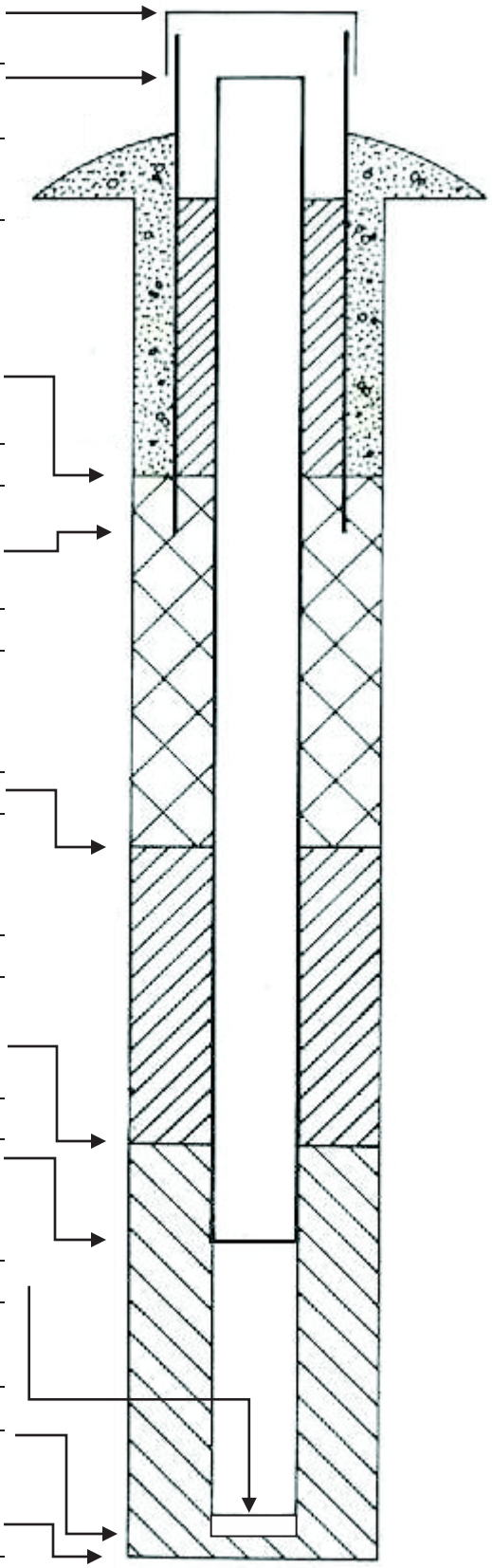
Top of Filter Pack, Base of Seal
Elevation A-Y = 576.94
Depth Y 6'

Top of Screen (TOS)
Elevation B-TD-S-WP = 575.94
Depth A-TOS^{elev} = 7'

Bottom of Screen (BOS)
Elevation B-TD-WP = 565.94
Depth A-BOS^{elev} = 17'

Bottom of Well
Elevation 565.94
Depth 17'

Bottom of Filter Pack
Elevation A-Z = 564.94
Depth Z 18'



Required Data:

- Elevations for A, B, and C shall be surveyed.
- Depths for W, X, Y, and Z shall be field measured following completion of each item.
- Lengths of the Protective Casing (PC), Screen (S), and Well Point (WP) shall be field measured prior to installation of each item.
- The total Depth (TD) from the Top of Well Casing to the Bottom of Well Point shall be field measured following installation.

PC: 8 S: 10
WP: 17 TD: 18

09/02/2025 - Classification: Internal - ECRM13574470

Appendix C

Laboratory Reports

09/02/2025 - Classification: Internal - ECRM13574470

C1 April/May 2024 Assessment Monitoring

09/02/2025 - Classification: Internal - ECRM13574470

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

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JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-280481-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Job Notes

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

Authorization



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Revision 1

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job Narrative
310-280481-1

Revision
The report being provided is a revision of the original report sent on 6/3/2024. The report (revision 1) is being revised due to: Client requested sample results be split among multiple reports.

Receipt
The samples were received on 5/3/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 1.5º C and 2.4º C.

HPLC/IC
Methods 300.0, 9056A: The following samples were diluted due to the nature of the sample matrix: MW-301 (310-280481-1), MW-302 (310-280481-2), MW-303 (310-280481-3), MW-304 (310-280481-4), MW-305 (310-280481-6) and MW-306 (310-280481-7). Elevated reporting limits (RLs) are provided.

Method 9056A: The following sample was diluted due to the nature of the sample matrix: MW-307 (310-280481-8). Elevated reporting limits (RLs) are provided.

Method 9056A: The following sample was diluted due to the nature of the sample matrix: MW-310 (310-280481-11). 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.

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

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

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-280481-1	MW-301	Water	04/30/24 16:30	05/03/24 16:40
310-280481-2	MW-302	Water	04/30/24 14:10	05/03/24 16:40
310-280481-3	MW-303	Water	04/30/24 13:25	05/03/24 16:40
310-280481-4	MW-304	Water	04/30/24 11:20	05/03/24 16:40
310-280481-5	MW-304A	Water	04/30/24 12:15	05/03/24 16:40
310-280481-6	MW-305	Water	04/30/24 10:10	05/03/24 16:40
310-280481-7	MW-306	Water	04/30/24 15:05	05/03/24 16:40
310-280481-8	MW-307	Water	05/02/24 09:20	05/03/24 16:40
310-280481-9	MW-308	Water	05/01/24 15:25	05/03/24 16:40
310-280481-10	MW-309	Water	05/01/24 14:25	05/03/24 16:40
310-280481-11	MW-310	Water	05/01/24 16:20	05/03/24 16:40
310-280481-15	MW-313	Water	05/01/24 09:25	05/03/24 16:40
310-280481-18	Field Blank	Water	05/02/24 00:00	05/03/24 16:40

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-301 — Lab Sample ID: 310-280481-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	95		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	130		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	0.57	J	2.0	0.53	ug/L	1		6020B	Total/NA
Barium	64		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	8000		400	300	ug/L	4		6020B	Total/NA
Cadmium	0.46		0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	140		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	4.3		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	660		100	36	ug/L	1		6020B	Total/NA
Lithium	6.3	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	530		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	650		50	42	mg/L	1		SM 2540C	Total/NA
pH	6.9	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	577.11				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	103.4				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.26				mg/L	1		Field Sampling	Total/NA
Field pH	6.47				SU	1		Field Sampling	Total/NA
Field Conductivity	1258				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.6				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	19.01				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-302 — Lab Sample ID: 310-280481-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.7		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	280		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	9.1		2.0	0.53	ug/L	1		6020B	Total/NA
Barium	78		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	6100		400	300	ug/L	4		6020B	Total/NA
Calcium	130		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	0.26	J	0.50	0.17	ug/L	1		6020B	Total/NA
Iron	55	J	100	36	ug/L	1		6020B	Total/NA
Lithium	28		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	150		2.0	1.3	ug/L	1		6020B	Total/NA
Selenium	5.7		5.0	1.4	ug/L	1		6020B	Total/NA
Total Dissolved Solids	650		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.4	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	576.29				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	41.5				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.69				mg/L	1		Field Sampling	Total/NA
Field pH	7.04				SU	1		Field Sampling	Total/NA
Field Conductivity	1115				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.7				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	28.45				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-303 — Lab Sample ID: 310-280481-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	400		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	15		2.0	0.53	ug/L	1		6020B	Total/NA
Barium	72		2.0	0.66	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-303 (Continued) — Lab Sample ID: 310-280481-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	5600		400	300	ug/L	4		6020B	Total/NA
Cadmium	0.10	J	0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	140		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	1.1		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	9800		100	36	ug/L	1		6020B	Total/NA
Lithium	59		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	170		2.0	1.3	ug/L	1		6020B	Total/NA
Selenium	1.5	J	5.0	1.4	ug/L	1		6020B	Total/NA
Total Dissolved Solids	830		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	578.28				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-27.1				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.23				mg/L	1		Field Sampling	Total/NA
Field pH	6.76				SU	1		Field Sampling	Total/NA
Field Conductivity	1518				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	28.42				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-304 — Lab Sample ID: 310-280481-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	410		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	3.9		2.0	0.53	ug/L	1		6020B	Total/NA
Barium	110		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	11000		400	300	ug/L	4		6020B	Total/NA
Cadmium	0.35		0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	140		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	1.1		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	780		100	36	ug/L	1		6020B	Total/NA
Lithium	2.6	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	820		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	860		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	576.55				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	7.6				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.18				mg/L	1		Field Sampling	Total/NA
Field pH	6.67				SU	1		Field Sampling	Total/NA
Field Conductivity	1440				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.0				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	16.08				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-304A — Lab Sample ID: 310-280481-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3	J	2.0	0.53	ug/L	1		6020B	Total/NA
Iron	420		100	36	ug/L	1		6020B	Total/NA
Molybdenum	3.5		2.0	1.3	ug/L	1		6020B	Total/NA
Groundwater Elevation	576.81				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	2.8				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.27				mg/L	1		Field Sampling	Total/NA
Field pH	6.93				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-304A (Continued) — Lab Sample ID: 310-280481-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field Conductivity	785				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.6				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	16.08				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-305 — Lab Sample ID: 310-280481-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	850		20	8.4	mg/L	20		9056A	Total/NA
Arsenic	1.8	J	2.0	0.53	ug/L	1		6020B	Total/NA
Barium	110		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	19000		700	530	ug/L	7		6020B	Total/NA
Cadmium	0.24		0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	260		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	1.1		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	1600		100	36	ug/L	1		6020B	Total/NA
Lithium	29		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	490		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	1500		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.3	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	576.68				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-33.6				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.32				mg/L	1		Field Sampling	Total/NA
Field pH	6.93				SU	1		Field Sampling	Total/NA
Field Conductivity	2308				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	24.90				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-306 — Lab Sample ID: 310-280481-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	180		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	160		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	81		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	8900		400	300	ug/L	4		6020B	Total/NA
Calcium	210		0.50	0.19	mg/L	1		6020B	Total/NA
Lithium	54		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	8.6		2.0	1.3	ug/L	1		6020B	Total/NA
Selenium	4.0	J	5.0	1.4	ug/L	1		6020B	Total/NA
Total Dissolved Solids	990		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	575.35				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	104.6				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.83				mg/L	1		Field Sampling	Total/NA
Field pH	6.65				SU	1		Field Sampling	Total/NA
Field Conductivity	1921				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.1				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	22.99				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-307 — Lab Sample ID: 310-280481-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	81		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	17		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	1.0	J	2.0	0.53	ug/L	1		6020B	Total/NA
Barium	280		2.0	0.66	ug/L	1		6020B	Total/NA
Cadmium	0.20		0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	240		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	3.0		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	450		100	36	ug/L	1		6020B	Total/NA
Total Dissolved Solids	870		50	42	mg/L	1		SM 2540C	Total/NA
pH	6.8	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	593.40				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	85.1				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.30				mg/L	1		Field Sampling	Total/NA
Field pH	6.43				SU	1		Field Sampling	Total/NA
Field Conductivity	2140				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	10.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	12.71				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-308 — Lab Sample ID: 310-280481-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	88	J	100	36	ug/L	1		6020B	Total/NA
Groundwater Elevation	577.17				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	30.8				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.35				mg/L	1		Field Sampling	Total/NA
Field pH	6.44				SU	1		Field Sampling	Total/NA
Field Conductivity	1037				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	14.12				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-309 — Lab Sample ID: 310-280481-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2	J	2.0	0.53	ug/L	1		6020B	Total/NA
Iron	31000		100	36	ug/L	1		6020B	Total/NA
Groundwater Elevation	574.40				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-117.9				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.24				mg/L	1		Field Sampling	Total/NA
Field pH	6.74				SU	1		Field Sampling	Total/NA
Field Conductivity	1324				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	7.69				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-310 — Lab Sample ID: 310-280481-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	71	F1	5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	110		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	36		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	880		100	76	ug/L	1		6020B	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	0.26	J	0.50	0.17	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-310 (Continued) — Lab Sample ID: 310-280481-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	3.4	J	10	2.5	ug/L	1		6020B	Total/NA
Total Dissolved Solids	680		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	589.12				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	35.5				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.57				mg/L	1		Field Sampling	Total/NA
Field pH	6.88				SU	1		Field Sampling	Total/NA
Field Conductivity	1324				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.4				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	12.98				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-313 — Lab Sample ID: 310-280481-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	58		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	8.7		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	1.8	J	2.0	0.53	ug/L	1		6020B	Total/NA
Calcium	61		0.50	0.19	mg/L	1		6020B	Total/NA
Iron	120		100	36	ug/L	1		6020B	Total/NA
Magnesium	25000		500	150	ug/L	1		6020B	Total/NA
Manganese	21		10	3.6	ug/L	1		6020B	Total/NA
Potassium	3000		500	150	ug/L	1		6020B	Total/NA
Sodium	74000		1000	480	ug/L	1		6020B	Total/NA
Bicarbonate Alkalinity as CaCO3	330		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3	330		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Groundwater Elevation	575.00				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	144.2				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.61				mg/L	1		Field Sampling	Total/NA
Field pH	7.16				SU	1		Field Sampling	Total/NA
Field Conductivity	877				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	9.9				NTU	1		Field Sampling	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 310-280481-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.0	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-301
Date Collected: 04/30/24 16:30
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-1
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95		5.0	2.3	mg/L			05/08/24 19:57	5
Fluoride	<0.38		1.0	0.38	mg/L			05/08/24 19:57	5
Sulfate	130		5.0	2.1	mg/L			05/08/24 19:57	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:09	1
Arsenic	0.57	J	2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:09	1
Barium	64		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:09	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:09	1
Boron	8000		400	300	ug/L		05/07/24 09:00	05/10/24 16:03	4
Cadmium	0.46		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:09	1
Calcium	140		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:09	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:09	1
Cobalt	4.3		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:09	1
Iron	660		100	36	ug/L		05/07/24 09:00	05/09/24 20:09	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:09	1
Lithium	6.3	J	10	2.5	ug/L		05/07/24 09:00	05/09/24 20:09	1
Molybdenum	530		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:09	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:09	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	650		50	42	mg/L			05/06/24 16:31	1
pH (SM 4500 H+ B)	6.9	HF	1.0	1.0	SU			05/03/24 17:28	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.183		0.109	0.110	1.00	0.138	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*83.1*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.609		0.402	0.405	1.00	0.596	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*83.1*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*81.9*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-301

Date Collected: 04/30/24 16:30
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-1

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.792		0.417	0.420	5.00	0.596	pCi/L		06/03/24 14:25	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	577.11				ft			04/30/24 16:30	1
Oxidation Reduction Potential	103.4				mV			04/30/24 16:30	1
Oxygen, Dissolved	0.26				mg/L			04/30/24 16:30	1
Field pH	6.47				SU			04/30/24 16:30	1
Field Conductivity	1258				umhos/cm			04/30/24 16:30	1
Field Temperature	12.6				Degrees C			04/30/24 16:30	1
Field Turbidity	19.01				NTU			04/30/24 16:30	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-302
Date Collected: 04/30/24 14:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-2
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.7**		5.0	2.3	mg/L			05/08/24 20:09	5
Fluoride	<0.38		1.0	0.38	mg/L			05/08/24 20:09	5
Sulfate	**280**		5.0	2.1	mg/L			05/08/24 20:09	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:28	1
Arsenic	**9.1**		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:28	1
Barium	**78**		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:28	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:28	1
Boron	**6100**		400	300	ug/L		05/07/24 09:00	05/10/24 16:14	4
Cadmium	<0.10		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:28	1
Calcium	**130**		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:28	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:28	1
Cobalt	**0.26**	**J**	0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:28	1
Iron	**55**	**J**	100	36	ug/L		05/07/24 09:00	05/09/24 20:28	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:28	1
Lithium	**28**		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:28	1
Molybdenum	**150**		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:28	1
Selenium	**5.7**		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:28	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11	F2 F1	0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**650**		50	42	mg/L			05/06/24 16:31	1
pH (SM 4500 H+ B)	**7.4**	**HF**	1.0	1.0	SU			05/03/24 17:38	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0795	U	0.0694	0.0698	1.00	0.0984	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*93.3*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	**0.545**		0.360	0.364	1.00	0.536	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*93.3*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*83.0*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-302

Date Collected: 04/30/24 14:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-2

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.624		0.367	0.371	5.00	0.536	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	576.29				ft			04/30/24 14:10	1
Oxidation Reduction Potential	41.5				mV			04/30/24 14:10	1
Oxygen, Dissolved	0.69				mg/L			04/30/24 14:10	1
Field pH	7.04				SU			04/30/24 14:10	1
Field Conductivity	1115				umhos/cm			04/30/24 14:10	1
Field Temperature	11.7				Degrees C			04/30/24 14:10	1
Field Turbidity	28.45				NTU			04/30/24 14:10	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-303
Date Collected: 04/30/24 13:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-3
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		5.0	2.3	mg/L			05/08/24 20:22	5
Fluoride	<0.38		1.0	0.38	mg/L			05/08/24 20:22	5
Sulfate	400		5.0	2.1	mg/L			05/08/24 20:22	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:30	1
Arsenic	15		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:30	1
Barium	72		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:30	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:30	1
Boron	5600		400	300	ug/L		05/07/24 09:00	05/10/24 16:17	4
Cadmium	0.10	J	0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:30	1
Calcium	140		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:30	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:30	1
Cobalt	1.1		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:30	1
Iron	9800		100	36	ug/L		05/07/24 09:00	05/09/24 20:30	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:30	1
Lithium	59		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:30	1
Molybdenum	170		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:30	1
Selenium	1.5	J	5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:30	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	830		50	42	mg/L			05/06/24 16:31	1
pH (SM 4500 H+ B)	7.2	HF	1.0	1.0	SU			05/03/24 17:37	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0309	U	0.0715	0.0716	1.00	0.132	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*91.3*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.324	U	0.339	0.340	1.00	0.548	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*91.3*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*82.2*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-303

Date Collected: 04/30/24 13:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-3

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.355	U	0.346	0.347	5.00	0.548	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**578.28**				ft			04/30/24 13:25	1
Oxidation Reduction Potential	**-27.1**				mV			04/30/24 13:25	1
Oxygen, Dissolved	**0.23**				mg/L			04/30/24 13:25	1
Field pH	**6.76**				SU			04/30/24 13:25	1
Field Conductivity	**1518**				umhos/cm			04/30/24 13:25	1
Field Temperature	**12.5**				Degrees C			04/30/24 13:25	1
Field Turbidity	**28.42**				NTU			04/30/24 13:25	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-304
Date Collected: 04/30/24 11:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-4
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21**		5.0	2.3	mg/L			05/08/24 20:34	5
Fluoride	<0.38		1.0	0.38	mg/L			05/08/24 20:34	5
Sulfate	**410**		5.0	2.1	mg/L			05/08/24 20:34	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:32	1
Arsenic	**3.9**		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:32	1
Barium	**110**		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:32	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:32	1
Boron	**11000**		400	300	ug/L		05/07/24 09:00	05/10/24 16:21	4
Cadmium	**0.35**		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:32	1
Calcium	**140**		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:32	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:32	1
Cobalt	**1.1**		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:32	1
Iron	**780**		100	36	ug/L		05/07/24 09:00	05/09/24 20:32	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:32	1
Lithium	**2.6**	**J**	10	2.5	ug/L		05/07/24 09:00	05/09/24 20:32	1
Molybdenum	**820**		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:32	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:32	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:32	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**860**		50	42	mg/L			05/06/24 16:31	1
pH (SM 4500 H+ B)	**7.1**	**HF**	1.0	1.0	SU			05/03/24 17:40	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	**0.159**		0.0996	0.101	1.00	0.128	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*89.1*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	-0.109	U	0.269	0.269	1.00	0.542	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*89.1*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*82.6*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-304

Date Collected: 04/30/24 11:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-4

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.159	U	0.287	0.287	5.00	0.542	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	576.55				ft			04/30/24 11:20	1
Oxidation Reduction Potential	7.6				mV			04/30/24 11:20	1
Oxygen, Dissolved	0.18				mg/L			04/30/24 11:20	1
Field pH	6.67				SU			04/30/24 11:20	1
Field Conductivity	1440				umhos/cm			04/30/24 11:20	1
Field Temperature	12.0				Degrees C			04/30/24 11:20	1
Field Turbidity	16.08				NTU			04/30/24 11:20	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-304A

Date Collected: 04/30/24 12:15
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.3	J	2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:34	1
Iron	420		100	36	ug/L		05/07/24 09:00	05/09/24 20:34	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:34	1
Molybdenum	3.5		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:34	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	576.81				ft			04/30/24 12:15	1
Oxidation Reduction Potential	2.8				mV			04/30/24 12:15	1
Oxygen, Dissolved	0.27				mg/L			04/30/24 12:15	1
Field pH	6.93				SU			04/30/24 12:15	1
Field Conductivity	785				umhos/cm			04/30/24 12:15	1
Field Temperature	12.6				Degrees C			04/30/24 12:15	1
Field Turbidity	16.08				NTU			04/30/24 12:15	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-305
Date Collected: 04/30/24 10:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-6
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		5.0	2.3	mg/L			05/08/24 20:47	5
Fluoride	<0.38		1.0	0.38	mg/L			05/08/24 20:47	5
Sulfate	850		20	8.4	mg/L			05/09/24 10:29	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:36	1
Arsenic	1.8	J	2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:36	1
Barium	110		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:36	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:36	1
Boron	19000		700	530	ug/L		05/07/24 09:00	05/10/24 16:24	7
Cadmium	0.24		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:36	1
Calcium	260		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:36	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:36	1
Cobalt	1.1		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:36	1
Iron	1600		100	36	ug/L		05/07/24 09:00	05/09/24 20:36	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:36	1
Lithium	29		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:36	1
Molybdenum	490		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:36	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:36	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:36	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	1500		50	42	mg/L			05/06/24 16:31	1
pH (SM 4500 H+ B)	7.3	HF	1.0	1.0	SU			05/03/24 17:47	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.159		0.103	0.104	1.00	0.138	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*89.8*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.820		0.381	0.389	1.00	0.506	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*89.8*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*82.2*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-305

Date Collected: 04/30/24 10:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-6

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.979		0.395	0.403	5.00	0.506	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	576.68				ft			04/30/24 10:10	1
Oxidation Reduction Potential	-33.6				mV			04/30/24 10:10	1
Oxygen, Dissolved	0.32				mg/L			04/30/24 10:10	1
Field pH	6.93				SU			04/30/24 10:10	1
Field Conductivity	2308				umhos/cm			04/30/24 10:10	1
Field Temperature	11.5				Degrees C			04/30/24 10:10	1
Field Turbidity	24.90				NTU			04/30/24 10:10	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-306

Date Collected: 04/30/24 15:05
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-7

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**180**		5.0	2.3	mg/L			05/08/24 21:00	5
Fluoride	<0.38		1.0	0.38	mg/L			05/08/24 21:00	5
Sulfate	**160**		5.0	2.1	mg/L			05/08/24 21:00	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:39	1
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:39	1
Barium	**81**		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:39	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:39	1
Boron	**8900**		400	300	ug/L		05/07/24 09:00	05/10/24 16:42	4
Cadmium	<0.10		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:39	1
Calcium	**210**		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:39	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:39	1
Cobalt	<0.17		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:39	1
Iron	<36		100	36	ug/L		05/07/24 09:00	05/09/24 20:39	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:39	1
Lithium	**54**		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:39	1
Molybdenum	**8.6**		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:39	1
Selenium	**4.0**	**J**	5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:39	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:39	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**990**		50	42	mg/L			05/06/24 16:31	1
pH (SM 4500 H+ B)	**7.1**	**HF**	1.0	1.0	SU			05/03/24 17:34	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0728	U	0.0733	0.0736	1.00	0.112	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*92.8*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	-0.253	U	0.244	0.245	1.00	0.536	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*92.8*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*81.9*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-306

Date Collected: 04/30/24 15:05
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-7

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0728	U	0.255	0.256	5.00	0.536	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	575.35				ft			04/30/24 15:05	1
Oxidation Reduction Potential	104.6				mV			04/30/24 15:05	1
Oxygen, Dissolved	1.83				mg/L			04/30/24 15:05	1
Field pH	6.65				SU			04/30/24 15:05	1
Field Conductivity	1921				umhos/cm			04/30/24 15:05	1
Field Temperature	11.1				Degrees C			04/30/24 15:05	1
Field Turbidity	22.99				NTU			04/30/24 15:05	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-307
Date Collected: 05/02/24 09:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-8
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**81**		5.0	2.3	mg/L			05/10/24 13:21	5
Fluoride	<0.38		1.0	0.38	mg/L			05/10/24 13:21	5
Sulfate	**17**		5.0	2.1	mg/L			05/10/24 13:21	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:41	1
Arsenic	**1.0**	**J**	2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:41	1
Barium	**280**		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:41	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:41	1
Boron	<76		100	76	ug/L		05/07/24 09:00	05/10/24 16:45	1
Cadmium	**0.20**		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:41	1
Calcium	**240**		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:41	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:41	1
Cobalt	**3.0**		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:41	1
Iron	**450**		100	36	ug/L		05/07/24 09:00	05/09/24 20:41	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:41	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:41	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:41	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:41	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**870**		50	42	mg/L			05/08/24 17:03	1
pH (SM 4500 H+ B)	**6.8**	**HF**	1.0	1.0	SU			05/03/24 17:32	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	**0.156**		0.0892	0.0903	1.00	0.0994	pCi/L	05/08/24 08:39	06/02/24 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*94.0*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:20*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.204	U	0.351	0.352	1.00	0.601	pCi/L	05/08/24 08:44	05/29/24 11:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*94.0*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*
Y Carrier	*80.4*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:59*	*1*

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-307

Date Collected: 05/02/24 09:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-8

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.360	U	0.362	0.363	5.00	0.601	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	593.40				ft			05/02/24 09:20	1
Oxidation Reduction Potential	85.1				mV			05/02/24 09:20	1
Oxygen, Dissolved	0.30				mg/L			05/02/24 09:20	1
Field pH	6.43				SU			05/02/24 09:20	1
Field Conductivity	2140				umhos/cm			05/02/24 09:20	1
Field Temperature	10.8				Degrees C			05/02/24 09:20	1
Field Turbidity	12.71				NTU			05/02/24 09:20	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-308

Date Collected: 05/01/24 15:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:43	1
Iron	**88**	**J**	100	36	ug/L		05/07/24 09:00	05/09/24 20:43	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:43	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:43	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**577.17**				ft			05/01/24 15:25	1
Oxidation Reduction Potential	**30.8**				mV			05/01/24 15:25	1
Oxygen, Dissolved	**1.35**				mg/L			05/01/24 15:25	1
Field pH	**6.44**				SU			05/01/24 15:25	1
Field Conductivity	**1037**				umhos/cm			05/01/24 15:25	1
Field Temperature	**11.8**				Degrees C			05/01/24 15:25	1
Field Turbidity	**14.12**				NTU			05/01/24 15:25	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-309

Date Collected: 05/01/24 14:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**	**J**	2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:45	1
Iron	**31000**		100	36	ug/L		05/07/24 09:00	05/09/24 20:45	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:45	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:45	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**574.40**				ft			05/01/24 14:25	1
Oxidation Reduction Potential	**-117.9**				mV			05/01/24 14:25	1
Oxygen, Dissolved	**0.24**				mg/L			05/01/24 14:25	1
Field pH	**6.74**				SU			05/01/24 14:25	1
Field Conductivity	**1324**				umhos/cm			05/01/24 14:25	1
Field Temperature	**11.9**				Degrees C			05/01/24 14:25	1
Field Turbidity	**7.69**				NTU			05/01/24 14:25	1

Client Sample ID: MW-310
Date Collected: 05/01/24 16:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-11
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**71**	**F1**	5.0	2.3	mg/L			05/10/24 15:34	5
Fluoride	<0.38		1.0	0.38	mg/L			05/10/24 15:34	5
Sulfate	**110**		5.0	2.1	mg/L			05/10/24 15:34	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:56	1
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:56	1
Barium	**36**		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:56	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:56	1
Boron	**880**		100	76	ug/L		05/07/24 09:00	05/10/24 16:49	1
Cadmium	<0.10		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:56	1
Calcium	**120**		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:56	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:56	1
Cobalt	**0.26**	**J**	0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:56	1
Iron	<36		100	36	ug/L		05/07/24 09:00	05/09/24 20:56	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:56	1
Lithium	**3.4**	**J**	10	2.5	ug/L		05/07/24 09:00	05/09/24 20:56	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:56	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:56	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**680**		50	42	mg/L			05/07/24 18:56	1
pH (SM 4500 H+ B)	**7.2**	**HF**	1.0	1.0	SU			05/03/24 17:33	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	**0.166**		0.0941	0.0953	1.00	0.108	pCi/L	05/08/24 08:39	06/02/24 13:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*89.8*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:21*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	**0.806**		0.397	0.404	1.00	0.544	pCi/L	05/08/24 08:44	05/29/24 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*89.8*		*30 - 110*	*05/08/24 08:44*	*05/29/24 12:00*	*1*
Y Carrier	*81.5*		*30 - 110*	*05/08/24 08:44*	*05/29/24 12:00*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-310

Date Collected: 05/01/24 16:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-11

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.972		0.408	0.415	5.00	0.544	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	589.12				ft			05/01/24 16:20	1
Oxidation Reduction Potential	35.5				mV			05/01/24 16:20	1
Oxygen, Dissolved	0.57				mg/L			05/01/24 16:20	1
Field pH	6.88				SU			05/01/24 16:20	1
Field Conductivity	1324				umhos/cm			05/01/24 16:20	1
Field Temperature	13.4				Degrees C			05/01/24 16:20	1
Field Turbidity	12.98				NTU			05/01/24 16:20	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-313

Date Collected: 05/01/24 09:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-15

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		5.0	2.3	mg/L			05/10/24 16:46	5
Sulfate	8.7		5.0	2.1	mg/L			05/10/24 16:46	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.8	J	2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:07	1
Calcium	61		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 21:07	1
Iron	120		100	36	ug/L		05/07/24 09:00	05/09/24 21:07	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 21:07	1
Magnesium	25000		500	150	ug/L		05/07/24 09:00	05/09/24 21:07	1
Manganese	21		10	3.6	ug/L		05/07/24 09:00	05/09/24 21:07	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:07	1
Potassium	3000		500	150	ug/L		05/07/24 09:00	05/09/24 21:07	1
Sodium	74000		1000	480	ug/L		05/07/24 09:00	05/09/24 21:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	330		5.0	2.5	mg/L			05/10/24 18:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.5		5.0	2.5	mg/L			05/10/24 18:59	1
Total Alkalinity as CaCO3 (SM 2320B)	330		5.0	2.5	mg/L			05/10/24 18:59	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	575.00				ft			05/01/24 09:25	1
Oxidation Reduction Potential	144.2				mV			05/01/24 09:25	1
Oxygen, Dissolved	2.61				mg/L			05/01/24 09:25	1
Field pH	7.16				SU			05/01/24 09:25	1
Field Conductivity	877				umhos/cm			05/01/24 09:25	1
Field Temperature	11.5				Degrees C			05/01/24 09:25	1
Field Turbidity	9.9				NTU			05/01/24 09:25	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: Field Blank

Date Collected: 05/02/24 00:00
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-18

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			05/10/24 17:23	1
Fluoride	<0.075		0.20	0.075	mg/L			05/10/24 17:23	1
Sulfate	<0.42		1.0	0.42	mg/L			05/10/24 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 21:14	1
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:14	1
Barium	<0.66		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 21:14	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 21:14	1
Boron	<76		100	76	ug/L		05/07/24 09:00	05/10/24 17:06	1
Cadmium	<0.10		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 21:14	1
Calcium	<0.19		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 21:14	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 21:14	1
Cobalt	<0.17		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 21:14	1
Iron	<36		100	36	ug/L		05/07/24 09:00	05/09/24 21:14	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 21:14	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 21:14	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:14	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 21:14	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 21:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<42		50	42	mg/L			05/08/24 17:03	1
pH (SM 4500 H+ B)	**7.0**	**HF**	1.0	1.0	SU			05/03/24 17:55	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	-0.0508	U	0.0560	0.0562	1.00	0.147	pCi/L	05/08/24 08:39	06/02/24 13:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.5*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:30*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	-0.138	U	0.258	0.258	1.00	0.533	pCi/L	05/08/24 08:44	05/29/24 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.5*		*30 - 110*	*05/08/24 08:44*	*05/29/24 12:00*	*1*
Y Carrier	*82.2*		*30 - 110*	*05/08/24 08:44*	*05/29/24 12:00*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: Field Blank
Date Collected: 05/02/24 00:00
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-18
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.000	U	0.264	0.264	5.00	0.533	pCi/L		06/03/24 17:21	1

Qualifiers

HPLC/IC

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

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-421204/3
Matrix: Water
Analysis Batch: 421204

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			05/08/24 16:10	1
Fluoride	<0.075		0.20	0.075	mg/L			05/08/24 16:10	1
Sulfate	<0.42		1.0	0.42	mg/L			05/08/24 16:10	1

Lab Sample ID: LCS 310-421204/4
Matrix: Water
Analysis Batch: 421204

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	9.94		mg/L		99	90 - 110
Fluoride	2.00	2.11		mg/L		105	90 - 110
Sulfate	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: MB 310-421384/3
Matrix: Water
Analysis Batch: 421384

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			05/10/24 09:17	1
Fluoride	<0.075		0.20	0.075	mg/L			05/10/24 09:17	1
Sulfate	<0.42		1.0	0.42	mg/L			05/10/24 09:17	1

Lab Sample ID: LCS 310-421384/31
Matrix: Water
Analysis Batch: 421384

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	9.66		mg/L		97	90 - 110
Fluoride	2.00	2.01		mg/L		101	90 - 110
Sulfate	10.0	9.39		mg/L		94	90 - 110

Lab Sample ID: MB 310-421417/3
Matrix: Water
Analysis Batch: 421417

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			05/10/24 15:09	1
Fluoride	<0.075		0.20	0.075	mg/L			05/10/24 15:09	1
Sulfate	<0.42		1.0	0.42	mg/L			05/10/24 15:09	1

Lab Sample ID: LCS 310-421417/4
Matrix: Water
Analysis Batch: 421417

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	9.67		mg/L		97	90 - 110
Fluoride	2.00	2.02		mg/L		101	90 - 110
Sulfate	10.0	9.39		mg/L		94	90 - 110

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

Lab Sample ID: 310-280481-11 MS
Matrix: Water
Analysis Batch: 421417

Client Sample ID: MW-310
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	71	F1	25.0	87.9	F1	mg/L		67	80 - 120
Fluoride	<0.38		5.00	5.01		mg/L		100	80 - 120
Sulfate	110		25.0	133	4	mg/L		81	80 - 120

Lab Sample ID: 310-280481-11 MSD
Matrix: Water
Analysis Batch: 421417

Client Sample ID: MW-310
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	71	F1	25.0	87.8	F1	mg/L		66	80 - 120	0	15
Fluoride	<0.38		5.00	5.00		mg/L		100	80 - 120	0	15
Sulfate	110		25.0	132	4	mg/L		81	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-420799/1-A
Matrix: Water
Analysis Batch: 421266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 20:04	1
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 20:04	1
Barium	<0.66		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 20:04	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 20:04	1
Magnesium	<150		500	150	ug/L		05/07/24 09:00	05/09/24 20:04	1
Cadmium	<0.10		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 20:04	1
Manganese	<3.6		10	3.6	ug/L		05/07/24 09:00	05/09/24 20:04	1
Calcium	<0.19		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 20:04	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 20:04	1
Potassium	<150		500	150	ug/L		05/07/24 09:00	05/09/24 20:04	1
Cobalt	<0.17		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 20:04	1
Sodium	<480		1000	480	ug/L		05/07/24 09:00	05/09/24 20:04	1
Iron	<36		100	36	ug/L		05/07/24 09:00	05/09/24 20:04	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 20:04	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 20:04	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 20:04	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 20:04	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 20:04	1

Lab Sample ID: MB 310-420799/1-A
Matrix: Water
Analysis Batch: 421418

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<76		100	76	ug/L		05/07/24 09:00	05/10/24 15:57	1

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

Lab Sample ID: LCS 310-420799/2-A
Matrix: Water
Analysis Batch: 421266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	222		ug/L		111	80 - 120
Arsenic	200	209		ug/L		105	80 - 120
Barium	100	113		ug/L		113	80 - 120
Beryllium	100	97.9		ug/L		98	80 - 120
Cadmium	100	103		ug/L		103	80 - 120
Calcium	2.00	1.87		mg/L		94	80 - 120
Chromium	100	96.0		ug/L		96	80 - 120
Cobalt	100	107		ug/L		107	80 - 120
Iron	200	221		ug/L		111	80 - 120
Lead	200	212		ug/L		106	80 - 120
Lithium	200	206		ug/L		103	80 - 120
Molybdenum	200	204		ug/L		102	80 - 120
Selenium	400	396		ug/L		99	80 - 120
Thallium	100	112		ug/L		112	80 - 120

Lab Sample ID: LCS 310-420799/2-A
Matrix: Water
Analysis Batch: 421418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	200	205		ug/L		102	80 - 120

Lab Sample ID: 310-280481-1 MS
Matrix: Water
Analysis Batch: 421266

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 420799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.0		200	221		ug/L		111	75 - 125
Arsenic	0.57	J	200	210		ug/L		105	75 - 125
Barium	64		100	174		ug/L		110	75 - 125
Beryllium	<0.33		100	101		ug/L		101	75 - 125
Magnesium	37000		2000	37800	4	ug/L		17	75 - 125
Cadmium	0.46		100	102		ug/L		102	75 - 125
Manganese	720		100	793	4	ug/L		71	75 - 125
Calcium	140		2.00	137	4	mg/L		-62	75 - 125
Chromium	<1.2		100	92.7		ug/L		93	75 - 125
Potassium	3300		2000	5340		ug/L		103	75 - 125
Cobalt	4.3		100	107		ug/L		103	75 - 125
Sodium	50000		2000	50600	4	ug/L		38	75 - 125
Iron	660		200	861		ug/L		102	75 - 125
Lead	<0.26		200	203		ug/L		102	75 - 125
Lithium	6.3	J	200	214		ug/L		104	75 - 125
Molybdenum	530		200	739		ug/L		104	75 - 125
Selenium	<1.4		400	401		ug/L		100	75 - 125
Thallium	<0.57		100	110		ug/L		110	75 - 125

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

Lab Sample ID: 310-280481-1 MS — **Client Sample ID: MW-301**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 421418 — **Prep Batch: 420799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	8000		200	8110	4	ug/L		59	75 - 125

Lab Sample ID: 310-280481-1 MSD — **Client Sample ID: MW-301**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 421266 — **Prep Batch: 420799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.0		200	221		ug/L		110	75 - 125	0	20
Arsenic	0.57	J	200	215		ug/L		107	75 - 125	2	20
Barium	64		100	174		ug/L		111	75 - 125	0	20
Beryllium	<0.33		100	102		ug/L		102	75 - 125	1	20
Magnesium	37000		2000	38200	4	ug/L		36	75 - 125	1	20
Cadmium	0.46		100	102		ug/L		102	75 - 125	0	20
Manganese	720		100	795	4	ug/L		73	75 - 125	0	20
Calcium	140		2.00	137	4	mg/L		-44	75 - 125	0	20
Chromium	<1.2		100	94.6		ug/L		95	75 - 125	2	20
Potassium	3300		2000	5260		ug/L		99	75 - 125	2	20
Cobalt	4.3		100	109		ug/L		105	75 - 125	2	20
Sodium	50000		2000	50800	4	ug/L		51	75 - 125	0	20
Iron	660		200	861		ug/L		102	75 - 125	0	20
Lead	<0.26		200	207		ug/L		104	75 - 125	2	20
Lithium	6.3	J	200	211		ug/L		103	75 - 125	1	20
Molybdenum	530		200	759		ug/L		114	75 - 125	3	20
Selenium	<1.4		400	409		ug/L		102	75 - 125	2	20
Thallium	<0.57		100	112		ug/L		112	75 - 125	2	20

Lab Sample ID: 310-280481-1 MSD — **Client Sample ID: MW-301**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 421418 — **Prep Batch: 420799**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	8000		200	8160	4	ug/L		87	75 - 125	1	20

Lab Sample ID: 310-280481-11 DU — **Client Sample ID: MW-310**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 421266 — **Prep Batch: 420799**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<1.0		<1.0		ug/L		NC	20
Arsenic	<0.53		<0.53		ug/L		NC	20
Barium	36		36.4		ug/L		2	20
Beryllium	<0.33		<0.33		ug/L		NC	20
Cadmium	<0.10		<0.10		ug/L		NC	20
Calcium	120		124		mg/L		2	20
Chromium	<1.2		<1.2		ug/L		NC	20
Cobalt	0.26	J	0.268	J	ug/L		4	20
Iron	<36		<36		ug/L		NC	20
Lead	<0.26		<0.26		ug/L		NC	20
Lithium	3.4	J	3.34	J	ug/L		3	20

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

Lab Sample ID: 310-280481-11 DU
Matrix: Water
Analysis Batch: 421266

Client Sample ID: MW-310
Prep Type: Total/NA
Prep Batch: 420799

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Molybdenum	<1.3		<1.3		ug/L		NC	20
Selenium	<1.4		<1.4		ug/L		NC	20
Thallium	<0.57		<0.57		ug/L		NC	20

Lab Sample ID: 310-280481-11 DU
Matrix: Water
Analysis Batch: 421418

Client Sample ID: MW-310
Prep Type: Total/NA
Prep Batch: 420799

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	880		890		ug/L		1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-420930/1-A
Matrix: Water
Analysis Batch: 421358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:03	1

Lab Sample ID: LCS 310-420930/2-A
Matrix: Water
Analysis Batch: 421358

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.72		ug/L		103	80 - 120

Lab Sample ID: 310-280481-2 MS
Matrix: Water
Analysis Batch: 421358

Client Sample ID: MW-302
Prep Type: Total/NA
Prep Batch: 420930

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.11	F2 F1	1.67	1.27	F1	ug/L		76	80 - 120

Lab Sample ID: 310-280481-2 MSD
Matrix: Water
Analysis Batch: 421358

Client Sample ID: MW-302
Prep Type: Total/NA
Prep Batch: 420930

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.11	F2 F1	1.67	0.708	F2 F1	ug/L		42	80 - 120	57	20

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

Lab Sample ID: MB 310-420796/1
Matrix: Water
Analysis Batch: 420796

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	<42		50	42	mg/L			05/06/24 16:31	1

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

Lab Sample ID: LCS 310-420796/2
Matrix: Water
Analysis Batch: 420796

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	982		mg/L		98	90 - 110

Lab Sample ID: MB 310-420932/1
Matrix: Water
Analysis Batch: 420932

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	<42		50	42	mg/L			05/07/24 18:56	1

Lab Sample ID: LCS 310-420932/2
Matrix: Water
Analysis Batch: 420932

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	938		mg/L		94	90 - 110

Lab Sample ID: MB 310-421072/1
Matrix: Water
Analysis Batch: 421072

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	<42		50	42	mg/L			05/08/24 17:03	1

Lab Sample ID: LCS 310-421072/2
Matrix: Water
Analysis Batch: 421072

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	942		mg/L		94	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-420673/1
Matrix: Water
Analysis Batch: 420673

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

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

Lab Sample ID: LCS 310-420673/29
Matrix: Water
Analysis Batch: 420673

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		101	98 - 102

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

Lab Sample ID: 310-280481-4 DU
Matrix: Water
Analysis Batch: 420673

Client Sample ID: MW-304
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.1	HF		7.1		SU				0.1	20

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-660604/1-A
Matrix: Water
Analysis Batch: 663738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 660604

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.2946	U	0.329	0.330	1.00	0.537	pCi/L	05/08/24 08:44	05/29/24 11:58	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*97.3*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:58*	*1*
Y Carrier	*78.9*		*30 - 110*	*05/08/24 08:44*	*05/29/24 11:58*	*1*

Lab Sample ID: LCS 160-660604/2-A
Matrix: Water
Analysis Batch: 663738

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 660604

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium 228			8.90	11.09		1.48	1.00	0.652	pCi/L	125	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Barium	*89.6*		*30 - 110*
Y Carrier	*81.5*		*30 - 110*

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

HPLC/IC

Analysis Batch: 421204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	9056A	
310-280481-2	MW-302	Total/NA	Water	9056A	
310-280481-3	MW-303	Total/NA	Water	9056A	
310-280481-4	MW-304	Total/NA	Water	9056A	
310-280481-6	MW-305	Total/NA	Water	9056A	
310-280481-6	MW-305	Total/NA	Water	9056A	
310-280481-7	MW-306	Total/NA	Water	9056A	
MB 310-421204/3	Method Blank	Total/NA	Water	9056A	
LCS 310-421204/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 421384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-8	MW-307	Total/NA	Water	9056A	
MB 310-421384/3	Method Blank	Total/NA	Water	9056A	
LCS 310-421384/31	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 421417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-11	MW-310	Total/NA	Water	9056A	
310-280481-15	MW-313	Total/NA	Water	9056A	
310-280481-18	Field Blank	Total/NA	Water	9056A	
MB 310-421417/3	Method Blank	Total/NA	Water	9056A	
LCS 310-421417/4	Lab Control Sample	Total/NA	Water	9056A	
310-280481-11 MS	MW-310	Total/NA	Water	9056A	
310-280481-11 MSD	MW-310	Total/NA	Water	9056A	

Metals

Prep Batch: 420799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	3005A	
310-280481-2	MW-302	Total/NA	Water	3005A	
310-280481-3	MW-303	Total/NA	Water	3005A	
310-280481-4	MW-304	Total/NA	Water	3005A	
310-280481-5	MW-304A	Total/NA	Water	3005A	
310-280481-6	MW-305	Total/NA	Water	3005A	
310-280481-7	MW-306	Total/NA	Water	3005A	
310-280481-8	MW-307	Total/NA	Water	3005A	
310-280481-9	MW-308	Total/NA	Water	3005A	
310-280481-10	MW-309	Total/NA	Water	3005A	
310-280481-11	MW-310	Total/NA	Water	3005A	
310-280481-15	MW-313	Total/NA	Water	3005A	
310-280481-18	Field Blank	Total/NA	Water	3005A	
MB 310-420799/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-420799/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-280481-1 MS	MW-301	Total/NA	Water	3005A	
310-280481-1 MSD	MW-301	Total/NA	Water	3005A	
310-280481-11 DU	MW-310	Total/NA	Water	3005A	

Metals

Prep Batch: 420930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	7470A	
310-280481-2	MW-302	Total/NA	Water	7470A	
310-280481-3	MW-303	Total/NA	Water	7470A	
310-280481-4	MW-304	Total/NA	Water	7470A	
310-280481-6	MW-305	Total/NA	Water	7470A	
310-280481-7	MW-306	Total/NA	Water	7470A	
310-280481-8	MW-307	Total/NA	Water	7470A	
310-280481-11	MW-310	Total/NA	Water	7470A	
310-280481-18	Field Blank	Total/NA	Water	7470A	
MB 310-420930/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-420930/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-280481-2 MS	MW-302	Total/NA	Water	7470A	
310-280481-2 MSD	MW-302	Total/NA	Water	7470A	

Analysis Batch: 421266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	6020B	420799
310-280481-2	MW-302	Total/NA	Water	6020B	420799
310-280481-3	MW-303	Total/NA	Water	6020B	420799
310-280481-4	MW-304	Total/NA	Water	6020B	420799
310-280481-5	MW-304A	Total/NA	Water	6020B	420799
310-280481-6	MW-305	Total/NA	Water	6020B	420799
310-280481-7	MW-306	Total/NA	Water	6020B	420799
310-280481-8	MW-307	Total/NA	Water	6020B	420799
310-280481-9	MW-308	Total/NA	Water	6020B	420799
310-280481-10	MW-309	Total/NA	Water	6020B	420799
310-280481-11	MW-310	Total/NA	Water	6020B	420799
310-280481-15	MW-313	Total/NA	Water	6020B	420799
310-280481-18	Field Blank	Total/NA	Water	6020B	420799
MB 310-420799/1-A	Method Blank	Total/NA	Water	6020B	420799
LCS 310-420799/2-A	Lab Control Sample	Total/NA	Water	6020B	420799
310-280481-1 MS	MW-301	Total/NA	Water	6020B	420799
310-280481-1 MSD	MW-301	Total/NA	Water	6020B	420799
310-280481-11 DU	MW-310	Total/NA	Water	6020B	420799

Analysis Batch: 421358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	7470A	420930
310-280481-2	MW-302	Total/NA	Water	7470A	420930
310-280481-3	MW-303	Total/NA	Water	7470A	420930
310-280481-4	MW-304	Total/NA	Water	7470A	420930
310-280481-6	MW-305	Total/NA	Water	7470A	420930
310-280481-7	MW-306	Total/NA	Water	7470A	420930
310-280481-8	MW-307	Total/NA	Water	7470A	420930
310-280481-11	MW-310	Total/NA	Water	7470A	420930
310-280481-18	Field Blank	Total/NA	Water	7470A	420930
MB 310-420930/1-A	Method Blank	Total/NA	Water	7470A	420930
LCS 310-420930/2-A	Lab Control Sample	Total/NA	Water	7470A	420930
310-280481-2 MS	MW-302	Total/NA	Water	7470A	420930
310-280481-2 MSD	MW-302	Total/NA	Water	7470A	420930

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Metals

Analysis Batch: 421418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	6020B	420799
310-280481-2	MW-302	Total/NA	Water	6020B	420799
310-280481-3	MW-303	Total/NA	Water	6020B	420799
310-280481-4	MW-304	Total/NA	Water	6020B	420799
310-280481-6	MW-305	Total/NA	Water	6020B	420799
310-280481-7	MW-306	Total/NA	Water	6020B	420799
310-280481-8	MW-307	Total/NA	Water	6020B	420799
310-280481-11	MW-310	Total/NA	Water	6020B	420799
310-280481-18	Field Blank	Total/NA	Water	6020B	420799
MB 310-420799/1-A	Method Blank	Total/NA	Water	6020B	420799
LCS 310-420799/2-A	Lab Control Sample	Total/NA	Water	6020B	420799
310-280481-1 MS	MW-301	Total/NA	Water	6020B	420799
310-280481-1 MSD	MW-301	Total/NA	Water	6020B	420799
310-280481-11 DU	MW-310	Total/NA	Water	6020B	420799

General Chemistry

Analysis Batch: 420673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	SM 4500 H+ B	
310-280481-2	MW-302	Total/NA	Water	SM 4500 H+ B	
310-280481-3	MW-303	Total/NA	Water	SM 4500 H+ B	
310-280481-4	MW-304	Total/NA	Water	SM 4500 H+ B	
310-280481-6	MW-305	Total/NA	Water	SM 4500 H+ B	
310-280481-7	MW-306	Total/NA	Water	SM 4500 H+ B	
310-280481-8	MW-307	Total/NA	Water	SM 4500 H+ B	
310-280481-11	MW-310	Total/NA	Water	SM 4500 H+ B	
310-280481-18	Field Blank	Total/NA	Water	SM 4500 H+ B	
LCS 310-420673/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-420673/29	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-280481-4 DU	MW-304	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 420796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	SM 2540C	
310-280481-2	MW-302	Total/NA	Water	SM 2540C	
310-280481-3	MW-303	Total/NA	Water	SM 2540C	
310-280481-4	MW-304	Total/NA	Water	SM 2540C	
310-280481-6	MW-305	Total/NA	Water	SM 2540C	
310-280481-7	MW-306	Total/NA	Water	SM 2540C	
MB 310-420796/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-420796/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 420932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-11	MW-310	Total/NA	Water	SM 2540C	
MB 310-420932/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-420932/2	Lab Control Sample	Total/NA	Water	SM 2540C	

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

General Chemistry

Analysis Batch: 421072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-8	MW-307	Total/NA	Water	SM 2540C	
310-280481-18	Field Blank	Total/NA	Water	SM 2540C	
MB 310-421072/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-421072/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 421378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-15	MW-313	Total/NA	Water	SM 2320B	

Rad

Prep Batch: 660603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	PrecSep-21	
310-280481-2	MW-302	Total/NA	Water	PrecSep-21	
310-280481-3	MW-303	Total/NA	Water	PrecSep-21	
310-280481-4	MW-304	Total/NA	Water	PrecSep-21	
310-280481-6	MW-305	Total/NA	Water	PrecSep-21	
310-280481-7	MW-306	Total/NA	Water	PrecSep-21	
310-280481-8	MW-307	Total/NA	Water	PrecSep-21	
310-280481-11	MW-310	Total/NA	Water	PrecSep-21	
310-280481-18	Field Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 660604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	PrecSep_0	
310-280481-2	MW-302	Total/NA	Water	PrecSep_0	
310-280481-3	MW-303	Total/NA	Water	PrecSep_0	
310-280481-4	MW-304	Total/NA	Water	PrecSep_0	
310-280481-6	MW-305	Total/NA	Water	PrecSep_0	
310-280481-7	MW-306	Total/NA	Water	PrecSep_0	
310-280481-8	MW-307	Total/NA	Water	PrecSep_0	
310-280481-11	MW-310	Total/NA	Water	PrecSep_0	
310-280481-18	Field Blank	Total/NA	Water	PrecSep_0	
MB 160-660604/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-660604/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 421498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-1	MW-301	Total/NA	Water	Field Sampling	
310-280481-2	MW-302	Total/NA	Water	Field Sampling	
310-280481-3	MW-303	Total/NA	Water	Field Sampling	
310-280481-4	MW-304	Total/NA	Water	Field Sampling	
310-280481-5	MW-304A	Total/NA	Water	Field Sampling	
310-280481-6	MW-305	Total/NA	Water	Field Sampling	
310-280481-7	MW-306	Total/NA	Water	Field Sampling	
310-280481-8	MW-307	Total/NA	Water	Field Sampling	
310-280481-9	MW-308	Total/NA	Water	Field Sampling	
310-280481-10	MW-309	Total/NA	Water	Field Sampling	
310-280481-11	MW-310	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 421498 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-15	MW-313	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-301
Date Collected: 04/30/24 16:30
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421204	QTZ5	EET CF	05/08/24 19:57
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		4	421418	DHM5	EET CF	05/10/24 16:03
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:09
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:13
Total/NA	Analysis	SM 2540C		1	420796	ENB7	EET CF	05/06/24 16:31
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:28
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 14:25
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 16:30

Client Sample ID: MW-302
Date Collected: 04/30/24 14:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421204	QTZ5	EET CF	05/08/24 20:09
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		4	421418	DHM5	EET CF	05/10/24 16:14
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:28
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:07
Total/NA	Analysis	SM 2540C		1	420796	ENB7	EET CF	05/06/24 16:31
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:38
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 14:10

Client Sample ID: MW-303
Date Collected: 04/30/24 13:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421204	QTZ5	EET CF	05/08/24 20:22

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-303

Date Collected: 04/30/24 13:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		4	421418	DHM5	EET CF	05/10/24 16:17
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:30
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:15
Total/NA	Analysis	SM 2540C		1	420796	ENB7	EET CF	05/06/24 16:31
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:37
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 13:25

Client Sample ID: MW-304

Date Collected: 04/30/24 11:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421204	QTZ5	EET CF	05/08/24 20:34
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		4	421418	DHM5	EET CF	05/10/24 16:21
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:32
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:22
Total/NA	Analysis	SM 2540C		1	420796	ENB7	EET CF	05/06/24 16:31
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:40
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 11:20

Client Sample ID: MW-304A

Date Collected: 04/30/24 12:15
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:34
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 12:15

Eurofins Cedar Falls

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-305
Date Collected: 04/30/24 10:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421204	QTZ5	EET CF	05/08/24 20:47
Total/NA	Analysis	9056A		20	421204	QTZ5	EET CF	05/09/24 10:29
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		7	421418	DHM5	EET CF	05/10/24 16:24
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:36
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:24
Total/NA	Analysis	SM 2540C		1	420796	ENB7	EET CF	05/06/24 16:31
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:47
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 10:10

Client Sample ID: MW-306
Date Collected: 04/30/24 15:05
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421204	QTZ5	EET CF	05/08/24 21:00
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		4	421418	DHM5	EET CF	05/10/24 16:42
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:39
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:26
Total/NA	Analysis	SM 2540C		1	420796	ENB7	EET CF	05/06/24 16:31
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:34
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	04/30/24 15:05

Client Sample ID: MW-307
Date Collected: 05/02/24 09:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421384	QTZ5	EET CF	05/10/24 13:21

Client Sample ID: MW-307

Lab Sample ID: 310-280481-8

Date Collected: 05/02/24 09:20

Matrix: Water

Date Received: 05/03/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421418	DHM5	EET CF	05/10/24 16:45
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:41
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:28
Total/NA	Analysis	SM 2540C		1	421072	ENB7	EET CF	05/08/24 17:03
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:32
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:20
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 11:59
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/02/24 09:20

Client Sample ID: MW-308

Lab Sample ID: 310-280481-9

Date Collected: 05/01/24 15:25

Matrix: Water

Date Received: 05/03/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:43
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 15:25

Client Sample ID: MW-309

Lab Sample ID: 310-280481-10

Date Collected: 05/01/24 14:25

Matrix: Water

Date Received: 05/03/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:45
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 14:25

Client Sample ID: MW-310

Lab Sample ID: 310-280481-11

Date Collected: 05/01/24 16:20

Matrix: Water

Date Received: 05/03/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421417	QTZ5	EET CF	05/10/24 15:34
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421418	DHM5	EET CF	05/10/24 16:49
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 20:56
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:31

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Client Sample ID: MW-310
Date Collected: 05/01/24 16:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	420932	D7CP	EET CF	05/07/24 18:56
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:33
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:21
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 16:20

Client Sample ID: MW-313
Date Collected: 05/01/24 09:25
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421417	QTZ5	EET CF	05/10/24 16:46
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:07
Total/NA	Analysis	SM 2320B		1	421378	WZC8	EET CF	05/10/24 18:59
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 09:25

Client Sample ID: Field Blank
Date Collected: 05/02/24 00:00
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	421417	QTZ5	EET CF	05/10/24 17:23
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421418	DHM5	EET CF	05/10/24 17:06
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:14
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:41
Total/NA	Analysis	SM 2540C		1	421072	ENB7	EET CF	05/08/24 17:03
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:55
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664291	SCB	EET SL	06/02/24 13:30
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21

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: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	05-27-24

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

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 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Pos			
Field Sampling	Field Sampling	EPA	EET CF
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:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

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310-280481 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 1 of 3
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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 2 of 3

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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.5 | Corrected Temp (°C): 1.5

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 3 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Meghan Blodgett	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin	Page: Page 1 of 2
Company: SCS Engineers	PWSID	Analysis Requested		Job #
Address: 2830 Dairy Drive	Due Date Requested			Preservation Codes
City: Madison	TAT Requested (days)			A HCL M Hexane; B NaOH N None; C Zn Acetate O AsNaO2; D Nitric Acid P Na2O4S; E NaHSO4 Q Na2SO3; F MeOH R Na2S2O3; G Amchlor S H2SO4; H Ascorbic Acid T TSP Dodecahydrate; I Ice U Acetone; J DI Water V MCAA; K EDTA W pH 4-5; L EDA Z other (specify)
State, Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			Other:
Email: mblodgett@scsengineers.com	WO #			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity						Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D	D	I	I	I	I	I							
MW-301	4/30/24	6:30	G	W	N		X				X	X	X		X								
MW-302	4/30/24	14:0	G	W	N		X				X	X	X		X								
MW-303	4/30/24	13:5	G	W	N		X				X	X	X		X								
MW-304	4/30/24	12:0	G	W	N		X				X	X	X		X								
MW-304A	4/30/24	12:5	G	W	N				X														
MW-305	4/30/24	10:0	G	W	N		X				X	X	X		X								
MW-306	4/30/24	15:0	G	W	N		X				X	X	X		X								
MW-307	5/1/24	9:20	G	W	N		X				X	X	X		X								
MW-308	5/1/24	13:5	G	W	N				X														
MW-309	5/1/24	14:5	G	W	N				X														
MW-310	5/1/24	12:0	G	W	N		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	Date/Time	Company	Received by	Date/Time	Company
Michael Mason	5/3/24	SCS	MC	5/3/24 1640	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver 01/16/2019

6/5/2024 (Rev. 1)

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Michael Mullen	Sandie Fredrick		
Client Contact: Meghan Blodgett	Phone: 55[illegible]07 5	E-Mail: Sandra.Fredrick@eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: SCS Engineers	PWSID			Job #

Address: 2830 Dairy Drive	Due Date Requested	
City: Madison	TAT Requested (days):	
State, Zip: WI 53718	Compliance Project: ☐ Yes ☒ No	
Phone: 608-224-2830	PO #: 25224077	
Email: mblodgett@scsengineers.com	WO #:	
Project Name: ML Kapp 25224077	Project #: 25224077	
Site: Clinton IA	SSOW#:	

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals Total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D		1	1	1	1	1						
MW-311	5/2/24	5	G	W	N				X													
MW-311A	5/2/24	2 05	G	W	N				X													
MW-312	5/1/24	0 20	G	W	N			X			X	X	X		X	X						
MW-313	5/1/24	9 25	G	W	N					X				X		X						
MW-314	5/1/24	2 0	G	W	N		X				X	X	X		X							
MW-314A	5/1/24	2 55	G	W	N		X				X	X	X		X							
Field Blank	5/1/24 2		G	W	N		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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Michael Mullen	5/1/24 1200	SCS			
Relinquished by	Date/Time	Company	Received by: M.L	Date/Time: 5-3-24 1646	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:

09/02/2025 - Classification: Internal - ECRM13574470

6/5/2024 (Rev. 1)

Table 1 Sampling Points and Parameters CCR Rule Sampling Program
Groundwater Mon toring M L. Kapp Ash Pond/ SCS Eng neers Project #25223077 00

		Parameter	MW-301	MW-302	MW 303	MW-304	MW-304A	MW-305	MW-306	MW-307	MW-308	MW-309	MW-310	MW-311	MW 311A	MW 312	MW 313	MW 314	MW-314A	Field Blank	TOTAL
CCR Rule Parameters	Appendix III Parameters (total/ unfiltered)	Boron	X	X	X	X		X	X	X			X			X		X	X	X	12
		Calcium	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Chloride	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		pH	X	X	X	X		X	X	X			X			X		X	X	X	12
		Sulfate	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		TDS	X	X	X	X		X	X	X			X			X		X	X	X	12
	Appendix IV Parameters (total/ unfiltered)	Antimony	X	X	X	X		X	X	X			X			X		X	X	X	12
		Arsenic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Barium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Beryllium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cadm um	X	X	X	X		X	X	X			X			X		X	X	X	12
		Chromium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cobalt	X	X	X	X		X	X	X			X			X		X	X	X	12
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lead	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lithium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Mercury	X	X	X	X		X	X	X			X			X		X	X	X	12
		Molybdenum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Selenium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Thallium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Radium	X	X	X	X		X	X	X			X			X		X	X	X	12
	Field Parameters	Groundwater Elevation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		pH (field)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Well Depth	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Specific Conductance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		ORP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Temperature	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Turbidity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Color	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Odor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
Additional Parameters	Total (Unfiltered)	Alkal nity Carbonate														X	X				2
		Alkal nity B carbonate														X	X				2
		Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Magnesium														X	X				2
		Manganese														X	X				2
		Potass um														X	X				2
		Sod um														X	X				2

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310-280481 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 1 of 3
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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 2 of 3

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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.5 | Corrected Temp (°C): 1.5

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 3 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• **Sample Container Temperature**

Container(s) used:	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (*e.g., bulging septa, broken/cracked bottles, frozen solid?*) ☐ Yes ☐ No

NOTE. If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Meghan Blodgett	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin	Page: Page 1 of 2
Company: SCS Engineers	PWSID	Analysis Requested		Job #
Address: 2830 Dairy Drive	Due Date Requested			Preservation Codes
City: Madison	TAT Requested (days)			A HCL M Hexane; B NaOH N None; C Zn Acetate O AsNaO2; D Nitric Acid P Na2O4S; E NaHSO4 Q Na2SO3; F MeOH R Na2S2O3; G Amchlor S H2SO4; H Ascorbic Acid T TSP Dodecahydrate; I Ice U Acetone; J DI Water V MCAA; K EDTA W pH 4-5; L EDA Z other (specify)
State, Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			Other:
Email: mblodgett@scsengineers.com	WO #			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity						Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D	D	I	I	I	I	I							
MW-301	4/30/24	6:30	G	W	N		X				X	X	X		X								
MW-302	4/30/24	14:0	G	W	N		X				X	X	X		X								
MW-303	4/30/24	13:5	G	W	N		X				X	X	X		X								
MW-304	4/30/24	12:0	G	W	N		X				X	X	X		X								
MW-304A	4/30/24	12:5	G	W	N				X														
MW-305	4/30/24	10:0	G	W	N		X				X	X	X		X								
MW-306	4/30/24	11:0	G	W	N		X				X	X	X		X								
MW-307	5/1/24	9:20	G	W	N		X				X	X	X		X								
MW-308	5/1/24	15:5	G	W	N				X														
MW-309	5/1/24	14:5	G	W	N				X														
MW-310	5/1/24	12:0	G	W	N		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	Date/Time	Company	Received by	Date/Time	Company
Michael Mahon	5/3/24	SCS	MC	5/3/24 1640	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver 01/16/2019

6/5/2024 (Rev. 1)

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Michael Mullen	Sandie Fredrick		
Client Contact: Meghan Blodgett	Phone: 55 [illegible] 07 8	E-Mail: Sandra.Fredrick@eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: SCS Engineers	PWSID			Job #

Address: 2830 Dairy Drive	Due Date Requested	
City: Madison	TAT Requested (days):	
State, Zip: WI 53718	Compliance Project: ☐ Yes ☒ No	
Phone: 608-224-2830	PO #: 25224077	
Email: mblodgett@scsengineers.com	WO #:	
Project Name: ML Kapp 25224077	Project #: 25224077	
Site: Clinton IA	SSOW#:	

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals Total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D		1	1	1	1	1						
MW-311	5/2/24	5	G	W	N				X													
MW-311A	5/2/24	2 05	G	W	N				X													
MW-312	5/1/24	0 20	G	W	N			X			X	X	X		X	X						
MW-313	5/1/24	9 25	G	W	N					X				X		X						
MW-314	5/1/24	2 0	G	W	N		X				X	X	X		X							
MW-314A	5/1/24	2 55	G	W	N		X				X	X	X		X							
Field Blank	5/1/24 2		G	W	N		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: Michael Mullen	Date/Time: 5/1/24 1200	Company: SCS	Received by	Date/Time: 5-3-24 1646	Company
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

6/5/2024 (Rev. 1)

09/02/2025 - Classification: Internal - ECRM13574470

6/5/2024 (Rev. 1)

Table 1 Sampling Points and Parameters CCR Rule Sampling Program
Groundwater Mon toring M L. Kapp Ash Pond/ SCS Eng neers Project #25223077 00

		Parameter	MW-301	MW-302	MW 303	MW-304	MW-304A	MW-305	MW-306	MW-307	MW-308	MW-309	MW-310	MW-311	MW 311A	MW 312	MW 313	MW 314	MW-314A	Field Blank	TOTAL
CCR Rule Parameters	Appendix III Parameters (total/ unfiltered)	Boron	X	X	X	X		X	X	X			X			X		X	X	X	12
		Calcium	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Chloride	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		pH	X	X	X	X		X	X	X			X			X		X	X	X	12
		Sulfate	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		TDS	X	X	X	X		X	X	X			X			X		X	X	X	12
	Appendix IV Parameters (total/ unfiltered)	Antimony	X	X	X	X		X	X	X			X			X		X	X	X	12
		Arsenic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Barium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Beryllium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cadm um	X	X	X	X		X	X	X			X			X		X	X	X	12
		Chromium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cobalt	X	X	X	X		X	X	X			X			X		X	X	X	12
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lead	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lithium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Mercury	X	X	X	X		X	X	X			X			X		X	X	X	12
		Molybdenum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Selenium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Thallium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Radium	X	X	X	X		X	X	X			X			X		X	X	X	12
	Field Parameters	Groundwater Elevation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		pH (field)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Well Depth	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Specific Conductance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		ORP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Temperature	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Turbidity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Color	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Odor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
Additional Parameters	Total (Unfiltered)	Alkal nity Carbonate														X	X				2
		Alkal nity B carbonate														X	X				2
		Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Magnesium														X	X				2
		Manganese														X	X				2
		Potass um														X	X				2
		Sod um														X	X				2

09/02/2025 - Classification: Internal - ECRM13574470

6/5/2024 (Rev. 1)

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 310-72062.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Iowa		Job #: 310-280481-1
Address: 13715 Rider Trail North,	Due Date Requested: 5/16/2024	Analysis Requested		Preservation Codes:
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: ML Kapp 25224077	Project #: 31011020			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Radium-226 (GFPC)	904.0/PrecSep_0 Radium-228 (GFPC)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-301 (310-280481-1)	4/30/24	16:30 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-302 (310-280481-2)	4/30/24	14:10 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-303 (310-280481-3)	4/30/24	13:25 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-304 (310-280481-4)	4/30/24	11:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-305 (310-280481-6)	4/30/24	10:10 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-306 (310-280481-7)	4/30/24	15:05 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-307 (310-280481-8)	5/2/24	09:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-310 (310-280481-11)	5/1/24	16:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-312 (310-280481-14)	5/1/24	10:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/8/24 1020	Company	Received by: Sierra Worthington	Date/Time: MAY 07 2024 1040	Company EMSL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

09/02/2025 - Classification: Internal - ECRM13574470

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 310-72062.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Iowa	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Iowa		Job #: 310-280481-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/16/2024	Analysis Requested		Preservation Codes: -
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: ML Kapp 25224077	Project #: 31011020			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Radium-226 (GFPC)	904.0/PrecSep_0 Radium-228 (GFPC)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-314 (310-280481-16)	5/1/24	12:10 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-314A (310-280481-17)	5/1/24	12:55 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
Field Blank (310-280481-18)	5/2/24	Central		Water			X	X	X	1	DO NOT SHIP ON ICE TO ST. LOUIS

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/6/24 1020		Sara Worthington	MAY 07 2024 1040	ETAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

6/5/2024 (Rev. 1)

09/02/2025 - Classification: Internal - ECRM13574470

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 310-72062.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Iowa		Job #: 310-280481-1
Address: 13715 Rider Trail North,	Due Date Requested: 5/16/2024	Analysis Requested		Preservation Codes:
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: ML Kapp 25224077	Project #: 31011020			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Radium-226 (GFPC)	904.0/PrecSep_0 Radium-228 (GFPC)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
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MW-307 (310-280481-8)	5/2/24	09:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-310 (310-280481-11)	5/1/24	16:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-312 (310-280481-14)	5/1/24	10:20 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS

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Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/8/24 1020	Company	Received by: Sierra Worthington	Date/Time: MAY 07 2024 1040	Company EMSL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

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Phone: 319-277-2401 Fax: 319-277-2425

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Address: 13715 Rider Trail North, ,	Due Date Requested: 5/16/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: ML Kapp 25224077	Project #: 31011020			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Radium-226 (GFPC)	904.0/PrecSep_0 Radium-228 (GFPC)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-314 (310-280481-16)	5/1/24	12:10 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-314A (310-280481-17)	5/1/24	12:55 Central		Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
Field Blank (310-280481-18)	5/2/24	Central		Water			X	X	X	1	DO NOT SHIP ON ICE TO ST. LOUIS

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Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/6/24 1020		Sara Worthington	MAY 07 2024 1040	ETNSL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

6/5/2024 (Rev. 1)

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-1

Login Number: 280481
List Number: 1
Creator: Costello, Mackenzie K

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-1

Login Number: 280481
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 05/07/24 02:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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?	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (30-110)
310-280481-1	MW-301	83.1
310-280481-2	MW-302	93.3
310-280481-3	MW-303	91.3
310-280481-4	MW-304	89.1
310-280481-6	MW-305	89.8
310-280481-7	MW-306	92.8
310-280481-8	MW-307	94.0
310-280481-11	MW-310	89.8
310-280481-18	Field Blank	90.5

Tracer/Carrier Legend

Ba = Barium

Method: 904.0 - 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)
310-280481-1	MW-301	83.1	81.9
310-280481-2	MW-302	93.3	83.0
310-280481-3	MW-303	91.3	82.2
310-280481-4	MW-304	89.1	82.6
310-280481-6	MW-305	89.8	82.2
310-280481-7	MW-306	92.8	81.9
310-280481-8	MW-307	94.0	80.4
310-280481-11	MW-310	89.8	81.5
310-280481-18	Field Blank	90.5	82.2
LCS 160-660604/2-A	Lab Control Sample	89.6	81.5
MB 160-660604/1-A	Method Blank	97.3	78.9

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier

Groundwater Monitoring Results - Field Parameters
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00
April 2024

Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
MW-301	4/30/2024	577.11	12.6	6.47	0.26	1,258	103.4	19.01
MW-302	4/30/2024	576.29	11.7	7.04	0.69	1,115	41.5	28.45
MW-303	4/30/2024	578.28	12.5	6.76	0.23	1,518	-27.1	28.42
MW-304	4/30/2024	576.55	12.0	6.67	0.18	1,440	7.6	16.08
MW-304A	4/30/2024	576.81	12.6	6.93	0.27	785	2.8	16.08
MW-305	4/30/2024	576.68	11.5	6.93	0.32	2,308	-33.6	24.90
MW-306	4/30/2024	575.35	11.1	6.65	1.83	1,921	104.6	22.99
MW-307	5/2/2024	593.40	10.8	6.43	0.30	2,140	85.1	12.71
MW-308	5/1/2024	577.17	11.8	6.44	1.35	1,037	30.8	14.12
MW-309	5/1/2024	574.40	11.9	6.74	0.24	1,324	-117.9	7.69
MW-310	5/1/2024	589.12	13.4	6.88	0.57	1,324	35.5	12.98
MW-311	5/2/2024	574.74	11.6	6.76	6.73	1,290	188.2	51.40
MW-311A	5/2/2024	574.78	12.8	7.39	0.30	1292	128.6	10.30
MW-312	5/1/2024	573.25	12.9	7.13	0.69	699	81.3	9.55
MW-313	5/1/2024	575.00	11.5	7.16	2.61	877	144.2	9.9
MW-314	5/1/2024	574.33	9.5	7.15	5.68	518	115.9	64.34
MW-314A	5/1/2024	574.38	11.6	7.36	1.60	2153	-69.4	163.30

Abbreviations:
mg/L = milligrams per liter
mV = millivolts
-- = not measured
amsl = above mean sea level
NS = not surveyed

Notes:
None

Created by: RM Date: 10/6/2021
Last revision by: NLB Date: 5/13/2024
Checked by: RM Date: 5/13/2024

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Groundwater Monitoring Results - Field Parameters
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00
April 2024

Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
MW-301	4/30/2024	577.11	12.6	6.47	0.26	1,258	103.4	19.01
MW-302	4/30/2024	576.29	11.7	7.04	0.69	1,115	41.5	28.45
MW-303	4/30/2024	578.28	12.5	6.76	0.23	1,518	-27.1	28.42
MW-304	4/30/2024	576.55	12.0	6.67	0.18	1,440	7.6	16.08
MW-304A	4/30/2024	576.81	12.6	6.93	0.27	785	2.8	16.08
MW-305	4/30/2024	576.68	11.5	6.93	0.32	2,308	-33.6	24.90
MW-306	4/30/2024	575.35	11.1	6.65	1.83	1,921	104.6	22.99
MW-307	5/2/2024	593.40	10.8	6.43	0.30	2,140	85.1	12.71
MW-308	5/1/2024	577.17	11.8	6.44	1.35	1,037	30.8	14.12
MW-309	5/1/2024	574.40	11.9	6.74	0.24	1,324	-117.9	7.69
MW-310	5/1/2024	589.12	13.4	6.88	0.57	1,324	35.5	12.98
MW-311	5/2/2024	574.74	11.6	6.76	6.73	1,290	188.2	51.40
MW-311A	5/2/2024	574.78	12.8	7.39	0.30	1292	128.6	10.30
MW-312	5/1/2024	573.25	12.9	7.13	0.69	699	81.3	9.55
MW-313	5/1/2024	575.00	11.5	7.16	2.61	877	144.2	9.9
MW-314	5/1/2024	574.33	9.5	7.15	5.68	518	115.9	64.34
MW-314A	5/1/2024	574.38	11.6	7.36	1.60	2153	-69.4	163.30

Abbreviations:
mg/L = milligrams per liter
mV = millivolts
-- = not measured
amsl = above mean sea level
NS = not surveyed

Notes:
None

Created by: RM Date: 10/6/2021
Last revision by: NLB Date: 5/13/2024
Checked by: RM Date: 5/13/2024

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ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Generated 6/5/2024 4:54:58 PM

JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-280481-2

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Job ID: 310-280481-2 — Eurofins Cedar Falls

Job Narrative
310-280481-2

REPORTS SPLIT AT CLIENT REQUEST

Receipt
The samples were received on 5/3/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 1.5º C and 2.4º C.

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-280481-12	MW-311	Water	05/02/24 11:15	05/03/24 16:40
310-280481-13	MW-311A	Water	05/02/24 12:05	05/03/24 16:40

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Client Sample ID: MW-311 — Lab Sample ID: 310-280481-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	40	J	100	36	ug/L	1		6020B	Total/NA
Lithium	6.7	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	21		2.0	1.3	ug/L	1		6020B	Total/NA
Groundwater Elevation	574.74				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	188.2				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	6.73				mg/L	1		Field Sampling	Total/NA
Field pH	6.76				SU	1		Field Sampling	Total/NA
Field Conductivity	1290				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.6				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	51.40				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-311A — Lab Sample ID: 310-280481-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	15		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	240		2.0	1.3	ug/L	1		6020B	Total/NA
Groundwater Elevation	574.78				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	128.6				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.30				mg/L	1		Field Sampling	Total/NA
Field pH	7.39				SU	1		Field Sampling	Total/NA
Field Conductivity	1292				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	10.30				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Client Sample ID: MW-311

Date Collected: 05/02/24 11:15
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:00	1
Iron	**40**	**J**	100	36	ug/L		05/07/24 09:00	05/09/24 21:00	1
Lithium	**6.7**	**J**	10	2.5	ug/L		05/07/24 09:00	05/09/24 21:00	1
Molybdenum	**21**		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:00	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**574.74**				ft			05/02/24 11:15	1
Oxidation Reduction Potential	**188.2**				mV			05/02/24 11:15	1
Oxygen, Dissolved	**6.73**				mg/L			05/02/24 11:15	1
Field pH	**6.76**				SU			05/02/24 11:15	1
Field Conductivity	**1290**				umhos/cm			05/02/24 11:15	1
Field Temperature	**11.6**				Degrees C			05/02/24 11:15	1
Field Turbidity	**51.40**				NTU			05/02/24 11:15	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Client Sample ID: MW-311A

Date Collected: 05/02/24 12:05
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:03	1
Iron	<36		100	36	ug/L		05/07/24 09:00	05/09/24 21:03	1
Lithium	**15**		10	2.5	ug/L		05/07/24 09:00	05/09/24 21:03	1
Molybdenum	**240**		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:03	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**574.78**				ft			05/02/24 12:05	1
Oxidation Reduction Potential	**128.6**				mV			05/02/24 12:05	1
Oxygen, Dissolved	**0.30**				mg/L			05/02/24 12:05	1
Field pH	**7.39**				SU			05/02/24 12:05	1
Field Conductivity	**1292**				umhos/cm			05/02/24 12:05	1
Field Temperature	**12.8**				Degrees C			05/02/24 12:05	1
Field Turbidity	**10.30**				NTU			05/02/24 12:05	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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 Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Metals

Prep Batch: 420799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-12	MW-311	Total/NA	Water	3005A	
310-280481-13	MW-311A	Total/NA	Water	3005A	

Analysis Batch: 421266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-12	MW-311	Total/NA	Water	6020B	420799
310-280481-13	MW-311A	Total/NA	Water	6020B	420799

Field Service / Mobile Lab

Analysis Batch: 421498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-12	MW-311	Total/NA	Water	Field Sampling	
310-280481-13	MW-311A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Client Sample ID: MW-311
Date Collected: 05/02/24 11:15
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:00
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/02/24 11:15

Client Sample ID: MW-311A
Date Collected: 05/02/24 12:05
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:03
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/02/24 12:05

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	05-27-24

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-2

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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310-280481 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 1 of 3

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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 2 of 3

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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.5 | Corrected Temp (°C): 1.5

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 3 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Meghan Blodgett	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin	Page: Page 1 of 2
Company: SCS Engineers	PWSID	Analysis Requested		Job #
Address: 2830 Dairy Drive	Due Date Requested			Preservation Codes
City: Madison	TAT Requested (days)			A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify)
State, Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity						Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D	D	I	I	I	I	I							
MW-301	4/30/24	6:30	G	W	N		X				X	X	X		X								
MW-302	4/30/24	14:0	G	W	N		X				X	X	X		X								
MW-303	4/30/24	13:45	G	W	N		X				X	X	X		X								
MW-304	4/30/24	12:0	G	W	N		X				X	X	X		X								
MW-304A	4/30/24	12:0	G	W	N				X														
MW-305	4/30/24	10:0	G	W	N		X				X	X	X		X								
MW-306	4/30/24	15:0	G	W	N		X				X	X	X		X								
MW-307	5/1/24	9:20	G	W	N		X				X	X	X		X								
MW-308	5/1/24	15:45	G	W	N				X														
MW-309	5/1/24	14:45	G	W	N				X														
MW-310	5/1/24	12:0	G	W	N		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	Date/Time	Company	Received by	Date/Time	Company
Michael Mason	5/3/24	SCS	MC	5/3/24 1640	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 01/16/2019

6/5/2024

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Michael Mullen	Sandie Fredrick		
Client Contact: Meghan Blodgett	Phone: 55[illegible]07 5	E-Mail: Sandra.Fredrick@eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: SCS Engineers	PWSID			Job #

Address: 2830 Dairy Drive	Due Date Requested	
City: Madison	TAT Requested (days):	
State, Zip: WI 53718	Compliance Project: ☐ Yes ☒ No	
Phone: 608-224-2830	PO #: 25224077	
Email: mblodgett@scsengineers.com	WO #:	
Project Name: ML Kapp 25224077	Project #: 25224077	
Site: Clinton IA	SSOW#:	

Analysis Requested

Preservation Codes

A HCL	M Hexane		
B NaOH	N None		
C Zn Acetate	O AsNaO2		
D Nitric Acid	P Na2O4S		
E NaHSO4	Q Na2SO3		
F MeOH	R Na2S2O3		
G Amchlor	S H2SO4		
H Ascorbic Acid	T TSP Dodecahydrate		
I Ice	U Acetone		
J DI Water	V MCAA		
K EDTA	W pH 4-5		
L EDA	Z other (specify)		

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals Total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note
			Preservation Code:				D	D	D	D		1	1	1	1	1						
MW-311	5/2/24	5	G	W	N				X													
MW-311A	5/2/24	2 05	G	W	N				X													
MW-312	5/1/24	0 20	G	W	N			X			X	X	X		X	X						
MW-313	5/1/24	9 25	G	W	N					X				X		X						
MW-314	5/1/24	2 0	G	W	N		X				X	X	X		X							
MW-314A	5/1/24	2 55	G	W	N		X				X	X	X		X							
Field Blank	5/1/24 2		G	W	N		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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Michael Mullen	5/1/24 1200	SCS			
Relinquished by	Date/Time	Company	Received by: M.L	5-3-24 1646	
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

09/02/2025 - Classification: Internal - ECRM13574470

Table 1 Sampling Points and Parameters CCR Rule Sampling Program
Groundwater Mon toring M L. Kapp Ash Pond/ SCS Eng neers Project #25223077 00

		Parameter	MW-301	MW-302	MW 303	MW-304	MW-304A	MW-305	MW-306	MW-307	MW-308	MW-309	MW-310	MW-311	MW 311A	MW 312	MW 313	MW 314	MW-314A	Field Blank	TOTAL
CCR Rule Parameters	Appendix III Parameters (total/ unfiltered)	Boron	X	X	X	X		X	X	X			X			X		X	X	X	12
		Calcium	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Chloride	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		pH	X	X	X	X		X	X	X			X			X		X	X	X	12
		Sulfate	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		TDS	X	X	X	X		X	X	X			X			X		X	X	X	12
	Appendix IV Parameters (total/ unfiltered)	Antimony	X	X	X	X		X	X	X			X			X		X	X	X	12
		Arsenic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Barium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Beryllium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cadm um	X	X	X	X		X	X	X			X			X		X	X	X	12
		Chromium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cobalt	X	X	X	X		X	X	X			X			X		X	X	X	12
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lead	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lithium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Mercury	X	X	X	X		X	X	X			X			X		X	X	X	12
		Molybdenum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Selenium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Thallium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Radium	X	X	X	X		X	X	X			X			X		X	X	X	12
	Field Parameters	Groundwater Elevation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		pH (field)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Well Depth	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Specific Conductance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		ORP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Temperature	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Turbidity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Color	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Odor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
Additional Parameters	Total (Unfiltered)	Alkal nity Carbonate														X	X				2
		Alkal nity B carbonate														X	X				2
		Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Magnesium														X	X				2
		Manganese														X	X				2
		Potass um														X	X				2
		Sod um														X	X				2

6/5/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-2

Login Number: 280481
List Number: 1
Creator: Costello, Mackenzie K

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Generated 6/5/2024 4:56:07 PM

JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-280481-3

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

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

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

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job Narrative
310-280481-3

REPORTS SPLIT AT CLIENT REQUEST

Receipt
The samples were received on 5/3/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 1.5º C and 2.4º C.

HPLC/IC
Method 9056A: The following samples were diluted due to the nature of the sample matrix: MW-312 (310-280481-14) and (310-280481-B-11). 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.

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

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

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-280481-14	MW-312	Water	05/01/24 10:20	05/03/24 16:40

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Client Sample ID: MW-312

Lab Sample ID: 310-280481-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	23		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	35		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	110		100	76	ug/L	1		6020B	Total/NA
Calcium	77		0.50	0.19	mg/L	1		6020B	Total/NA
Magnesium	35000		500	150	ug/L	1		6020B	Total/NA
Manganese	12		10	3.6	ug/L	1		6020B	Total/NA
Potassium	690		500	150	ug/L	1		6020B	Total/NA
Sodium	6200		1000	480	ug/L	1		6020B	Total/NA
Bicarbonate Alkalinity as CaCO3	370		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3	370		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	310		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.5	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	573.25				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	81.3				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.69				mg/L	1		Field Sampling	Total/NA
Field pH	7.13				SU	1		Field Sampling	Total/NA
Field Conductivity	699				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	12.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	9.55				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Client Sample ID: MW-312

Date Collected: 05/01/24 10:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-14

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11**		5.0	2.3	mg/L			05/10/24 16:34	5
Fluoride	<0.38		1.0	0.38	mg/L			05/10/24 16:34	5
Sulfate	**23**		5.0	2.1	mg/L			05/10/24 16:34	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		05/07/24 09:00	05/09/24 21:05	1
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:05	1
Barium	**35**		2.0	0.66	ug/L		05/07/24 09:00	05/09/24 21:05	1
Beryllium	<0.33		1.0	0.33	ug/L		05/07/24 09:00	05/09/24 21:05	1
Boron	**110**		100	76	ug/L		05/07/24 09:00	05/10/24 16:56	1
Cadmium	<0.10		0.20	0.10	ug/L		05/07/24 09:00	05/09/24 21:05	1
Calcium	**77**		0.50	0.19	mg/L		05/07/24 09:00	05/09/24 21:05	1
Chromium	<1.2		5.0	1.2	ug/L		05/07/24 09:00	05/09/24 21:05	1
Cobalt	<0.17		0.50	0.17	ug/L		05/07/24 09:00	05/09/24 21:05	1
Iron	<36		100	36	ug/L		05/07/24 09:00	05/09/24 21:05	1
Lead	<0.26		0.50	0.26	ug/L		05/07/24 09:00	05/09/24 21:05	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 21:05	1
Magnesium	**35000**		500	150	ug/L		05/07/24 09:00	05/09/24 21:05	1
Manganese	**12**		10	3.6	ug/L		05/07/24 09:00	05/09/24 21:05	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:05	1
Potassium	**690**		500	150	ug/L		05/07/24 09:00	05/09/24 21:05	1
Selenium	<1.4		5.0	1.4	ug/L		05/07/24 09:00	05/09/24 21:05	1
Sodium	**6200**		1000	480	ug/L		05/07/24 09:00	05/09/24 21:05	1
Thallium	<0.57		1.0	0.57	ug/L		05/07/24 09:00	05/09/24 21:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		05/07/24 17:37	05/10/24 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**370**		5.0	2.5	mg/L			05/10/24 15:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.5		5.0	2.5	mg/L			05/10/24 15:59	1
Total Alkalinity as CaCO3 (SM 2320B)	**370**		5.0	2.5	mg/L			05/10/24 15:59	1
Total Dissolved Solids (SM 2540C)	**310**		50	42	mg/L			05/07/24 18:56	1
pH (SM 4500 H+ B)	**7.5**	**HF**	1.0	1.0	SU			05/03/24 17:29	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0440	U	0.0668	0.0669	1.00	0.115	pCi/L	05/08/24 08:39	06/02/24 13:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*94.5*		*30 - 110*	*05/08/24 08:39*	*06/02/24 13:21*	*1*

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Client Sample ID: MW-312

Date Collected: 05/01/24 10:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-14

Matrix: Water

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.0382	U	0.297	0.297	1.00	0.547	pCi/L	05/08/24 08:44	05/29/24 12:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*94.5*		*30 - 110*	*05/08/24 08:44*	*05/29/24 12:00*	*1*
Y Carrier	*83.0*		*30 - 110*	*05/08/24 08:44*	*05/29/24 12:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0822	U	0.304	0.304	5.00	0.547	pCi/L		06/03/24 17:21	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**573.25**				ft			05/01/24 10:20	1
Oxidation Reduction Potential	**81.3**				mV			05/01/24 10:20	1
Oxygen, Dissolved	**0.69**				mg/L			05/01/24 10:20	1
Field pH	**7.13**				SU			05/01/24 10:20	1
Field Conductivity	**699**				umhos/cm			05/01/24 10:20	1
Field Temperature	**12.9**				Degrees C			05/01/24 10:20	1
Field Turbidity	**9.55**				NTU			05/01/24 10:20	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

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

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 310-421378/25
Matrix: Water
Analysis Batch: 421378

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	1000	978		mg/L		98	90 - 110

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

HPLC/IC

Analysis Batch: 421417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	9056A	

Metals

Prep Batch: 420799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	3005A	

Prep Batch: 420930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	7470A	

Analysis Batch: 421266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	6020B	420799

Analysis Batch: 421358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	7470A	420930

Analysis Batch: 421418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	6020B	420799

General Chemistry

Analysis Batch: 420673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 420932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	SM 2540C	

Analysis Batch: 421378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	SM 2320B	
LCS 310-421378/25	Lab Control Sample	Total/NA	Water	SM 2320B	

Rad

Prep Batch: 660603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	PrecSep-21	

Prep Batch: 660604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Field Service / Mobile Lab

Analysis Batch: 421498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-14	MW-312	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Client Sample ID: MW-312
Date Collected: 05/01/24 10:20
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	421417	QTZ5	EET CF	05/10/24 16:34
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421418	DHM5	EET CF	05/10/24 16:56
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:05
Total/NA	Prep	7470A			420930	A6US	EET CF	05/07/24 17:37
Total/NA	Analysis	7470A		1	421358	A6US	EET CF	05/10/24 12:33
Total/NA	Analysis	SM 2320B		1	421378	WZC8	EET CF	05/10/24 15:59
Total/NA	Analysis	SM 2540C		1	420932	D7CP	EET CF	05/07/24 18:56
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:29
Total/NA	Prep	PrecSep-21			660603	MLT	EET SL	05/08/24 08:39
Total/NA	Analysis	903.0		1	664279	SCB	EET SL	06/02/24 13:21
Total/NA	Prep	PrecSep_0			660604	MLT	EET SL	05/08/24 08:44
Total/NA	Analysis	904.0		1	663738	SCB	EET SL	05/29/24 12:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	664462	FLC	EET SL	06/03/24 17:21
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 10:20

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: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	05-27-24

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-24
HI - RadChem Recognition	State	n/a	06-30-24
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-24
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-24
MI - RadChem Recognition	State	9005	06-30-24
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-24
New Mexico	State	MO00054	06-30-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
North Dakota	State	R-207	06-30-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	10310	06-15-25
Washington	State	C592	08-30-24
West Virginia DEP	State	381	10-31-24

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

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

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 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Field Sampling	Field Sampling	EPA	EET CF
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:

EPA = US Environmental Protection Agency
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

eurofins | Environment Testing America

310-280481 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 1 of 3
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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 2 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.5 | Corrected Temp (°C): 1.5

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 3 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

09/02/2025 - Classification: Internal - ECRM13574470

6/5/2024

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Meghan Blodgett	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin	Page: Page 1 of 2
Company: SCS Engineers	PWSID			Job #
Address: 2830 Dairy Drive	Due Date Requested			
City: Madison	TAT Requested (days)			
State, Zip: WI 53718	Compliance Project: ☐ Yes ☐ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride Fluoride Sulfate	Chloride Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity	Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D	D	I	I	I	I	I		
MW-301	4/30/24	6 30	G	W	N		X				X	X	X		X			
MW-302	4/30/24	14 0	G	W	N		X				X	X	X		X			
MW-303	4/30/24	3 45	G	W	N		X				X	X	X		X			
MW-304	4/30/24	1 20	G	W	N		X				X	X	X		X			
MW-304A	4/30/24	12 5	G	W	N				X									
MW-305	4/30/24	10 0	G	W	N		X				X	X	X		X			
MW-306	4/30/24	15 05	G	W	N		X				X	X	X		X			
MW-307	5/1/24	9 20	G	W	N		X				X	X	X		X			
MW-308	5/1/24	5 45	G	W	N				X									
MW-309	5/1/24	4 45	G	W	N				X									
MW-310	5/1/24	12 20	G	W	N		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	Date/Time	Company	Received by	Date/Time	Company
Michael Mahon	5/3/24	SCS	MC	5/3/24 1640	
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

Ver 01/16/2019

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Michael Mullen	Sandie Fredrick		
Client Contact: Meghan Blodgett	Phone: 55[illegible]07 5	E-Mail: Sandra.Fredrick@eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: SCS Engineers	PWSID			Job #

Address: 2830 Dairy Drive	Due Date Requested	
City: Madison	TAT Requested (days):	
State, Zip: WI 53718	Compliance Project: ☐ Yes ☒ No	
Phone: 608-224-2830	PO #: 25224077	
Email: mblodgett@scsengineers.com	WO #:	
Project Name: ML Kapp 25224077	Project #: 25224077	
Site: Clinton IA	SSOW#:	

Analysis Requested

Preservation Codes

A HCL	M Hexane		
B NaOH	N None		
C Zn Acetate	O AsNaO2		
D Nitric Acid	P Na2O4S		
E NaHSO4	Q Na2SO3		
F MeOH	R Na2S2O3		
G Amchlor	S H2SO4		
H Ascorbic Acid	T TSP Dodecahydrate		
I Ice	U Acetone		
J DI Water	V MCAA		
K EDTA	W pH 4-5		
L EDA	Z other (specify)		

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals Total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D		1	1	1	1	1						
MW-311	5/2/24	5	G	W	N				X													
MW-311A	5/2/24	2 05	G	W	N				X													
MW-312	5/1/24	0 20	G	W	N			X			X	X	X		X	X						
MW-313	5/1/24	9 25	G	W	N					X				X		X						
MW-314	5/1/24	2 0	G	W	N		X				X	X	X		X							
MW-314A	5/1/24	2 55	G	W	N		X				X	X	X		X							
Field Blank	5/1/24 2		G	W	N		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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Michael Mullen	5/1/24 1200	SCS			
Relinquished by	Date/Time	Company	Received by: M.L	5-3-24 1646	
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

6/5/2024

09/02/2025 - Classification: Internal - ECRM13574470

Table 1 Sampling Points and Parameters CCR Rule Sampling Program
Groundwater Mon toring M L. Kapp Ash Pond/ SCS Eng neers Project #25223077 00

		Parameter	MW-301	MW-302	MW 303	MW-304	MW-304A	MW-305	MW-306	MW-307	MW-308	MW-309	MW-310	MW-311	MW 311A	MW 312	MW 313	MW 314	MW-314A	Field Blank	TOTAL
CCR Rule Parameters	Appendix III Parameters (total/ unfiltered)	Boron	X	X	X	X		X	X	X			X			X		X	X	X	12
		Calcium	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Chloride	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		pH	X	X	X	X		X	X	X			X			X		X	X	X	12
		Sulfate	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		TDS	X	X	X	X		X	X	X			X			X		X	X	X	12
	Appendix IV Parameters (total/ unfiltered)	Antimony	X	X	X	X		X	X	X			X			X		X	X	X	12
		Arsenic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Barium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Beryllium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cadm um	X	X	X	X		X	X	X			X			X		X	X	X	12
		Chromium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cobalt	X	X	X	X		X	X	X			X			X		X	X	X	12
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lead	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lithium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Mercury	X	X	X	X		X	X	X			X			X		X	X	X	12
		Molybdenum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Selenium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Thallium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Radium	X	X	X	X		X	X	X			X			X		X	X	X	12
	Field Parameters	Groundwater Elevation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		pH (field)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Well Depth	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Specific Conductance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		ORP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Temperature	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Turbidity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Color	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Odor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
Additional Parameters	Total (Unfiltered)	Alkal nity Carbonate														X	X				2
		Alkal nity B carbonate														X	X				2
		Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Magnesium														X	X				2
		Manganese														X	X				2
		Potass um														X	X				2
		Sod um														X	X				2

6/5/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-3

Login Number: 280481
List Number: 1
Creator: Costello, Mackenzie K

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-3

Login Number: 280481
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 05/07/24 02:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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?	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-3

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
310-280481-14	MW-312	94.5							

Tracer/Carrier Legend

Ba = Barium

Method: 904.0 - 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)						
310-280481-14	MW-312	94.5	83.0						

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier

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ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

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JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-280481-4

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
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(920)261-1660

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Job Narrative
310-280481-4

REPORTS SPLIT AT CLIENT REQUEST

Receipt
The samples were received on 5/3/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 1.5º C and 2.4º C.

HPLC/IC
Method 9056A: The following samples were diluted due to the nature of the sample matrix: MW-314 (310-280481-16), MW-314A (310-280481-17) and (310-280481-B-11). 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.

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

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

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-280481-16	MW-314	Water	05/01/24 12:10	05/03/24 16:40
310-280481-17	MW-314A	Water	05/01/24 12:55	05/03/24 16:40

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Client Sample ID: MW-314 — Lab Sample ID: 310-280481-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	760		100	36	ug/L	1		6020B	Total/NA
pH	7.5	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	574.33				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	115.9				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.68				mg/L	1		Field Sampling	Total/NA
Field pH	7.15				SU	1		Field Sampling	Total/NA
Field Conductivity	518				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	9.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	64.34				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-314A — Lab Sample ID: 310-280481-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3		2.0	0.53	ug/L	1		6020B	Total/NA
Iron	2100		100	36	ug/L	1		6020B	Total/NA
Lithium	5.4	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	2.4		2.0	1.3	ug/L	1		6020B	Total/NA
pH	7.7	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	574.38				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-69.4				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.60				mg/L	1		Field Sampling	Total/NA
Field pH	7.36				SU	1		Field Sampling	Total/NA
Field Conductivity	2153				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	11.6				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	163.30				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Client Sample ID: MW-314

Date Collected: 05/01/24 12:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:09	1
Iron	**760**		100	36	ug/L		05/07/24 09:00	05/09/24 21:09	1
Lithium	<2.5		10	2.5	ug/L		05/07/24 09:00	05/09/24 21:09	1
Molybdenum	<1.3		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.5**	**HF**	1.0	1.0	SU			05/03/24 17:31	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**574.33**				ft			05/01/24 12:10	1
Oxidation Reduction Potential	**115.9**				mV			05/01/24 12:10	1
Oxygen, Dissolved	**5.68**				mg/L			05/01/24 12:10	1
Field pH	**7.15**				SU			05/01/24 12:10	1
Field Conductivity	**518**				umhos/cm			05/01/24 12:10	1
Field Temperature	**9.5**				Degrees C			05/01/24 12:10	1
Field Turbidity	**64.34**				NTU			05/01/24 12:10	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Client Sample ID: MW-314A

Date Collected: 05/01/24 12:55
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-17

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.3		2.0	0.53	ug/L		05/07/24 09:00	05/09/24 21:11	1
Iron	2100		100	36	ug/L		05/07/24 09:00	05/09/24 21:11	1
Lithium	5.4	J	10	2.5	ug/L		05/07/24 09:00	05/09/24 21:11	1
Molybdenum	2.4		2.0	1.3	ug/L		05/07/24 09:00	05/09/24 21:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.7	HF	1.0	1.0	SU			05/03/24 17:30	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	574.38				ft			05/01/24 12:55	1
Oxidation Reduction Potential	-69.4				mV			05/01/24 12:55	1
Oxygen, Dissolved	1.60				mg/L			05/01/24 12:55	1
Field pH	7.36				SU			05/01/24 12:55	1
Field Conductivity	2153				umhos/cm			05/01/24 12:55	1
Field Temperature	11.6				Degrees C			05/01/24 12:55	1
Field Turbidity	163.30				NTU			05/01/24 12:55	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

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

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Metals

Prep Batch: 420799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-16	MW-314	Total/NA	Water	3005A	
310-280481-17	MW-314A	Total/NA	Water	3005A	

Analysis Batch: 421266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-16	MW-314	Total/NA	Water	6020B	420799
310-280481-17	MW-314A	Total/NA	Water	6020B	420799

General Chemistry

Analysis Batch: 420673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-16	MW-314	Total/NA	Water	SM 4500 H+ B	
310-280481-17	MW-314A	Total/NA	Water	SM 4500 H+ B	

Field Service / Mobile Lab

Analysis Batch: 421498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-280481-16	MW-314	Total/NA	Water	Field Sampling	
310-280481-17	MW-314A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Client Sample ID: MW-314
Date Collected: 05/01/24 12:10
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:09
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:31
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 12:10

Client Sample ID: MW-314A
Date Collected: 05/01/24 12:55
Date Received: 05/03/24 16:40

Lab Sample ID: 310-280481-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			420799	KM3E	EET CF	05/07/24 09:00
Total/NA	Analysis	6020B		1	421266	NFT2	EET CF	05/09/24 21:11
Total/NA	Analysis	SM 4500 H+ B		1	420673	A3GU	EET CF	05/03/24 17:30
Total/NA	Analysis	Field Sampling		1	421498	BJ0R	EET CF	05/01/24 12:55

Laboratory References:

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	05-27-24

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-280481-4

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
SM 4500 H+ B	pH	SM	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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310-280481 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 1 of 3
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: R | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 2 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.5 | Corrected Temp (°C): 1.5

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE WI | Project:

Receipt Information

Date/Time Received: DATE 5-3-24 | TIME 1640 | Received By: MV

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 # 3 of 3

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: R | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 2.4 | Corrected Temp (°C): 2.4

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Meghan Blodgett	Phone	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin	Page: Page 1 of 2
Company: SCS Engineers	PWSID			Job #
Address: 2830 Dairy Drive	Due Date Requested			
City: Madison	TAT Requested (days)			
State, Zip: WI 53718	Compliance Project: ☐ Yes ☐ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity	Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D	D	I	I	I	I	I		
MW-301	4/30/24	6 30	G	W	N		X				X	X	X		X			
MW-302	4/30/24	14 0	G	W	N		X				X	X	X		X			
MW-303	4/30/24	13 45	G	W	N		X				X	X	X		X			
MW-304	4/30/24	12 0	G	W	N		X				X	X	X		X			
MW-304A	4/30/24	12 0	G	W	N				X									
MW-305	4/30/24	10 0	G	W	N		X				X	X	X		X			
MW-306	4/30/24	11 0	G	W	N		X				X	X	X		X			
MW-307	5/1/24	9 20	G	W	N		X				X	X	X		X			
MW-308	5/1/24	5 45	G	W	N				X									
MW-309	5/1/24	4 45	G	W	N				X									
MW-310	5/1/24	12 0	G	W	N		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	Date/Time	Company	Received by	Date/Time	Company
Michael Mahan	5/3/24	SCS	MC	5/3/24 1640	
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

Ver: 01/16/2019

6/5/2024

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Michael Mullen	Sandie Fredrick		
Client Contact: Meghan Blodgett	Phone: 55[illegible]07 8	E-Mail: Sandra.Fredrick@eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: SCS Engineers	PWSID			Job #

Address: 2830 Dairy Drive	Due Date Requested	
City: Madison	TAT Requested (days):	
State, Zip: WI 53718	Compliance Project: ☐ Yes ☒ No	
Phone: 608-224-2830	PO #: 25224077	
Email: mblodgett@scsengineers.com	WO #:	
Project Name: ML Kapp 25224077	Project #: 25224077	
Site: Clinton IA	SSOW#:	

Analysis Requested

Preservation Codes

A HCL	M Hexane		
B NaOH	N None		
C Zn Acetate	O AsNaO2		
D Nitric Acid	P Na2O4S		
E NaHSO4	Q Na2SO3		
F MeOH	R Na2S2O3		
G Amchlor	S H2SO4		
H Ascorbic Acid	T TSP Dodecahydrate		
I Ice	U Acetone		
J DI Water	V MCAA		
K EDTA	W pH 4-5		
L EDA	Z other (specify)		

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals Total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals Total (As Fe Li Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note
			Preservation Code				D	D	D	D		1	1	1	1	1						
MW-311	5/2/24	5	G	W	N				X													
MW-311A	5/2/24	2 05	G	W	N				X													
MW-312	5/1/24	0 20	G	W	N			X			X	X	X		X	X						
MW-313	5/1/24	9 25	G	W	N					X				X		X						
MW-314	5/1/24	2 0	G	W	N		X				X	X	X		X							
MW-314A	5/1/24	2 55	G	W	N		X				X	X	X		X							
Field Blank	5/1/24 2		G	W	N		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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Michael Mullen	5/1/24 1200	SCS			
Relinquished by	Date/Time	Company	Received by: M.L	Date/Time: 5-3-24 1646	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

6/5/2024

09/02/2025 - Classification: Internal - ECRM13574470

Table 1 Sampling Points and Parameters CCR Rule Sampling Program
Groundwater Mon toring M L. Kapp Ash Pond/ SCS Eng neers Project #25223077 00

		Parameter	MW-301	MW-302	MW 303	MW-304	MW-304A	MW-305	MW-306	MW-307	MW-308	MW-309	MW-310	MW-311	MW 311A	MW 312	MW 313	MW 314	MW-314A	Field Blank	TOTAL
CCR Rule Parameters	Appendix III Parameters (total/ unfiltered)	Boron	X	X	X	X		X	X	X			X			X		X	X	X	12
		Calcium	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Chloride	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		pH	X	X	X	X		X	X	X			X			X		X	X	X	12
		Sulfate	X	X	X	X		X	X	X			X			X	X	X	X	X	13
		TDS	X	X	X	X		X	X	X			X			X		X	X	X	12
	Appendix IV Parameters (total/ unfiltered)	Antimony	X	X	X	X		X	X	X			X			X		X	X	X	12
		Arsenic	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Barium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Beryllium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cadm um	X	X	X	X		X	X	X			X			X		X	X	X	12
		Chromium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Cobalt	X	X	X	X		X	X	X			X			X		X	X	X	12
		Fluoride	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lead	X	X	X	X		X	X	X			X			X		X	X	X	12
		Lithium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Mercury	X	X	X	X		X	X	X			X			X		X	X	X	12
		Molybdenum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
		Selenium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Thallium	X	X	X	X		X	X	X			X			X		X	X	X	12
		Radium	X	X	X	X		X	X	X			X			X		X	X	X	12
	Field Parameters	Groundwater Elevation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		pH (field)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Well Depth	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Specific Conductance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		ORP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Temperature	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Turbidity	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Color	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Odor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
Additional Parameters	Total (Unfiltered)	Alkal nity Carbonate														X	X				2
		Alkal nity B carbonate														X	X				2
		Iron	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		17
		Magnesium														X	X				2
		Manganese														X	X				2
		Potass um														X	X				2
		Sod um														X	X				2

Table 1, page 1 of 1

6/5/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-4

Login Number: 280481
List Number: 1
Creator: Costello, Mackenzie K

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-280481-4

Login Number: 280481
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 05/07/24 02:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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?	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

C2 October 2024 Assessment Monitoring

09/02/2025 - Classification: Internal - ECRM13574470

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Generated 12/5/2024 11:43:11 AM

JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-294299-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

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

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job Narrative
310-294299-1

Receipt
The samples were received on 11/1/2024 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.2º C, 4.7º C and 9.3º C.

Receipt Exceptions
Sample temperature at the time of laboratory receipt was 9.3 Deg C. for the following samples: MW-301 (310-294299-1), MW-302 (310-294299-2), MW-303 (310-294299-3), MW-304 (310-294299-4), MW-304A (310-294299-5), MW-305 (310-294299-6), MW-306 (310-294299-7), MW-307 (310-294299-8), MW-308 (310-294299-9), MW-310 (310-294299-11), MW-313 (310-294299-12) and Field Blank (310-294299-13).

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

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

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-294299-1	MW-301	Water	10/30/24 12:02	11/01/24 16:50
310-294299-2	MW-302	Water	10/29/24 10:07	11/01/24 16:50
310-294299-3	MW-303	Water	10/29/24 15:09	11/01/24 16:50
310-294299-4	MW-304	Water	10/29/24 13:24	11/01/24 16:50
310-294299-5	MW-304A	Water	10/29/24 12:33	11/01/24 16:50
310-294299-6	MW-305	Water	10/29/24 16:56	11/01/24 16:50
310-294299-7	MW-306	Water	10/30/24 10:08	11/01/24 16:50
310-294299-8	MW-307	Water	10/30/24 17:21	11/01/24 16:50
310-294299-9	MW-308	Water	10/28/24 15:43	11/01/24 16:50
310-294299-11	MW-310	Water	10/28/24 16:51	11/01/24 16:50
310-294299-12	MW-313	Water	10/30/24 13:42	11/01/24 16:50
310-294299-13	Field Blank	Water	10/29/24 17:30	11/01/24 16:50

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-301 — Lab Sample ID: 310-294299-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	95		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	140		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	60		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	8800		400	300	ug/L	4		6020B	Total/NA
Cadmium	0.43		0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	140		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	4.6		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	310		100	36	ug/L	1		6020B	Total/NA
Lithium	6.5	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	540		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	720		50	42	mg/L	1		SM 2540C	Total/NA
pH	6.7	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	576.22				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	215.9				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.51				mg/L	1		Field Sampling	Total/NA
Field pH	6.54				SU	1		Field Sampling	Total/NA
Field Conductivity	1187				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.8				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	8.86				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-302 — Lab Sample ID: 310-294299-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	460		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	4.4		2.0	0.53	ug/L	1		6020B	Total/NA
Barium	140		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	10000		700	530	ug/L	7		6020B	Total/NA
Cadmium	0.14	J	0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	180		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	0.84		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	37	J	100	36	ug/L	1		6020B	Total/NA
Lithium	48		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	180		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	810		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	573.66				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	196.3				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.92				mg/L	1		Field Sampling	Total/NA
Field pH	6.99				SU	1		Field Sampling	Total/NA
Field Conductivity	1194				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	17.3				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	4.85				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-303 — Lab Sample ID: 310-294299-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	340		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	29		2.0	0.53	ug/L	1		6020B	Total/NA
Barium	80		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	5600		400	300	ug/L	4		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-303 (Continued) — Lab Sample ID: 310-294299-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.15	J	0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	91		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	1.1		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	10000		100	36	ug/L	1		6020B	Total/NA
Lithium	53		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	220		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	660		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.0	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	574.59				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	88.1				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.53				mg/L	1		Field Sampling	Total/NA
Field pH	6.82				SU	1		Field Sampling	Total/NA
Field Conductivity	1104				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	13.58				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-304 — Lab Sample ID: 310-294299-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	420		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	3.2		2.0	0.53	ug/L	1		6020B	Total/NA
Barium	130		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	9600		700	530	ug/L	7		6020B	Total/NA
Cadmium	0.37		0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	130		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	1.5		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	1500		100	36	ug/L	1		6020B	Total/NA
Lithium	3.4	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	800		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	850		50	42	mg/L	1		SM 2540C	Total/NA
pH	6.9	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	574.07				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	173.3				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.41				mg/L	1		Field Sampling	Total/NA
Field pH	6.70				SU	1		Field Sampling	Total/NA
Field Conductivity	1274				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	18.22				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-304A — Lab Sample ID: 310-294299-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.85	J	2.0	0.53	ug/L	1		6020B	Total/NA
Iron	380		100	36	ug/L	1		6020B	Total/NA
Molybdenum	2.9		2.0	1.3	ug/L	1		6020B	Total/NA
Groundwater Elevation	574.01				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	139.2				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	3.71				mg/L	1		Field Sampling	Total/NA
Field pH	7.11				SU	1		Field Sampling	Total/NA
Field Conductivity	699				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	20.0				Degrees C	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-304A (Continued) — Lab Sample ID: 310-294299-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field Turbidity	4.93				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-305 — Lab Sample ID: 310-294299-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	31		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	510		20	8.4	mg/L	20		9056A	Total/NA
Arsenic	1.2	J	2.0	0.53	ug/L	1		6020B	Total/NA
Barium	83		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	16000		700	530	ug/L	7		6020B	Total/NA
Cadmium	0.19	J	0.20	0.10	ug/L	1		6020B	Total/NA
Calcium	190		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	0.81		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	910		100	36	ug/L	1		6020B	Total/NA
Lithium	23		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	430		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	1200		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.0	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	573.99				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	104.9				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.52				mg/L	1		Field Sampling	Total/NA
Field pH	6.90				SU	1		Field Sampling	Total/NA
Field Conductivity	1656				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	16.7				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	9.83				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-306 — Lab Sample ID: 310-294299-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	210		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	200		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	79		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	11000		700	530	ug/L	7		6020B	Total/NA
Calcium	160		0.50	0.19	mg/L	1		6020B	Total/NA
Lithium	95		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	20		2.0	1.3	ug/L	1		6020B	Total/NA
Total Dissolved Solids	1000		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	574.77				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	208.7				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.95				mg/L	1		Field Sampling	Total/NA
Field pH	6.94				SU	1		Field Sampling	Total/NA
Field Conductivity	1794				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	14.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	5.53				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-307 — Lab Sample ID: 310-294299-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	73		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	22		5.0	2.1	mg/L	5		9056A	Total/NA
Arsenic	0.92	J	2.0	0.53	ug/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample ID: MW-307 (Continued) — Lab Sample ID: 310-294299-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	380		2.0	0.66	ug/L	1		6020B	Total/NA
Calcium	190		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	7.2		0.50	0.17	ug/L	1		6020B	Total/NA
Iron	1000		100	36	ug/L	1		6020B	Total/NA
Lithium	6.2	J	10	2.5	ug/L	1		6020B	Total/NA
Total Dissolved Solids	740		50	42	mg/L	1		SM 2540C	Total/NA
pH	6.5	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	589.81				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	240.1				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.56				mg/L	1		Field Sampling	Total/NA
Field pH	6.34				SU	1		Field Sampling	Total/NA
Field Conductivity	1421				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.9				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	5.63				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-308 — Lab Sample ID: 310-294299-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	2.5	J	10	2.5	ug/L	1		6020B	Total/NA
Groundwater Elevation	574.22				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	222.3				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.47				mg/L	1		Field Sampling	Total/NA
Field pH	6.39				SU	1		Field Sampling	Total/NA
Field Conductivity	804				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	4.74				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-310 — Lab Sample ID: 310-294299-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	63		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	120		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	32		2.0	0.66	ug/L	1		6020B	Total/NA
Boron	730		100	76	ug/L	1		6020B	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020B	Total/NA
Cobalt	0.37	J	0.50	0.17	ug/L	1		6020B	Total/NA
Lithium	3.6	J	10	2.5	ug/L	1		6020B	Total/NA
Total Dissolved Solids	670		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	588.10				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	210.4				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.91				mg/L	1		Field Sampling	Total/NA
Field pH	6.91				SU	1		Field Sampling	Total/NA
Field Conductivity	1171				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.0				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	4.14				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-313 — Lab Sample ID: 310-294299-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	50		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	5.8		5.0	2.1	mg/L	5		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-313 (Continued) — Lab Sample ID: 310-294299-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.6	J	2.0	0.53	ug/L	1		6020B	Total/NA
Calcium	58000		500	190	ug/L	1		6020B	Total/NA
Iron	90	J	100	36	ug/L	1		6020B	Total/NA
Magnesium	25000		500	150	ug/L	1		6020B	Total/NA
Manganese	14		10	3.6	ug/L	1		6020B	Total/NA
Potassium	2700		500	150	ug/L	1		6020B	Total/NA
Sodium	64000		1000	480	ug/L	1		6020B	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3	320		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Groundwater Elevation	573.28				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	204.1				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.14				mg/L	1		Field Sampling	Total/NA
Field pH	7.15				SU	1		Field Sampling	Total/NA
Field Conductivity	779				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	16.4				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	6.52				NTU	1		Field Sampling	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 310-294299-13

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

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-301
Date Collected: 10/30/24 12:02
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-1
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**95**		5.0	2.3	mg/L			11/13/24 19:17	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 19:17	5
Sulfate	**140**		5.0	2.1	mg/L			11/13/24 19:17	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:04	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:04	1
Barium	**60**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:04	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:04	1
Boron	**8800**		400	300	ug/L		11/12/24 09:30	11/13/24 11:56	4
Cadmium	**0.43**		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:04	1
Calcium	**140**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:04	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:04	1
Cobalt	**4.6**		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:04	1
Iron	**310**		100	36	ug/L		11/12/24 09:30	11/12/24 18:04	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:04	1
Lithium	**6.5**	**J**	10	2.5	ug/L		11/12/24 09:30	11/12/24 18:04	1
Molybdenum	**540**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:04	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:04	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**720**		50	42	mg/L			11/05/24 16:20	1
pH (SM 4500 H+ B)	**6.7**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	**0.226**		0.0959	0.0980	1.00	0.0950	pCi/L	11/08/24 08:24	12/02/24 15:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*85.8*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:34*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	**0.683**		0.378	0.383	1.00	0.537	pCi/L	11/08/24 08:26	11/25/24 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*85.8*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:49*	*1*
Y Carrier	*86.4*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:49*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-301
Date Collected: 10/30/24 12:02
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-1
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.909		0.390	0.395	5.00	0.537	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	576.22				ft			10/30/24 12:02	1
Oxidation Reduction Potential	215.9				mV			10/30/24 12:02	1
Oxygen, Dissolved	0.51				mg/L			10/30/24 12:02	1
Field pH	6.54				SU			10/30/24 12:02	1
Field Conductivity	1187				umhos/cm			10/30/24 12:02	1
Field Temperature	15.8				Degrees C			10/30/24 12:02	1
Field Turbidity	8.86				NTU			10/30/24 12:02	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-302
Date Collected: 10/29/24 10:07
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-2
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12**		5.0	2.3	mg/L			11/13/24 20:06	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 20:06	5
Sulfate	**460**		5.0	2.1	mg/L			11/13/24 20:06	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:07	1
Arsenic	**4.4**		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:07	1
Barium	**140**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:07	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:07	1
Boron	**10000**		700	530	ug/L		11/12/24 09:30	11/13/24 11:59	7
Cadmium	**0.14**	**J**	0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:07	1
Calcium	**180**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:07	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:07	1
Cobalt	**0.84**		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:07	1
Iron	**37**	**J**	100	36	ug/L		11/12/24 09:30	11/12/24 18:07	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:07	1
Lithium	**48**		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:07	1
Molybdenum	**180**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:07	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:07	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**810**		50	42	mg/L			11/02/24 13:46	1
pH (SM 4500 H+ B)	**7.1**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	**0.222**		0.100	0.102	1.00	0.112	pCi/L	11/08/24 08:24	12/02/24 15:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*87.6*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:34*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.298	U	0.394	0.395	1.00	0.657	pCi/L	11/08/24 08:26	11/25/24 11:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*87.6*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:49*	*1*
Y Carrier	*81.5*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:49*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-302

Date Collected: 10/29/24 10:07
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-2

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.520	U	0.406	0.408	5.00	0.657	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	573.66				ft			10/29/24 10:07	1
Oxidation Reduction Potential	196.3				mV			10/29/24 10:07	1
Oxygen, Dissolved	0.92				mg/L			10/29/24 10:07	1
Field pH	6.99				SU			10/29/24 10:07	1
Field Conductivity	1194				umhos/cm			10/29/24 10:07	1
Field Temperature	17.3				Degrees C			10/29/24 10:07	1
Field Turbidity	4.85				NTU			10/29/24 10:07	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-303
Date Collected: 10/29/24 15:09
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-3
Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21**		5.0	2.3	mg/L			11/13/24 20:39	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 20:39	5
Sulfate	**340**		5.0	2.1	mg/L			11/13/24 20:39	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:09	1
Arsenic	**29**		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:09	1
Barium	**80**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:09	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:09	1
Boron	**5600**		400	300	ug/L		11/12/24 09:30	11/13/24 12:02	4
Cadmium	**0.15**	**J**	0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:09	1
Calcium	**91**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:09	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:09	1
Cobalt	**1.1**		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:09	1
Iron	**10000**		100	36	ug/L		11/12/24 09:30	11/12/24 18:09	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:09	1
Lithium	**53**		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:09	1
Molybdenum	**220**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:09	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:09	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**660**		50	42	mg/L			11/02/24 13:46	1
pH (SM 4500 H+ B)	**7.0**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0355	U	0.0624	0.0625	1.00	0.110	pCi/L	11/08/24 08:24	12/02/24 15:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.6*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.322	U	0.342	0.343	1.00	0.555	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.6*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*78.5*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-303

Date Collected: 10/29/24 15:09
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-3

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.357	U	0.348	0.349	5.00	0.555	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	574.59				ft			10/29/24 15:09	1
Oxidation Reduction Potential	88.1				mV			10/29/24 15:09	1
Oxygen, Dissolved	0.53				mg/L			10/29/24 15:09	1
Field pH	6.82				SU			10/29/24 15:09	1
Field Conductivity	1104				umhos/cm			10/29/24 15:09	1
Field Temperature	15.9				Degrees C			10/29/24 15:09	1
Field Turbidity	13.58				NTU			10/29/24 15:09	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-304

Date Collected: 10/29/24 13:24
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-4

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		5.0	2.3	mg/L			11/13/24 20:50	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 20:50	5
Sulfate	420		5.0	2.1	mg/L			11/13/24 20:50	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:21	1
Arsenic	3.2		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:21	1
Barium	130		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:21	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:21	1
Boron	9600		700	530	ug/L		11/12/24 09:30	11/13/24 15:23	7
Cadmium	0.37		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:21	1
Calcium	130		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:21	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:21	1
Cobalt	1.5		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:21	1
Iron	1500		100	36	ug/L		11/12/24 09:30	11/12/24 18:21	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:21	1
Lithium	3.4	J	10	2.5	ug/L		11/12/24 09:30	11/12/24 18:21	1
Molybdenum	800		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:21	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:21	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 10:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	850		50	42	mg/L			11/02/24 13:46	1
pH (SM 4500 H+ B)	6.9	HF	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.224		0.100	0.102	1.00	0.109	pCi/L	11/08/24 08:24	12/02/24 15:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*87.8*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	1.05		0.422	0.433	1.00	0.549	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*87.8*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*84.9*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-304

Date Collected: 10/29/24 13:24
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-4

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.27		0.434	0.445	5.00	0.549	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	574.07				ft			10/29/24 13:24	1
Oxidation Reduction Potential	173.3				mV			10/29/24 13:24	1
Oxygen, Dissolved	0.41				mg/L			10/29/24 13:24	1
Field pH	6.70				SU			10/29/24 13:24	1
Field Conductivity	1274				umhos/cm			10/29/24 13:24	1
Field Temperature	14.5				Degrees C			10/29/24 13:24	1
Field Turbidity	18.22				NTU			10/29/24 13:24	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-304A

Date Collected: 10/29/24 12:33
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.85	J	2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:38	1
Iron	380		100	36	ug/L		11/12/24 09:30	11/12/24 18:38	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:38	1
Molybdenum	2.9		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:38	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	574.01				ft			10/29/24 12:33	1
Oxidation Reduction Potential	139.2				mV			10/29/24 12:33	1
Oxygen, Dissolved	3.71				mg/L			10/29/24 12:33	1
Field pH	7.11				SU			10/29/24 12:33	1
Field Conductivity	699				umhos/cm			10/29/24 12:33	1
Field Temperature	20.0				Degrees C			10/29/24 12:33	1
Field Turbidity	4.93				NTU			10/29/24 12:33	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-305

Date Collected: 10/29/24 16:56
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-6

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31**		5.0	2.3	mg/L			11/13/24 21:01	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 21:01	5
Sulfate	**510**		20	8.4	mg/L			11/13/24 21:12	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:41	1
Arsenic	**1.2**	**J**	2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:41	1
Barium	**83**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:41	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:41	1
Boron	**16000**		700	530	ug/L		11/12/24 09:30	11/13/24 15:31	7
Cadmium	**0.19**	**J**	0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:41	1
Calcium	**190**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:41	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:41	1
Cobalt	**0.81**		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:41	1
Iron	**910**		100	36	ug/L		11/12/24 09:30	11/12/24 18:41	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:41	1
Lithium	**23**		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:41	1
Molybdenum	**430**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:41	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:41	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1200**		50	42	mg/L			11/02/24 13:46	1
pH (SM 4500 H+ B)	**7.0**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0377	U	0.0700	0.0701	1.00	0.124	pCi/L	11/08/24 08:24	12/02/24 15:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.4*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:35*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.310	U	0.367	0.369	1.00	0.606	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.4*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*84.1*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-305

Date Collected: 10/29/24 16:56
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-6

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.347	U	0.374	0.376	5.00	0.606	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	573.99				ft			10/29/24 16:56	1
Oxidation Reduction Potential	104.9				mV			10/29/24 16:56	1
Oxygen, Dissolved	0.52				mg/L			10/29/24 16:56	1
Field pH	6.90				SU			10/29/24 16:56	1
Field Conductivity	1656				umhos/cm			10/29/24 16:56	1
Field Temperature	16.7				Degrees C			10/29/24 16:56	1
Field Turbidity	9.83				NTU			10/29/24 16:56	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-306

Date Collected: 10/30/24 10:08
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-7

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**210**		5.0	2.3	mg/L			11/13/24 21:23	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 21:23	5
Sulfate	**200**		5.0	2.1	mg/L			11/13/24 21:23	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:43	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:43	1
Barium	**79**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:43	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:43	1
Boron	**11000**		700	530	ug/L		11/12/24 09:30	11/13/24 15:35	7
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:43	1
Calcium	**160**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:43	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:43	1
Cobalt	<0.17		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:43	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 18:43	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:43	1
Lithium	**95**		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:43	1
Molybdenum	**20**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:43	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:43	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/13/24 13:50	11/14/24 10:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1000**		50	42	mg/L			11/05/24 16:20	1
pH (SM 4500 H+ B)	**7.1**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0364	U	0.0756	0.0756	1.00	0.134	pCi/L	11/08/24 08:24	12/02/24 15:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*92.9*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:30*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.494	U	0.352	0.355	1.00	0.533	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*92.9*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*84.1*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-306

Date Collected: 10/30/24 10:08
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-7

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.531	U	0.360	0.363	5.00	0.533	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	574.77				ft			10/30/24 10:08	1
Oxidation Reduction Potential	208.7				mV			10/30/24 10:08	1
Oxygen, Dissolved	0.95				mg/L			10/30/24 10:08	1
Field pH	6.94				SU			10/30/24 10:08	1
Field Conductivity	1794				umhos/cm			10/30/24 10:08	1
Field Temperature	14.9				Degrees C			10/30/24 10:08	1
Field Turbidity	5.53				NTU			10/30/24 10:08	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-307

Date Collected: 10/30/24 17:21
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-8

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73**		5.0	2.3	mg/L			11/13/24 21:34	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 21:34	5
Sulfate	**22**		5.0	2.1	mg/L			11/13/24 21:34	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:46	1
Arsenic	**0.92**	**J**	2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:46	1
Barium	**380**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:46	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:46	1
Boron	<76		100	76	ug/L		11/12/24 09:30	11/13/24 15:38	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:46	1
Calcium	**190**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:46	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:46	1
Cobalt	**7.2**		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:46	1
Iron	**1000**		100	36	ug/L		11/12/24 09:30	11/12/24 18:46	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:46	1
Lithium	**6.2**	**J**	10	2.5	ug/L		11/12/24 09:30	11/12/24 18:46	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:46	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:46	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:46	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/13/24 13:50	11/14/24 10:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**740**		50	42	mg/L			11/05/24 16:20	1
pH (SM 4500 H+ B)	**6.5**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	**0.154**		0.0945	0.0955	1.00	0.128	pCi/L	11/08/24 08:24	12/02/24 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.6*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:31*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	**0.860**		0.366	0.375	1.00	0.468	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.6*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*86.0*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-307

Date Collected: 10/30/24 17:21
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-8

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.01		0.378	0.387	5.00	0.468	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	589.81				ft			10/30/24 17:21	1
Oxidation Reduction Potential	240.1				mV			10/30/24 17:21	1
Oxygen, Dissolved	1.56				mg/L			10/30/24 17:21	1
Field pH	6.34				SU			10/30/24 17:21	1
Field Conductivity	1421				umhos/cm			10/30/24 17:21	1
Field Temperature	15.9				Degrees C			10/30/24 17:21	1
Field Turbidity	5.63				NTU			10/30/24 17:21	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-308

Date Collected: 10/28/24 15:43
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:49	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 18:49	1
Lithium	**2.5**	**J**	10	2.5	ug/L		11/12/24 09:30	11/12/24 18:49	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:49	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**574.22**				ft			10/28/24 15:43	1
Oxidation Reduction Potential	**222.3**				mV			10/28/24 15:43	1
Oxygen, Dissolved	**0.47**				mg/L			10/28/24 15:43	1
Field pH	**6.39**				SU			10/28/24 15:43	1
Field Conductivity	**804**				umhos/cm			10/28/24 15:43	1
Field Temperature	**15.5**				Degrees C			10/28/24 15:43	1
Field Turbidity	**4.74**				NTU			10/28/24 15:43	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-310

Date Collected: 10/28/24 16:51
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-11

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63**		5.0	2.3	mg/L			11/13/24 21:45	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 21:45	5
Sulfate	**120**		5.0	2.1	mg/L			11/13/24 21:45	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:52	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:52	1
Barium	**32**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:52	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:52	1
Boron	**730**		100	76	ug/L		11/12/24 09:30	11/13/24 15:42	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:52	1
Calcium	**120**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:52	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:52	1
Cobalt	**0.37**	**J**	0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:52	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 18:52	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:52	1
Lithium	**3.6**	**J**	10	2.5	ug/L		11/12/24 09:30	11/12/24 18:52	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:52	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:52	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:52	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/13/24 13:50	11/14/24 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**670**		50	42	mg/L			11/02/24 15:00	1
pH (SM 4500 H+ B)	**7.1**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0316	U	0.0857	0.0857	1.00	0.156	pCi/L	11/08/24 08:24	12/02/24 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*82.0*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:31*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	**1.18**		0.478	0.490	1.00	0.608	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*82.0*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*77.0*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-310

Date Collected: 10/28/24 16:51
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-11

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.21		0.486	0.497	5.00	0.608	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	588.10				ft			10/28/24 16:51	1
Oxidation Reduction Potential	210.4				mV			10/28/24 16:51	1
Oxygen, Dissolved	1.91				mg/L			10/28/24 16:51	1
Field pH	6.91				SU			10/28/24 16:51	1
Field Conductivity	1171				umhos/cm			10/28/24 16:51	1
Field Temperature	15.0				Degrees C			10/28/24 16:51	1
Field Turbidity	4.14				NTU			10/28/24 16:51	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-313

Date Collected: 10/30/24 13:42
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-12

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50		5.0	2.3	mg/L			11/13/24 21:57	5
Sulfate	5.8		5.0	2.1	mg/L			11/13/24 21:57	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6	J	2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:55	1
Calcium	58000		500	190	ug/L		11/12/24 09:30	11/12/24 18:55	1
Iron	90	J	100	36	ug/L		11/12/24 09:30	11/12/24 18:55	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:55	1
Magnesium	25000		500	150	ug/L		11/12/24 09:30	11/12/24 18:55	1
Manganese	14		10	3.6	ug/L		11/12/24 09:30	11/12/24 18:55	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:55	1
Potassium	2700		500	150	ug/L		11/12/24 09:30	11/12/24 18:55	1
Sodium	64000		1000	480	ug/L		11/12/24 09:30	11/12/24 18:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	320		5.0	2.5	mg/L			11/09/24 12:45	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.5		5.0	2.5	mg/L			11/09/24 12:45	1
Total Alkalinity as CaCO3 (SM 2320B)	320		5.0	2.5	mg/L			11/09/24 12:45	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	573.28				ft			10/30/24 13:42	1
Oxidation Reduction Potential	204.1				mV			10/30/24 13:42	1
Oxygen, Dissolved	2.14				mg/L			10/30/24 13:42	1
Field pH	7.15				SU			10/30/24 13:42	1
Field Conductivity	779				umhos/cm			10/30/24 13:42	1
Field Temperature	16.4				Degrees C			10/30/24 13:42	1
Field Turbidity	6.52				NTU			10/30/24 13:42	1

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: Field Blank

Lab Sample ID: 310-294299-13

Date Collected: 10/29/24 17:30

Matrix: Water

Date Received: 11/01/24 16:50

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			11/13/24 22:08	1
Fluoride	<0.075		0.20	0.075	mg/L			11/13/24 22:08	1
Sulfate	<0.42		1.0	0.42	mg/L			11/13/24 22:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:58	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:58	1
Barium	<0.66		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:58	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:58	1
Boron	<76		100	76	ug/L		11/12/24 09:30	11/13/24 15:46	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:58	1
Calcium	<0.19		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:58	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:58	1
Cobalt	<0.17		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:58	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 18:58	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:58	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:58	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:58	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:58	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/13/24 13:50	11/14/24 10:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	<42		50	42	mg/L			11/02/24 13:46	1
pH (SM 4500 H+ B)	**5.8**	**HF**	1.0	1.0	SU			11/01/24 18:32	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	-0.0114	U	0.0595	0.0595	1.00	0.127	pCi/L	11/08/24 08:24	12/02/24 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*88.6*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:31*	*1*

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.388	U	0.355	0.357	1.00	0.562	pCi/L	11/08/24 08:26	11/25/24 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*88.6*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*
Y Carrier	*78.9*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:50*	*1*

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: Field Blank

Date Collected: 10/29/24 17:30
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-13

Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.388	U	0.360	0.362	5.00	0.562	pCi/L		12/05/24 10:05	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-439727/3
Matrix: Water
Analysis Batch: 439727

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			11/13/24 16:51	1
Fluoride	<0.075		0.20	0.075	mg/L			11/13/24 16:51	1
Sulfate	<0.42		1.0	0.42	mg/L			11/13/24 16:51	1

Lab Sample ID: LCS 310-439727/4
Matrix: Water
Analysis Batch: 439727

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	9.39		mg/L		94	90 - 110
Fluoride	2.00	1.98		mg/L		99	90 - 110
Sulfate	10.0	9.44		mg/L		94	90 - 110

Lab Sample ID: MB 310-439981/3
Matrix: Water
Analysis Batch: 439981

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			11/13/24 12:16	1
Fluoride	<0.075		0.20	0.075	mg/L			11/13/24 12:16	1
Sulfate	<0.42		1.0	0.42	mg/L			11/13/24 12:16	1

Lab Sample ID: LCS 310-439981/4
Matrix: Water
Analysis Batch: 439981

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.1		mg/L		101	90 - 110
Fluoride	2.00	2.00		mg/L		100	90 - 110
Sulfate	10.0	10.6		mg/L		106	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-439334/1-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 16:35	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 16:35	1
Barium	<0.66		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 16:35	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 16:35	1
Boron	<76		100	76	ug/L		11/12/24 09:30	11/12/24 16:35	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 16:35	1
Calcium	<0.19		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 16:35	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 16:35	1
Cobalt	<0.17		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 16:35	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 16:35	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 16:35	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 16:35	1

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

Lab Sample ID: MB 310-439334/1-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 16:35	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 16:35	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 16:35	1

Lab Sample ID: LCS 310-439334/2-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	197		ug/L		98	80 - 120
Arsenic	200	203		ug/L		102	80 - 120
Barium	100	103		ug/L		103	80 - 120
Beryllium	100	99.9		ug/L		100	80 - 120
Boron	200	205		ug/L		102	80 - 120
Cadmium	100	96.8		ug/L		97	80 - 120
Calcium	2.00	2.09		mg/L		105	80 - 120
Chromium	100	102		ug/L		102	80 - 120
Cobalt	100	98.5		ug/L		99	80 - 120
Iron	200	186		ug/L		93	80 - 120
Lead	200	209		ug/L		104	80 - 120
Lithium	200	212		ug/L		106	80 - 120
Molybdenum	200	192		ug/L		96	80 - 120
Selenium	400	402		ug/L		100	80 - 120
Thallium	100	111		ug/L		111	80 - 120

Lab Sample ID: MB 310-439335/1-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:15	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:15	1
Barium	<0.66		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:15	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:15	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:15	1
Calcium	<0.19		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:15	1
Magnesium	<150		500	150	ug/L		11/12/24 09:30	11/12/24 18:15	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:15	1
Manganese	<3.6		10	3.6	ug/L		11/12/24 09:30	11/12/24 18:15	1
Cobalt	<0.17		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:15	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 18:15	1
Potassium	<150		500	150	ug/L		11/12/24 09:30	11/12/24 18:15	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:15	1
Sodium	<480		1000	480	ug/L		11/12/24 09:30	11/12/24 18:15	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:15	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:15	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:15	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:15	1

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

Lab Sample ID: MB 310-439335/1-A
Matrix: Water
Analysis Batch: 439659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<76		100	76	ug/L		11/12/24 09:30	11/13/24 15:16	1

Lab Sample ID: LCS 310-439335/2-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	190		ug/L		95	80 - 120
Arsenic	200	199		ug/L		100	80 - 120
Barium	100	102		ug/L		102	80 - 120
Beryllium	100	97.1		ug/L		97	80 - 120
Cadmium	100	95.2		ug/L		95	80 - 120
Calcium	2.00	2.03		mg/L		101	80 - 120
Magnesium	2000	1860		ug/L		93	80 - 120
Chromium	100	101		ug/L		101	80 - 120
Manganese	100	96.1		ug/L		96	80 - 120
Cobalt	100	96.8		ug/L		97	80 - 120
Iron	200	183		ug/L		91	80 - 120
Potassium	2000	1820		ug/L		91	80 - 120
Lead	200	206		ug/L		103	80 - 120
Sodium	2000	1970		ug/L		99	80 - 120
Lithium	200	209		ug/L		104	80 - 120
Molybdenum	200	189		ug/L		95	80 - 120
Selenium	400	387		ug/L		97	80 - 120
Thallium	100	111		ug/L		111	80 - 120

Lab Sample ID: LCS 310-439335/2-A
Matrix: Water
Analysis Batch: 439659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	200	183		ug/L		92	80 - 120

Lab Sample ID: 310-294299-4 DU
Matrix: Water
Analysis Batch: 439506

Client Sample ID: MW-304
Prep Type: Total/NA
Prep Batch: 439335

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<1.0		<1.0		ug/L		NC	20
Arsenic	3.2		3.31		ug/L		2	20
Barium	130		131		ug/L		2	20
Beryllium	<0.33		<0.33		ug/L		NC	20
Cadmium	0.37		0.364		ug/L		0.5	20
Calcium	130		132		mg/L		1	20
Magnesium	26000		26000		ug/L		2	20
Chromium	<1.2		<1.2		ug/L		NC	20
Manganese	910		932		ug/L		2	20
Cobalt	1.5		1.52		ug/L		2	20
Iron	1500		1490		ug/L		0.8	20

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

Lab Sample ID: 310-294299-4 DU
Matrix: Water
Analysis Batch: 439506

Client Sample ID: MW-304
Prep Type: Total/NA
Prep Batch: 439335

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	17000		16700		ug/L		0.9	20
Lead	<0.26		<0.26		ug/L		NC	20
Sodium	90000		92300		ug/L		2	20
Lithium	3.4	J	3.56	J	ug/L		4	20
Molybdenum	800		815		ug/L		2	20
Selenium	<1.4		<1.4		ug/L		NC	20
Thallium	<0.57		<0.57		ug/L		NC	20

Lab Sample ID: 310-294299-4 DU
Matrix: Water
Analysis Batch: 439659

Client Sample ID: MW-304
Prep Type: Total/NA
Prep Batch: 439335

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	9600		10200		ug/L		6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-439294/1-A
Matrix: Water
Analysis Batch: 439456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439294

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 09:41	1

Lab Sample ID: LCS 310-439294/2-A
Matrix: Water
Analysis Batch: 439456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.53		ug/L		92	80 - 120

Lab Sample ID: MB 310-439539/1-A
Matrix: Water
Analysis Batch: 439780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/13/24 13:50	11/14/24 10:38	1

Lab Sample ID: LCS 310-439539/2-A
Matrix: Water
Analysis Batch: 439780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439539

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.67		ug/L		100	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 310-439204/2
Matrix: Water
Analysis Batch: 439204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	1000	977		mg/L		98	86 - 111

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

Lab Sample ID: MB 310-438481/1
Matrix: Water
Analysis Batch: 438481

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	<42		50	42	mg/L			11/02/24 13:46	1

Lab Sample ID: LCS 310-438481/2
Matrix: Water
Analysis Batch: 438481

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	970		mg/L		97	88 - 110

Lab Sample ID: MB 310-438485/1
Matrix: Water
Analysis Batch: 438485

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	<42		50	42	mg/L			11/02/24 15:00	1

Lab Sample ID: LCS 310-438485/2
Matrix: Water
Analysis Batch: 438485

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	976		mg/L		98	88 - 110

Lab Sample ID: MB 310-438766/1
Matrix: Water
Analysis Batch: 438766

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	<42		50	42	mg/L			11/05/24 16:20	1

Lab Sample ID: LCS 310-438766/2
Matrix: Water
Analysis Batch: 438766

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	976		mg/L		98	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-438438/29
Matrix: Water
Analysis Batch: 438438

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

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

Lab Sample ID: 310-294299-6 DU
Matrix: Water
Analysis Batch: 438438

Client Sample ID: MW-305
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.0	HF		7.0		SU				0	20

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-687519/1-A
Matrix: Water
Analysis Batch: 691378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687519

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.008620	U	0.0490	0.0490	1.00	0.0995	pCi/L	11/08/24 08:24	12/02/24 15:32	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*92.4*		*30 - 110*	*11/08/24 08:24*	*12/02/24 15:32*	*1*

Lab Sample ID: LCS 160-687519/2-A
Matrix: Water
Analysis Batch: 691378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687519

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium 226			9.58	8.593		0.927	1.00	0.107	pCi/L	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Barium	*97.5*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-687520/1-A
Matrix: Water
Analysis Batch: 690405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687520

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	0.2564	U	0.312	0.312	1.00	0.515	pCi/L	11/08/24 08:26	11/25/24 11:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*92.4*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:49*	*1*
Y Carrier	*81.9*		*30 - 110*	*11/08/24 08:26*	*11/25/24 11:49*	*1*

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-687520/2-A
Matrix: Water
Analysis Batch: 690405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687520

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium 228			8.31	8.703		1.18	1.00	0.423	pCi/L	105	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Barium	*97.5*		*30 - 110*
Y Carrier	*84.9*		*30 - 110*

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

HPLC/IC

Analysis Batch: 439727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-2	MW-302	Total/NA	Water	9056A	
310-294299-3	MW-303	Total/NA	Water	9056A	
310-294299-4	MW-304	Total/NA	Water	9056A	
310-294299-6	MW-305	Total/NA	Water	9056A	
310-294299-6	MW-305	Total/NA	Water	9056A	
310-294299-7	MW-306	Total/NA	Water	9056A	
310-294299-8	MW-307	Total/NA	Water	9056A	
310-294299-11	MW-310	Total/NA	Water	9056A	
310-294299-12	MW-313	Total/NA	Water	9056A	
310-294299-13	Field Blank	Total/NA	Water	9056A	
MB 310-439727/3	Method Blank	Total/NA	Water	9056A	
LCS 310-439727/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 439981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	9056A	
MB 310-439981/3	Method Blank	Total/NA	Water	9056A	
LCS 310-439981/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 439294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	7470A	
310-294299-2	MW-302	Total/NA	Water	7470A	
310-294299-3	MW-303	Total/NA	Water	7470A	
310-294299-4	MW-304	Total/NA	Water	7470A	
310-294299-6	MW-305	Total/NA	Water	7470A	
MB 310-439294/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-439294/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 439334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	3005A	
310-294299-2	MW-302	Total/NA	Water	3005A	
310-294299-3	MW-303	Total/NA	Water	3005A	
MB 310-439334/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 439335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-4	MW-304	Total/NA	Water	3005A	
310-294299-5	MW-304A	Total/NA	Water	3005A	
310-294299-6	MW-305	Total/NA	Water	3005A	
310-294299-7	MW-306	Total/NA	Water	3005A	
310-294299-8	MW-307	Total/NA	Water	3005A	
310-294299-9	MW-308	Total/NA	Water	3005A	
310-294299-11	MW-310	Total/NA	Water	3005A	
310-294299-12	MW-313	Total/NA	Water	3005A	
310-294299-13	Field Blank	Total/NA	Water	3005A	
MB 310-439335/1-A	Method Blank	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 439335 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-439335/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-294299-4 DU	MW-304	Total/NA	Water	3005A	

Analysis Batch: 439456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	7470A	439294
310-294299-2	MW-302	Total/NA	Water	7470A	439294
310-294299-3	MW-303	Total/NA	Water	7470A	439294
310-294299-4	MW-304	Total/NA	Water	7470A	439294
310-294299-6	MW-305	Total/NA	Water	7470A	439294
MB 310-439294/1-A	Method Blank	Total/NA	Water	7470A	439294
LCS 310-439294/2-A	Lab Control Sample	Total/NA	Water	7470A	439294

Analysis Batch: 439506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	6020B	439334
310-294299-2	MW-302	Total/NA	Water	6020B	439334
310-294299-3	MW-303	Total/NA	Water	6020B	439334
310-294299-4	MW-304	Total/NA	Water	6020B	439335
310-294299-5	MW-304A	Total/NA	Water	6020B	439335
310-294299-6	MW-305	Total/NA	Water	6020B	439335
310-294299-7	MW-306	Total/NA	Water	6020B	439335
310-294299-8	MW-307	Total/NA	Water	6020B	439335
310-294299-9	MW-308	Total/NA	Water	6020B	439335
310-294299-11	MW-310	Total/NA	Water	6020B	439335
310-294299-12	MW-313	Total/NA	Water	6020B	439335
310-294299-13	Field Blank	Total/NA	Water	6020B	439335
MB 310-439334/1-A	Method Blank	Total/NA	Water	6020B	439334
MB 310-439335/1-A	Method Blank	Total/NA	Water	6020B	439335
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	6020B	439334
LCS 310-439335/2-A	Lab Control Sample	Total/NA	Water	6020B	439335
310-294299-4 DU	MW-304	Total/NA	Water	6020B	439335

Prep Batch: 439539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-7	MW-306	Total/NA	Water	7470A	
310-294299-8	MW-307	Total/NA	Water	7470A	
310-294299-11	MW-310	Total/NA	Water	7470A	
310-294299-13	Field Blank	Total/NA	Water	7470A	
MB 310-439539/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-439539/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 439576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	6020B	439334
310-294299-2	MW-302	Total/NA	Water	6020B	439334
310-294299-3	MW-303	Total/NA	Water	6020B	439334

Analysis Batch: 439659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-4	MW-304	Total/NA	Water	6020B	439335

Metals (Continued)

Analysis Batch: 439659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-6	MW-305	Total/NA	Water	6020B	439335
310-294299-7	MW-306	Total/NA	Water	6020B	439335
310-294299-8	MW-307	Total/NA	Water	6020B	439335
310-294299-11	MW-310	Total/NA	Water	6020B	439335
310-294299-13	Field Blank	Total/NA	Water	6020B	439335
MB 310-439335/1-A	Method Blank	Total/NA	Water	6020B	439335
LCS 310-439335/2-A	Lab Control Sample	Total/NA	Water	6020B	439335
310-294299-4 DU	MW-304	Total/NA	Water	6020B	439335

Analysis Batch: 439780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-7	MW-306	Total/NA	Water	7470A	439539
310-294299-8	MW-307	Total/NA	Water	7470A	439539
310-294299-11	MW-310	Total/NA	Water	7470A	439539
310-294299-13	Field Blank	Total/NA	Water	7470A	439539
MB 310-439539/1-A	Method Blank	Total/NA	Water	7470A	439539
LCS 310-439539/2-A	Lab Control Sample	Total/NA	Water	7470A	439539

General Chemistry

Analysis Batch: 438438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	SM 4500 H+ B	
310-294299-2	MW-302	Total/NA	Water	SM 4500 H+ B	
310-294299-3	MW-303	Total/NA	Water	SM 4500 H+ B	
310-294299-4	MW-304	Total/NA	Water	SM 4500 H+ B	
310-294299-6	MW-305	Total/NA	Water	SM 4500 H+ B	
310-294299-7	MW-306	Total/NA	Water	SM 4500 H+ B	
310-294299-8	MW-307	Total/NA	Water	SM 4500 H+ B	
310-294299-11	MW-310	Total/NA	Water	SM 4500 H+ B	
310-294299-13	Field Blank	Total/NA	Water	SM 4500 H+ B	
LCS 310-438438/29	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-294299-6 DU	MW-305	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 438481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-2	MW-302	Total/NA	Water	SM 2540C	
310-294299-3	MW-303	Total/NA	Water	SM 2540C	
310-294299-4	MW-304	Total/NA	Water	SM 2540C	
310-294299-6	MW-305	Total/NA	Water	SM 2540C	
310-294299-13	Field Blank	Total/NA	Water	SM 2540C	
MB 310-438481/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-438481/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 438485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-11	MW-310	Total/NA	Water	SM 2540C	
MB 310-438485/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-438485/2	Lab Control Sample	Total/NA	Water	SM 2540C	

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

General Chemistry

Analysis Batch: 438766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	SM 2540C	
310-294299-7	MW-306	Total/NA	Water	SM 2540C	
310-294299-8	MW-307	Total/NA	Water	SM 2540C	
MB 310-438766/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-438766/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 439204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-12	MW-313	Total/NA	Water	SM 2320B	
LCS 310-439204/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Rad

Prep Batch: 687519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	PrecSep-21	
310-294299-2	MW-302	Total/NA	Water	PrecSep-21	
310-294299-3	MW-303	Total/NA	Water	PrecSep-21	
310-294299-4	MW-304	Total/NA	Water	PrecSep-21	
310-294299-6	MW-305	Total/NA	Water	PrecSep-21	
310-294299-7	MW-306	Total/NA	Water	PrecSep-21	
310-294299-8	MW-307	Total/NA	Water	PrecSep-21	
310-294299-11	MW-310	Total/NA	Water	PrecSep-21	
310-294299-13	Field Blank	Total/NA	Water	PrecSep-21	
MB 160-687519/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-687519/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 687520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	PrecSep_0	
310-294299-2	MW-302	Total/NA	Water	PrecSep_0	
310-294299-3	MW-303	Total/NA	Water	PrecSep_0	
310-294299-4	MW-304	Total/NA	Water	PrecSep_0	
310-294299-6	MW-305	Total/NA	Water	PrecSep_0	
310-294299-7	MW-306	Total/NA	Water	PrecSep_0	
310-294299-8	MW-307	Total/NA	Water	PrecSep_0	
310-294299-11	MW-310	Total/NA	Water	PrecSep_0	
310-294299-13	Field Blank	Total/NA	Water	PrecSep_0	
MB 160-687520/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-687520/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 439721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-1	MW-301	Total/NA	Water	Field Sampling	
310-294299-2	MW-302	Total/NA	Water	Field Sampling	
310-294299-3	MW-303	Total/NA	Water	Field Sampling	
310-294299-4	MW-304	Total/NA	Water	Field Sampling	
310-294299-5	MW-304A	Total/NA	Water	Field Sampling	
310-294299-6	MW-305	Total/NA	Water	Field Sampling	
310-294299-7	MW-306	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 439721 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294299-8	MW-307	Total/NA	Water	Field Sampling	
310-294299-9	MW-308	Total/NA	Water	Field Sampling	
310-294299-11	MW-310	Total/NA	Water	Field Sampling	
310-294299-12	MW-313	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-301
Date Collected: 10/30/24 12:02
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439981	WZC8	EET CF	11/13/24 19:17
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:04
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		4	439576	A6US	EET CF	11/13/24 11:56
Total/NA	Prep	7470A			439294	QTZ5	EET CF	11/11/24 16:15
Total/NA	Analysis	7470A		1	439456	QTZ5	EET CF	11/12/24 10:06
Total/NA	Analysis	SM 2540C		1	438766	XJ7V	EET CF	11/05/24 16:20
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691378	FLC	EET SL	12/02/24 15:34
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/30/24 12:02

Client Sample ID: MW-302
Date Collected: 10/29/24 10:07
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 20:06
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:07
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		7	439576	A6US	EET CF	11/13/24 11:59
Total/NA	Prep	7470A			439294	QTZ5	EET CF	11/11/24 16:15
Total/NA	Analysis	7470A		1	439456	QTZ5	EET CF	11/12/24 10:08
Total/NA	Analysis	SM 2540C		1	438481	XJ7V	EET CF	11/02/24 13:46
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691378	FLC	EET SL	12/02/24 15:34
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:49
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/29/24 10:07

Client Sample ID: MW-303
Date Collected: 10/29/24 15:09
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 20:39

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-303
Date Collected: 10/29/24 15:09
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:09
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		4	439576	A6US	EET CF	11/13/24 12:02
Total/NA	Prep	7470A			439294	QTZ5	EET CF	11/11/24 16:15
Total/NA	Analysis	7470A		1	439456	QTZ5	EET CF	11/12/24 10:11
Total/NA	Analysis	SM 2540C		1	438481	XJ7V	EET CF	11/02/24 13:46
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691378	FLC	EET SL	12/02/24 15:35
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/29/24 15:09

Client Sample ID: MW-304
Date Collected: 10/29/24 13:24
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 20:50
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		7	439659	NFT2	EET CF	11/13/24 15:23
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:21
Total/NA	Prep	7470A			439294	QTZ5	EET CF	11/11/24 16:15
Total/NA	Analysis	7470A		1	439456	QTZ5	EET CF	11/12/24 10:13
Total/NA	Analysis	SM 2540C		1	438481	XJ7V	EET CF	11/02/24 13:46
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691378	FLC	EET SL	12/02/24 15:35
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/29/24 13:24

Client Sample ID: MW-304A
Date Collected: 10/29/24 12:33
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:38
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/29/24 12:33

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-305
Date Collected: 10/29/24 16:56
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 21:01
Total/NA	Analysis	9056A		20	439727	WZC8	EET CF	11/13/24 21:12
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		7	439659	NFT2	EET CF	11/13/24 15:31
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:41
Total/NA	Prep	7470A			439294	QTZ5	EET CF	11/11/24 16:15
Total/NA	Analysis	7470A		1	439456	QTZ5	EET CF	11/12/24 10:15
Total/NA	Analysis	SM 2540C		1	438481	XJ7V	EET CF	11/02/24 13:46
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691378	FLC	EET SL	12/02/24 15:35
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/29/24 16:56

Client Sample ID: MW-306
Date Collected: 10/30/24 10:08
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 21:23
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		7	439659	NFT2	EET CF	11/13/24 15:35
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:43
Total/NA	Prep	7470A			439539	QTZ5	EET CF	11/13/24 13:50
Total/NA	Analysis	7470A		1	439780	QTZ5	EET CF	11/14/24 10:42
Total/NA	Analysis	SM 2540C		1	438766	XJ7V	EET CF	11/05/24 16:20
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691382	FLC	EET SL	12/02/24 15:30
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/30/24 10:08

Client Sample ID: MW-307
Date Collected: 10/30/24 17:21
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 21:34

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-307
Date Collected: 10/30/24 17:21
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439659	NFT2	EET CF	11/13/24 15:38
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:46
Total/NA	Prep	7470A			439539	QTZ5	EET CF	11/13/24 13:50
Total/NA	Analysis	7470A		1	439780	QTZ5	EET CF	11/14/24 10:45
Total/NA	Analysis	SM 2540C		1	438766	XJ7V	EET CF	11/05/24 16:20
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691382	FLC	EET SL	12/02/24 15:31
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/30/24 17:21

Client Sample ID: MW-308
Date Collected: 10/28/24 15:43
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:49
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/28/24 15:43

Client Sample ID: MW-310
Date Collected: 10/28/24 16:51
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 21:45
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439659	NFT2	EET CF	11/13/24 15:42
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:52
Total/NA	Prep	7470A			439539	QTZ5	EET CF	11/13/24 13:50
Total/NA	Analysis	7470A		1	439780	QTZ5	EET CF	11/14/24 10:47
Total/NA	Analysis	SM 2540C		1	438485	XJ7V	EET CF	11/02/24 15:00
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691382	FLC	EET SL	12/02/24 15:31
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/28/24 16:51

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Client Sample ID: MW-313
Date Collected: 10/30/24 13:42
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439727	WZC8	EET CF	11/13/24 21:57
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:55
Total/NA	Analysis	SM 2320B		1	439204	T5AC	EET CF	11/09/24 12:45
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/30/24 13:42

Client Sample ID: Field Blank
Date Collected: 10/29/24 17:30
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294299-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		1	439727	WZC8	EET CF	11/13/24 22:08
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439659	NFT2	EET CF	11/13/24 15:46
Total/NA	Prep	3005A			439335	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:58
Total/NA	Prep	7470A			439539	QTZ5	EET CF	11/13/24 13:50
Total/NA	Analysis	7470A		1	439780	QTZ5	EET CF	11/14/24 10:49
Total/NA	Analysis	SM 2540C		1	438481	XJ7V	EET CF	11/02/24 13:46
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 18:32
Total/NA	Prep	PrecSep-21			687519	BCE	EET SL	11/08/24 08:24
Total/NA	Analysis	903.0		1	691382	FLC	EET SL	12/02/24 15:31
Total/NA	Prep	PrecSep_0			687520	BCE	EET SL	11/08/24 08:26
Total/NA	Analysis	904.0		1	690405	SCB	EET SL	11/25/24 11:50
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05

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: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
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	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
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	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	12-31-24
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	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.

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

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 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Field Sampling	Field Sampling	EPA	EET CF
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:

EPA = US Environmental Protection Agency
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

eurofins | Environment Testing America

310-294299 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.01.24 | TIME 1650 | Received By: CGC

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 # 1 of 3

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: melted ice ☐ NONE

Thermometer ID: P | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 7.7 | Corrected Temp (°C): 7.7

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used.	250mL Plastic HNO_3	
Uncorrected Temp (°C):	9.3	~~9.3~~ CGC
Corrected Temp (°C):	9.3	~~9.3~~

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 | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.01.24 | TIME 1630 | Received By: CGC

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 # 2 of 3

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: P | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.2 | Corrected Temp (°C): 1.2

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.01.24 TIME 1630 | Received By: CGC

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 # 3 of 3

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: P | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 4.7 | Corrected Temp (°C): 4.7

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

09/02/2025 - Classification: Internal - ECRM13574470

12/5/2024

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Michael Morgan	Lab PM: Sandie Fredrick	Carrier Tracking No(s):	COC No: 1
Client Contact: Meghan Blodgett	Phone: 515-631-0778	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: SCS Engineers	PWSID:			Job #:

Address: 2830 Dairy Drive	Due Date Requested:	Analysis Requested
City: Madison	TAT Requested (days):	
State, Zip: WI 53718	Compliance Project: Δ Yes Δ No	
Phone: 608-224-2830	PO #: 25224077	
Email: mblodgett@scsengineers.com	WO #:	
Project Name: ML Kapp 25224077	Project #: 25224077	
Site: Clinton IA	SSOW#:	

Preservation Codes

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals, total (Sb, As Ba Be B, Ca Cd Cr Co Fe Pb, Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd, Cr Co Fe Pb, Li Mg Mn Mo, K, Se Na Tl)	6020 Metals, total (As, Fe, Li, Mo)	6020 Metals Total (As Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride Fluoride Sulfate	Chloride Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	D	D	D	I	I	I	I	I		
MW-301	10/30/24	12 02	G	W	N		X				X	X	X		X			
MW-302	10/29/24	10 07	G	W	N		X				X	X	X		X			
MW-303	10/29/24	15 09	G	W	N		X				X	X	X		X			
MW-304	10/29/24	13 24	G	W	N		X				X	X	X		X			
MW-304A	10/29/24	12 33	G	W	N				X									
MW-305	10/29/24	16 56	G	W	N		X				X	X	X		X			
MW-306	10/30/24	10 08	G	W	N		X				X	X	X		X			
MW-307	10/30/24	17:21	G	W	N		X				X	X	X		X			
MW-308	10/28/24	15.43	G	W	N				X									
MW-309			G	W	N				X									
MW-310	10/28/24	16 51	G	W	N		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: Michael Morgan	Date/Time: 11/1/24 09:30	Company: SCS	Received by: CGC	Date/Time: 11-01-24 1650	Company: Eurofins
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Michael Morgan	Lab PM: Sandie Fredrick	Carrier Tracking No(s).	COC No 1
Client Contact: Meghan Blodgett	Phone: 515-631-0778	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin.	Page: Page 2 of 2
Company: SCS Engineers	PWSID:			Job #:
Address: 2830 Dairy Drive	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #:			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#:			

Analysis Requested

Preservation Codes

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals total (Sb As Ba Be B Ca Cd Cr Co Fe Pb Li Mg Mn Mo K Se Na Tl)	6020 Metals total (As, Fe Li Mo)	6020 Metals Total (As, Ca Fe Li Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride Fluoride Sulfate	Chloride Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note.
			Preservation Code:				D	D	D	D		I	I	I	I	I						
MW-313	10/30/24	13 42	G	W	N					X				X		X						
Field Blank	10/29/24	17 30	G	W	N		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:	Date/Time:	Company	Received by:	Date/Time:	Company
Michael Morgan	11/1/24 09:30	SCS	CGC	11.01.24 1630	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time.	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

12/5/2024

ers - CCR Rule Sampling Program
ıd/ SCS Engineers Project #25223077.00

						COC #2		COC #3	COC #4		
MW-307	MW-308	MW-309	MW-310	MW-313	Field Blank	MW-311	MW-311A	MW-312	MW-314	MW-314A	TOTAL
X			X		X			X	X	X	12
X			X	X	X			X	X	X	13
X			X	X	X			X	X	X	13
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X	X	X			X	X	X	13
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X	X	X	X	X	X	X	X	X	X	X	18
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X	X	X	X	X	X	X	X	X	X	X	18
X			X		X			X	X	X	12
X	X	X	X	X	X	X	X	X	X	X	18
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X			X		X			X	X	X	12
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
X	X	X	X	X		X	X	X	X	X	17
				X				X			2
				X				X			2
X	X	X	X	X		X	X	X	X	X	17
				X				X			2
				X				X			2
				X				X			2
				X				X			2

09/02/2025 - Classification: Internal - ECRM13574470

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

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Fredrick, Sandie	Carrier Tracking No(s): N/A	COC No: 310-78046.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Iowa		Job #: 310-294299-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/4/2024			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ML Kapp 25224077	Project #: 31011020			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:
-

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Radium-226 (GFPC)	904.0/PrecSep_0 Radium-228 (GFPC)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-301 (310-294299-1)	10/30/24	12:02 Central	G	Water			X	X	X	1	DO NOT SHIP ON ICE TO ST. LOUIS
MW-302 (310-294299-2)	10/29/24	10:07 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-303 (310-294299-3)	10/29/24	15:09 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-304 (310-294299-4)	10/29/24	13:24 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-305 (310-294299-6)	10/29/24	16:56 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-306 (310-294299-7)	10/30/24	10:08 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-307 (310-294299-8)	10/30/24	17:21 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-310 (310-294299-11)	10/28/24	16:51 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
Field Blank (310-294299-13)	10/29/24	17:30 Central	G	Water			X	X	X	1	DO NOT SHIP ON ICE TO ST. LOUIS

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 11/6/24 1235	Company	Received by:	Date/Time: 0845 NOV 07 2024	Company: ETA-STL
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

12/5/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294299-1

Login Number: 294299
List Number: 1
Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294299-1

Login Number: 294299
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 11/07/24 12:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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?	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294299-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
310-294299-1	MW-301	85.8
310-294299-2	MW-302	87.6
310-294299-3	MW-303	90.6
310-294299-4	MW-304	87.8
310-294299-6	MW-305	90.4
310-294299-7	MW-306	92.9
310-294299-8	MW-307	90.6
310-294299-11	MW-310	82.0
310-294299-13	Field Blank	88.6
LCS 160-687519/2-A	Lab Control Sample	97.5
MB 160-687519/1-A	Method Blank	92.4

Tracer/Carrier Legend

Ba = Barium

Method: 904.0 - 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)
310-294299-1	MW-301	85.8	86.4
310-294299-2	MW-302	87.6	81.5
310-294299-3	MW-303	90.6	78.5
310-294299-4	MW-304	87.8	84.9
310-294299-6	MW-305	90.4	84.1
310-294299-7	MW-306	92.9	84.1
310-294299-8	MW-307	90.6	86.0
310-294299-11	MW-310	82.0	77.0
310-294299-13	Field Blank	88.6	78.9
LCS 160-687520/2-A	Lab Control Sample	97.5	84.9
MB 160-687520/1-A	Method Blank	92.4	81.9

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier

Groundwater Monitoring Results - Field Parameters
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00
October 2024

Eurofins Report Number	Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
310-294299-1,2	MW-301	10/30/2024	576.22	15.8	6.54	0.51	1,187	215.9	8.86
	MW-302	10/29/2024	573.66	17.3	6.99	0.92	1,194	196.3	4.85
	MW-303	10/29/2024	574.59	15.9	6.82	0.53	1,104	88.1	13.58
	MW-304	10/29/2024	574.07	14.5	6.70	0.41	1,274	173.3	18.22
	MW-304A	10/29/2024	574.01	20.0	7.11	3.71	699	139.2	4.93
	MW-305	10/29/2024	573.99	16.7	6.90	0.52	1,656	104.9	9.83
	MW-306	10/30/2024	574.77	14.9	6.94	0.95	1,794	208.7	5.53
	MW-307	10/30/2024	589.81	15.9	6.34	1.56	1,421	240.1	5.63
	MW-308	10/28/2024	574.22	15.5	6.39	0.47	804	222.3	4.74
	~~MW-309~~	~~10/28/2024~~	DRY	--	--	--	--	--	--
	MW-310	10/28/2024	588.10	15.0	6.91	1.91	1,171	210.4	4.14
	MW-313	10/30/2024	573.28	16.4	7.15	2.14	779	204.1	6.52
310-294297-1	MW-311	10/30/2024	573.37	15.3	6.89	4.85	941	231.2	9.54
	MW-311A	10/30/2024	573.46	16.2	7.44	1.88	987	196.6	4.79
310-294298-1,2	MW-312	10/31/2024	573.36	13.7	7.16	2.60	629	198.1	1.67
310-294296-1,2	MW-314	10/31/2024	572.69	13.5	7.06	2.75	826	210.3	7.21
	MW-314A	10/30/2024	572.79	12.2	7.42	2.92	1924	121.7	6.61

Abbreviations:
mg/L = milligrams per liter
mV = millivolts
-- = not measured
amsl = above mean sea level

Created by: RM Date: 10/6/2021
Last revision by: KMV Date: 11/4/2024
Checked by: RM Date: 11/14/2024

09/02/2025 - Classification: Internal - ECRM13574470

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ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Generated 11/14/2024 11:37:20 AM

JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-294297-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Eurofins Cedar Falls

Job Notes

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

Authorization



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11/14/2024 11:37:20 AM

Authorized for release by
Sandie Fredrick, Senior Project Manager
Sandra.Fredrick@et.eurofinsus.com
(920)261-1660

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Job Narrative
310-294297-1

Receipt
The samples were received on 11/1/2024 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 was 1.2º C.

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-294297-1	MW-311	Water	10/30/24 15:01	11/01/24 16:50
310-294297-2	MW-311A	Water	10/30/24 16:01	11/01/24 16:50

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Client Sample ID: MW-311 — Lab Sample ID: 310-294297-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	25		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	24		2.0	1.3	ug/L	1		6020B	Total/NA
Groundwater Elevation	573.37				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	231.2				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	4.85				mg/L	1		Field Sampling	Total/NA
Field pH	6.89				SU	1		Field Sampling	Total/NA
Field Conductivity	941				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	15.3				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	9.54				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-311A — Lab Sample ID: 310-294297-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	15		10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	170		2.0	1.3	ug/L	1		6020B	Total/NA
Groundwater Elevation	573.46				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	196.6				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.88				mg/L	1		Field Sampling	Total/NA
Field pH	7.44				SU	1		Field Sampling	Total/NA
Field Conductivity	987				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	16.2				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	4.79				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Client Sample ID: MW-311

Date Collected: 10/30/24 15:01
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294297-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 17:55	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 17:55	1
Lithium	**25**		10	2.5	ug/L		11/12/24 09:30	11/12/24 17:55	1
Molybdenum	**24**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 17:55	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**573.37**				ft			10/30/24 15:01	1
Oxidation Reduction Potential	**231.2**				mV			10/30/24 15:01	1
Oxygen, Dissolved	**4.85**				mg/L			10/30/24 15:01	1
Field pH	**6.89**				SU			10/30/24 15:01	1
Field Conductivity	**941**				umhos/cm			10/30/24 15:01	1
Field Temperature	**15.3**				Degrees C			10/30/24 15:01	1
Field Turbidity	**9.54**				NTU			10/30/24 15:01	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Client Sample ID: MW-311A

Date Collected: 10/30/24 16:01
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294297-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 17:58	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 17:58	1
Lithium	**15**		10	2.5	ug/L		11/12/24 09:30	11/12/24 17:58	1
Molybdenum	**170**		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 17:58	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	**573.46**				ft			10/30/24 16:01	1
Oxidation Reduction Potential	**196.6**				mV			10/30/24 16:01	1
Oxygen, Dissolved	**1.88**				mg/L			10/30/24 16:01	1
Field pH	**7.44**				SU			10/30/24 16:01	1
Field Conductivity	**987**				umhos/cm			10/30/24 16:01	1
Field Temperature	**16.2**				Degrees C			10/30/24 16:01	1
Field Turbidity	**4.79**				NTU			10/30/24 16:01	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

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: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-439334/1-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 16:35	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 16:35	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 16:35	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 16:35	1

Lab Sample ID: LCS 310-439334/2-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	200	203		ug/L		102	80 - 120
Iron	200	186		ug/L		93	80 - 120
Lithium	200	212		ug/L		106	80 - 120
Molybdenum	200	192		ug/L		96	80 - 120

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Metals

Prep Batch: 439334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294297-1	MW-311	Total/NA	Water	3005A	
310-294297-2	MW-311A	Total/NA	Water	3005A	
MB 310-439334/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 439506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294297-1	MW-311	Total/NA	Water	6020B	439334
310-294297-2	MW-311A	Total/NA	Water	6020B	439334
MB 310-439334/1-A	Method Blank	Total/NA	Water	6020B	439334
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	6020B	439334

Field Service / Mobile Lab

Analysis Batch: 439721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294297-1	MW-311	Total/NA	Water	Field Sampling	
310-294297-2	MW-311A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Client Sample ID: MW-311
Date Collected: 10/30/24 15:01
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294297-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 17:55
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/30/24 15:01

Client Sample ID: MW-311A
Date Collected: 10/30/24 16:01
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294297-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 17:58
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/30/24 16:01

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294297-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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310-294297 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.01.24 | TIME 1650 | Received By: CGC

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: P | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.2 | Corrected Temp (°C): 1.2

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

Document CED-P-SAM-FRM45521
Revision 26
Effective Date

General temperature criteria is 0 to 6°C
Bacteria temperature criteria is 0 to 10°C

09/02/2025 - Classification: Internal - ECRM13574470

11/14/2024

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls

3019 Venture Way

Cedar Falls, IA 50613

Phone (319) 277-2401 Phone (319) 277-2425

eurofins Environment Testing America

Chain of Custody Record

Client Information	Sampler: Michael Morgan	Lab PM: Sandie Fredrick	Carrier Tracking No(s):	COC No. 2
Client Contact: Meghan Blodgett	Phone: 55-631-0778	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:	Analysis Requested		Job #:
Address: 2830 Dairy Drive	Due Date Requested:			Preservation Codes
City: Madison	TAT Requested (days):			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
State, Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #:			Other:
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton IA	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb As Ba Be B, Ca Cd Cr Co Fe Pb Li Mo Se Tl)	6020 Metals Total (Sb As Ba Be B, Ca Cd, Cr Co Fe Pb Li Mg Mn Mo K, Se Na Tl)	6020 Metals Total (As Fe Li Mo)	6020 Metals, Total (As, Ca Fe, Li, Mn Mg Mo Na K)	7470 Mercury Total	TDS and pH	Chloride Fluoride Sulfate	Chloride Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	D	D		I	I	I	I	I		
MW-311	10/30/24	15 01	G	W	N				X									
MW-311A	10/30/24	16 01	G	W	N				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	Date/Time	Company	Received by	Date/Time	Company
Michael Morgan	11/1/24 09 30	SCS	CGC	11.01.24 1650	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No | Cooler Temperature(s) °C and Other Remarks:

11/14/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294297-1

Login Number: 294297
List Number: 1
Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Groundwater Monitoring Results - Field Parameters
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00
October 2024

Eurofins Report Number	Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
310-294299-1,2	MW-301	10/30/2024	576.22	15.8	6.54	0.51	1,187	215.9	8.86
	MW-302	10/29/2024	573.66	17.3	6.99	0.92	1,194	196.3	4.85
	MW-303	10/29/2024	574.59	15.9	6.82	0.53	1,104	88.1	13.58
	MW-304	10/29/2024	574.07	14.5	6.70	0.41	1,274	173.3	18.22
	MW-304A	10/29/2024	574.01	20.0	7.11	3.71	699	139.2	4.93
	MW-305	10/29/2024	573.99	16.7	6.90	0.52	1,656	104.9	9.83
	MW-306	10/30/2024	574.77	14.9	6.94	0.95	1,794	208.7	5.53
	MW-307	10/30/2024	589.81	15.9	6.34	1.56	1,421	240.1	5.63
	MW-308	10/28/2024	574.22	15.5	6.39	0.47	804	222.3	4.74
	~~MW-309~~	~~10/28/2024~~	DRY	--	--	--	--	--	--
	MW-310	10/28/2024	588.10	15.0	6.91	1.91	1,171	210.4	4.14
	MW-313	10/30/2024	573.28	16.4	7.15	2.14	779	204.1	6.52
310-294297-1	MW-311	10/30/2024	573.37	15.3	6.89	4.85	941	231.2	9.54
	MW-311A	10/30/2024	573.46	16.2	7.44	1.88	987	196.6	4.79
310-294298-1,2	MW-312	10/31/2024	573.36	13.7	7.16	2.60	629	198.1	1.67
310-294296-1,2	MW-314	10/31/2024	572.69	13.5	7.06	2.75	826	210.3	7.21
	MW-314A	10/30/2024	572.79	12.2	7.42	2.92	1924	121.7	6.61

Abbreviations:
mg/L = milligrams per liter
mV = millivolts
-- = not measured
amsl = above mean sea level

Created by: RM Date: 10/6/2021
Last revision by: KMV Date: 11/4/2024
Checked by: RM Date: 11/14/2024

09/02/2025 - Classification: Internal - ECRM13574470

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ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Generated 12/5/2024 11:41:44 AM

JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-294298-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Authorized for release by
Sandie Fredrick, Senior Project Manager
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(920)261-1660

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Job Narrative
310-294298-1

Receipt
The sample was received on 11/1/2024 4:50 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2º C.

HPLC/IC
Methods 300.0, 9056A: The following sample was diluted due to the nature of the sample matrix: MW-312 (310-294298-1). 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.

RAD
Method 904.0: Radium 228 batch 687980 The LCS recovered at (130%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (69-145%) per method requirements. The LCS passes, no further action is required (LCS 160-687980/2-A)

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

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

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-294298-1	MW-312	Water	10/31/24 13:26	11/01/24 16:50

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Client Sample ID: MW-312

Lab Sample ID: 310-294298-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.9		5.0	2.3	mg/L	5		9056A	Total/NA
Sulfate	23		5.0	2.1	mg/L	5		9056A	Total/NA
Barium	30		2.0	0.66	ug/L	1		6020B	Total/NA
Calcium	72		0.50	0.19	mg/L	1		6020B	Total/NA
Magnesium	34000		500	150	ug/L	1		6020B	Total/NA
Potassium	650		500	150	ug/L	1		6020B	Total/NA
Sodium	6000		1000	480	ug/L	1		6020B	Total/NA
Bicarbonate Alkalinity as CaCO3	270		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3	270		5.0	2.5	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	320		50	42	mg/L	1		SM 2540C	Total/NA
pH	7.5	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Groundwater Elevation	573.36				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	198.1				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.60				mg/L	1		Field Sampling	Total/NA
Field pH	7.16				SU	1		Field Sampling	Total/NA
Field Conductivity	629				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	13.7				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	1.67				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Client Sample ID: MW-312

Date Collected: 10/31/24 13:26
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294298-1

Matrix: Water

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.9**		5.0	2.3	mg/L			11/13/24 19:01	5
Fluoride	<0.38		1.0	0.38	mg/L			11/13/24 19:01	5
Sulfate	**23**		5.0	2.1	mg/L			11/13/24 19:01	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 18:01	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 18:01	1
Barium	**30**		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 18:01	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 18:01	1
Boron	<76		100	76	ug/L		11/12/24 09:30	11/13/24 11:53	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 18:01	1
Calcium	**72**		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 18:01	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 18:01	1
Cobalt	<0.17		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 18:01	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 18:01	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 18:01	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 18:01	1
Magnesium	**34000**		500	150	ug/L		11/12/24 09:30	11/12/24 18:01	1
Manganese	<3.6		10	3.6	ug/L		11/12/24 09:30	11/12/24 18:01	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 18:01	1
Potassium	**650**		500	150	ug/L		11/12/24 09:30	11/12/24 18:01	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 18:01	1
Sodium	**6000**		1000	480	ug/L		11/12/24 09:30	11/12/24 18:01	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 18:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**270**		5.0	2.5	mg/L			11/07/24 07:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.5		5.0	2.5	mg/L			11/07/24 07:49	1
Total Alkalinity as CaCO3 (SM 2320B)	**270**		5.0	2.5	mg/L			11/07/24 07:49	1
Total Dissolved Solids (SM 2540C)	**320**		50	42	mg/L			11/05/24 17:27	1
pH (SM 4500 H+ B)	**7.5**	**HF**	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	0.0869	U	0.0843	0.0846	1.00	0.131	pCi/L	11/11/24 09:02	12/03/24 07:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*80.0*		*30 - 110*	*11/11/24 09:02*	*12/03/24 07:34*	*1*

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Client Sample ID: MW-312

Date Collected: 10/31/24 13:26
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294298-1

Matrix: Water

Method: EPA 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	1.01		0.632	0.639	1.00	0.920	pCi/L	11/11/24 09:11	11/26/24 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*80.0*		*30 - 110*	*11/11/24 09:11*	*11/26/24 15:00*	*1*
Y Carrier	*59.1*		*30 - 110*	*11/11/24 09:11*	*11/26/24 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.10		0.638	0.645	5.00	0.920	pCi/L		12/05/24 10:05	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Groundwater Elevation	573.36				ft			10/31/24 13:26	1
Oxidation Reduction Potential	198.1				mV			10/31/24 13:26	1
Oxygen, Dissolved	2.60				mg/L			10/31/24 13:26	1
Field pH	7.16				SU			10/31/24 13:26	1
Field Conductivity	629				umhos/cm			10/31/24 13:26	1
Field Temperature	13.7				Degrees C			10/31/24 13:26	1
Field Turbidity	1.67				NTU			10/31/24 13:26	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

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

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-439981/3
Matrix: Water
Analysis Batch: 439981

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.45		1.0	0.45	mg/L			11/13/24 12:16	1
Fluoride	<0.075		0.20	0.075	mg/L			11/13/24 12:16	1
Sulfate	<0.42		1.0	0.42	mg/L			11/13/24 12:16	1

Lab Sample ID: LCS 310-439981/4
Matrix: Water
Analysis Batch: 439981

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.1		mg/L		101	90 - 110
Fluoride	2.00	2.00		mg/L		100	90 - 110
Sulfate	10.0	10.6		mg/L		106	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-439334/1-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		2.0	1.0	ug/L		11/12/24 09:30	11/12/24 16:35	1
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 16:35	1
Barium	<0.66		2.0	0.66	ug/L		11/12/24 09:30	11/12/24 16:35	1
Beryllium	<0.33		1.0	0.33	ug/L		11/12/24 09:30	11/12/24 16:35	1
Boron	<76		100	76	ug/L		11/12/24 09:30	11/12/24 16:35	1
Cadmium	<0.10		0.20	0.10	ug/L		11/12/24 09:30	11/12/24 16:35	1
Calcium	<0.19		0.50	0.19	mg/L		11/12/24 09:30	11/12/24 16:35	1
Chromium	<1.2		5.0	1.2	ug/L		11/12/24 09:30	11/12/24 16:35	1
Cobalt	<0.17		0.50	0.17	ug/L		11/12/24 09:30	11/12/24 16:35	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 16:35	1
Lead	<0.26		0.50	0.26	ug/L		11/12/24 09:30	11/12/24 16:35	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 16:35	1
Magnesium	<150		500	150	ug/L		11/12/24 09:30	11/12/24 16:35	1
Manganese	<3.6		10	3.6	ug/L		11/12/24 09:30	11/12/24 16:35	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 16:35	1
Potassium	<150		500	150	ug/L		11/12/24 09:30	11/12/24 16:35	1
Selenium	<1.4		5.0	1.4	ug/L		11/12/24 09:30	11/12/24 16:35	1
Sodium	<480		1000	480	ug/L		11/12/24 09:30	11/12/24 16:35	1
Thallium	<0.57		1.0	0.57	ug/L		11/12/24 09:30	11/12/24 16:35	1

Lab Sample ID: LCS 310-439334/2-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	200	197		ug/L		98	80 - 120
Arsenic	200	203		ug/L		102	80 - 120
Barium	100	103		ug/L		103	80 - 120
Beryllium	100	99.9		ug/L		100	80 - 120

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

Lab Sample ID: LCS 310-439334/2-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	200	205		ug/L		102	80 - 120
Cadmium	100	96.8		ug/L		97	80 - 120
Calcium	2.00	2.09		mg/L		105	80 - 120
Chromium	100	102		ug/L		102	80 - 120
Cobalt	100	98.5		ug/L		99	80 - 120
Iron	200	186		ug/L		93	80 - 120
Lead	200	209		ug/L		104	80 - 120
Lithium	200	212		ug/L		106	80 - 120
Magnesium	2000	1900		ug/L		95	80 - 120
Manganese	100	97.3		ug/L		97	80 - 120
Molybdenum	200	192		ug/L		96	80 - 120
Potassium	2000	1870		ug/L		94	80 - 120
Selenium	400	402		ug/L		100	80 - 120
Sodium	2000	1980		ug/L		99	80 - 120
Thallium	100	111		ug/L		111	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-439294/1-A
Matrix: Water
Analysis Batch: 439456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439294

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.11		0.20	0.11	ug/L		11/11/24 16:15	11/12/24 09:41	1

Lab Sample ID: LCS 310-439294/2-A
Matrix: Water
Analysis Batch: 439456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439294

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.67	1.53		ug/L		92	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 310-438962/25
Matrix: Water
Analysis Batch: 438962

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	1000	936		mg/L		94	86 - 111

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

Lab Sample ID: MB 310-438777/1
Matrix: Water
Analysis Batch: 438777

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	<42		50	42	mg/L			11/05/24 17:27	1

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

Lab Sample ID: LCS 310-438777/2
Matrix: Water
Analysis Batch: 438777

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	994		mg/L		99	88 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-438438/29
Matrix: Water
Analysis Batch: 438438

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

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-687939/1-A
Matrix: Water
Analysis Batch: 691705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687939

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226	-0.03562	U	0.0364	0.0366	1.00	0.107	pCi/L	11/11/24 09:02	12/03/24 07:34	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.9*		*30 - 110*	*11/11/24 09:02*	*12/03/24 07:34*	*1*

Lab Sample ID: LCS 160-687939/2-A
Matrix: Water
Analysis Batch: 691705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687939

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium 226	9.58	10.09		1.10	1.00	0.168	pCi/L	105	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Barium	*83.5*		*30 - 110*

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-687980/1-A
Matrix: Water
Analysis Batch: 690621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687980

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 228	-0.1089	U	0.344	0.345	1.00	0.676	pCi/L	11/11/24 09:11	11/26/24 14:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Barium	*90.9*		*30 - 110*	*11/11/24 09:11*	*11/26/24 14:59*	*1*
Y Carrier	*76.6*		*30 - 110*	*11/11/24 09:11*	*11/26/24 14:59*	*1*

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Method: 904.0 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-687980/2-A
Matrix: Water
Analysis Batch: 690621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687980

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium 228			8.31	10.76		1.60	1.00	0.722	pCi/L	130	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Barium	*83.5*		*30 - 110*
Y Carrier	*68.0*		*30 - 110*

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

HPLC/IC

Analysis Batch: 439981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	9056A	
MB 310-439981/3	Method Blank	Total/NA	Water	9056A	
LCS 310-439981/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 439294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	7470A	
MB 310-439294/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-439294/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 439334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	3005A	
MB 310-439334/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 439456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	7470A	439294
MB 310-439294/1-A	Method Blank	Total/NA	Water	7470A	439294
LCS 310-439294/2-A	Lab Control Sample	Total/NA	Water	7470A	439294

Analysis Batch: 439506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	6020B	439334
MB 310-439334/1-A	Method Blank	Total/NA	Water	6020B	439334
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	6020B	439334

Analysis Batch: 439576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	6020B	439334

General Chemistry

Analysis Batch: 438438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	SM 4500 H+ B	
LCS 310-438438/29	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 438777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	SM 2540C	
MB 310-438777/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-438777/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 438962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	SM 2320B	
LCS 310-438962/25	Lab Control Sample	Total/NA	Water	SM 2320B	

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Rad

Prep Batch: 687939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	PrecSep-21	
MB 160-687939/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-687939/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 687980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	PrecSep_0	
MB 160-687980/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-687980/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 439721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294298-1	MW-312	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Client Sample ID: MW-312

Date Collected: 10/31/24 13:26
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294298-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	439981	WZC8	EET CF	11/13/24 19:01
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 18:01
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439576	A6US	EET CF	11/13/24 11:53
Total/NA	Prep	7470A			439294	QTZ5	EET CF	11/11/24 16:15
Total/NA	Analysis	7470A		1	439456	QTZ5	EET CF	11/12/24 10:04
Total/NA	Analysis	SM 2320B		1	438962	MDU9	EET CF	11/07/24 07:49
Total/NA	Analysis	SM 2540C		1	438777	XJ7V	EET CF	11/05/24 17:27
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Prep	PrecSep-21			687939	BCE	EET SL	11/11/24 09:02
Total/NA	Analysis	903.0		1	691705	FLC	EET SL	12/03/24 07:34
Total/NA	Prep	PrecSep_0			687980	BCE	EET SL	11/11/24 09:11
Total/NA	Analysis	904.0		1	690621	FLC	EET SL	11/26/24 15:00
Total/NA	Analysis	Ra226_Ra228 Pos		1	691916	SCB	EET SL	12/05/24 10:05
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/31/24 13:26

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: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	12-08-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25
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	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
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	03-31-25
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	12-31-24
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	P330-17-00028	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.

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

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 2320B	Alkalinity	SM	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
903.0	Radium-226 (GFPC)	EPA	EET SL
904.0	Radium-228 (GFPC)	EPA	EET SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	EET SL
Field Sampling	Field Sampling	EPA	EET CF
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:

EPA = US Environmental Protection Agency
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

eurofins | Environment Testing America

310-294298 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.01.24 TIME 1630 | Received By: CGC

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: P | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.2 | Corrected Temp (°C): 1.2

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
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

09/02/2025 - Classification: Internal - ECRM13574470

09/02/2025 - Classification: Internal - ECRM13574470

Eurofins TestAmerica, Cedar Falls

3019 Venture Way

Cedar Falls IA 50613

Phone (319) 277-2401 Phone (319) 277-2425

eurofins Environment Testing America

Chain of Custody Record

Client Information	Sampler: Michael Morgan	Lab PM: Sandie Fredrick	Carrier Tracking No(s):	COC No. 3
Client Contact: Meghan Blodgett	Phone: 515-631-0778	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:			Job #:
Address: 2830 Dairy Drive	Due Date Requested:			
City: Madison	TAT Requested (days):			
State Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #:			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton, IA	SSOW#:			

Analysis Requested

Preservation Codes.

A - HCL M - Hexane
B - NaOH N - None
C - Zn Acetate O - AsNaO2
D - Nitric Acid P - Na2O4S
E - NaHSO4 Q - Na2SO3
F - MeOH R - Na2S2O3
G - Amchlor S - H2SO4
H - Ascorbic Acid T - TSP Dodecahydrate
I - Ice U - Acetone
J - DI Water V - MCAA
K - EDTA W - pH 4-5
L - EDA Z - other (specify)

Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals, total (Sb, As, Ba, Be, B, Ca, Cd, Cr, Co, Fe, Pb, Li, Mo, Se, Tl)	6020 Metals total (Sb, As, Ba, Be, B, Ca, Cd, Cr, Co, Fe, Pb, Li, Mg, Mn, Mo, K, Se, Na, Tl)	6020 Metals total (As, Fe, Li, Mo)	6020 Metals, Total (As, Ca, Fe, Li, Mn, Mg, Mo, Na, K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	D	D		I	I	I	I	I						
MW-312	10/31/24	13:26	G	W	N			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:	Date/Time:	Company	Received by:	Date/Time:	Company
Michael Morgan	11/1/24 09:30	SCS	CGC	11.01.24 1650	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No | Cooler Temperature(s) °C and Other Remarks:

12/5/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294298-1

Login Number: 294298
List Number: 1
Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294298-1

Login Number: 294298
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 11/08/24 01:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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?	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294298-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
310-294298-1	MW-312	80.0
LCS 160-687939/2-A	Lab Control Sample	83.5
MB 160-687939/1-A	Method Blank	90.9

Tracer/Carrier Legend

Ba = Barium

Method: 904.0 - 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)
310-294298-1	MW-312	80.0	59.1
LCS 160-687980/2-A	Lab Control Sample	83.5	68.0
MB 160-687980/1-A	Method Blank	90.9	76.6

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier

Groundwater Monitoring Results - Field Parameters
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00
October 2024

Eurofins Report Number	Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
310-294299-1,2	MW-301	10/30/2024	576.22	15.8	6.54	0.51	1,187	215.9	8.86
	MW-302	10/29/2024	573.66	17.3	6.99	0.92	1,194	196.3	4.85
	MW-303	10/29/2024	574.59	15.9	6.82	0.53	1,104	88.1	13.58
	MW-304	10/29/2024	574.07	14.5	6.70	0.41	1,274	173.3	18.22
	MW-304A	10/29/2024	574.01	20.0	7.11	3.71	699	139.2	4.93
	MW-305	10/29/2024	573.99	16.7	6.90	0.52	1,656	104.9	9.83
	MW-306	10/30/2024	574.77	14.9	6.94	0.95	1,794	208.7	5.53
	MW-307	10/30/2024	589.81	15.9	6.34	1.56	1,421	240.1	5.63
	MW-308	10/28/2024	574.22	15.5	6.39	0.47	804	222.3	4.74
	~~MW-309~~	~~10/28/2024~~	DRY	--	--	--	--	--	--
	MW-310	10/28/2024	588.10	15.0	6.91	1.91	1,171	210.4	4.14
	MW-313	10/30/2024	573.28	16.4	7.15	2.14	779	204.1	6.52
310-294297-1	MW-311	10/30/2024	573.37	15.3	6.89	4.85	941	231.2	9.54
	MW-311A	10/30/2024	573.46	16.2	7.44	1.88	987	196.6	4.79
310-294298-1,2	MW-312	10/31/2024	573.36	13.7	7.16	2.60	629	198.1	1.67
310-294296-1,2	MW-314	10/31/2024	572.69	13.5	7.06	2.75	826	210.3	7.21
	MW-314A	10/30/2024	572.79	12.2	7.42	2.92	1924	121.7	6.61

Abbreviations:
mg/L = milligrams per liter
mV = millivolts
-- = not measured
amsl = above mean sea level

Created by: RM Date: 10/6/2021
Last revision by: KMV Date: 11/4/2024
Checked by: RM Date: 11/14/2024

09/02/2025 - Classification: Internal - ECRM13574470

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ANALYTICAL REPORT

PREPARED FOR

Attn: Meghan Blodgett
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Generated 12/5/2024 1:10:54 PM Revision 1

JOB DESCRIPTION

ML Kapp 25224077

JOB NUMBER

310-294296-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Revision 1

Authorized for release by
Sandie Fredrick, Senior Project Manager
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Job ID: 310-294296-1 — Eurofins Cedar Falls

Job Narrative
310-294296-1

Revision
The report being provided is a revision of the original report sent on 12/05/24. The report (revision 1) is being revised due to:
Report only the following analytes per client request:
Arsenic
Iron
Lithium
Molybdenum
Lab pH
Field Parameters.

Receipt
The samples were received on 11/1/2024 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 was 9.3º C.

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

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

Sample Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-294296-1	MW-314	Water	10/31/24 09:51	11/01/24 16:50
310-294296-2	MW-314A	Water	10/31/24 11:18	11/01/24 16:50

Detection Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Client Sample ID: MW-314 — Lab Sample ID: 310-294296-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.93	J	2.0	0.53	ug/L	1		6020B	Total/NA
Iron	98	J	100	36	ug/L	1		6020B	Total/NA
Molybdenum	1.6	J	2.0	1.3	ug/L	1		6020B	Total/NA
pH	7.3	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Field Conductivity	826				umhos/cm	1		Field Sampling	Total/NA
Field pH	7.06				SU	1		Field Sampling	Total/NA
Field Temperature	13.5				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	7.21				NTU	1		Field Sampling	Total/NA
Groundwater Elevation	572.69				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	210.3				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.75				mg/L	1		Field Sampling	Total/NA

Client Sample ID: MW-314A — Lab Sample ID: 310-294296-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.0		2.0	0.53	ug/L	1		6020B	Total/NA
Iron	1100		100	36	ug/L	1		6020B	Total/NA
Lithium	3.9	J	10	2.5	ug/L	1		6020B	Total/NA
Molybdenum	2.2		2.0	1.3	ug/L	1		6020B	Total/NA
pH	7.4	HF	1.0	1.0	SU	1		SM 4500 H+ B	Total/NA
Field Conductivity	1924				umhos/cm	1		Field Sampling	Total/NA
Field pH	7.42				SU	1		Field Sampling	Total/NA
Field Temperature	12.2				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	6.61				NTU	1		Field Sampling	Total/NA
Groundwater Elevation	572.79				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	121.7				mV	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.92				mg/L	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Client Sample ID: MW-314

Date Collected: 10/31/24 09:51
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294296-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.93	J	2.0	0.53	ug/L		11/12/24 09:30	11/12/24 17:38	1
Iron	98	J	100	36	ug/L		11/12/24 09:30	11/12/24 17:38	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 17:38	1
Molybdenum	1.6	J	2.0	1.3	ug/L		11/12/24 09:30	11/12/24 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.3	HF	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Conductivity	826				umhos/cm			10/31/24 09:51	1
Field pH	7.06				SU			10/31/24 09:51	1
Field Temperature	13.5				Degrees C			10/31/24 09:51	1
Field Turbidity	7.21				NTU			10/31/24 09:51	1
Groundwater Elevation	572.69				ft			10/31/24 09:51	1
Oxidation Reduction Potential	210.3				mV			10/31/24 09:51	1
Oxygen, Dissolved	2.75				mg/L			10/31/24 09:51	1

Client Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Client Sample ID: MW-314A

Date Collected: 10/31/24 11:18
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294296-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.0		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 17:41	1
Iron	1100		100	36	ug/L		11/12/24 09:30	11/12/24 17:41	1
Lithium	3.9	J	10	2.5	ug/L		11/12/24 09:30	11/12/24 17:41	1
Molybdenum	2.2		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 17:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.4	HF	1.0	1.0	SU			11/01/24 17:35	1

Method: EPA Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field Conductivity	1924				umhos/cm			10/31/24 11:18	1
Field pH	7.42				SU			10/31/24 11:18	1
Field Temperature	12.2				Degrees C			10/31/24 11:18	1
Field Turbidity	6.61				NTU			10/31/24 11:18	1
Groundwater Elevation	572.79				ft			10/31/24 11:18	1
Oxidation Reduction Potential	121.7				mV			10/31/24 11:18	1
Oxygen, Dissolved	2.92				mg/L			10/31/24 11:18	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

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

QC Sample Results

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-439334/1-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.53		2.0	0.53	ug/L		11/12/24 09:30	11/12/24 16:35	1
Iron	<36		100	36	ug/L		11/12/24 09:30	11/12/24 16:35	1
Lithium	<2.5		10	2.5	ug/L		11/12/24 09:30	11/12/24 16:35	1
Molybdenum	<1.3		2.0	1.3	ug/L		11/12/24 09:30	11/12/24 16:35	1

Lab Sample ID: LCS 310-439334/2-A
Matrix: Water
Analysis Batch: 439506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	200	203		ug/L		102	80 - 120
Iron	200	186		ug/L		93	80 - 120
Lithium	200	212		ug/L		106	80 - 120
Molybdenum	200	192		ug/L		96	80 - 120

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-438438/29
Matrix: Water
Analysis Batch: 438438

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

QC Association Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Metals

Prep Batch: 439334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294296-1	MW-314	Total/NA	Water	3005A	
310-294296-2	MW-314A	Total/NA	Water	3005A	
MB 310-439334/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 439506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294296-1	MW-314	Total/NA	Water	6020B	439334
310-294296-2	MW-314A	Total/NA	Water	6020B	439334
MB 310-439334/1-A	Method Blank	Total/NA	Water	6020B	439334
LCS 310-439334/2-A	Lab Control Sample	Total/NA	Water	6020B	439334

General Chemistry

Analysis Batch: 438438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294296-1	MW-314	Total/NA	Water	SM 4500 H+ B	
310-294296-2	MW-314A	Total/NA	Water	SM 4500 H+ B	
LCS 310-438438/29	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Field Service / Mobile Lab

Analysis Batch: 439721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294296-1	MW-314	Total/NA	Water	Field Sampling	
310-294296-2	MW-314A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Client Sample ID: MW-314
Date Collected: 10/31/24 09:51
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294296-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 17:38
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/31/24 09:51

Client Sample ID: MW-314A
Date Collected: 10/31/24 11:18
Date Received: 11/01/24 16:50

Lab Sample ID: 310-294296-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439334	F5MW	EET CF	11/12/24 09:30
Total/NA	Analysis	6020B		1	439506	A6US	EET CF	11/12/24 17:41
Total/NA	Analysis	SM 4500 H+ B		1	438438	A3GU	EET CF	11/01/24 17:35
Total/NA	Analysis	Field Sampling		1	439721	BJ0R	EET CF	10/31/24 11:18

Laboratory References:

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
SM 4500 H+ B	pH	SM	EET CF
Field Sampling	Field Sampling	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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310-294296 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.01.24 TIME 1630 | Received By: CGC

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 melted ice ☐ NONE

Thermometer ID: P | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 7.7 | Corrected Temp (°C): 7.7

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	250mL Plastic HNO_3	
Uncorrected Temp (°C):	9.3	
Corrected Temp (°C):	9.3	

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

09/02/2025 - Classification: Internal - ECRM13574470

12/5/2024 (Rev. 1)

Eurofins TestAmerica, Cedar Falls

3019 Venture Way

Cedar Falls IA 50613

Phone (319) 277-2401 Phone (319) 277-2425

eurofins Environment Testing America

Chain of Custody Record

Client Information	Sampler: Michael Morgan	Lab PM: Sandie Fredrick	Carrier Tracking No(s):	COC No 4
Client Contact: Meghan Blodgett	Phone: 515-631-0778	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:	Analysis Requested		Job #:
Address: 2830 Dairy Drive	Due Date Requested:			
City: Madison	TAT Requested (days):			
State Zip: WI 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-224-2830	PO #: 25224077			
Email: mblodgett@scsengineers.com	WO #:			
Project Name: ML Kapp 25224077	Project #: 25224077			
Site: Clinton, IA	SSOW#:			

Preservation Codes

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 Metals Total (Sb, As, Ba, Be, B, Ca, Cd, Cr, Co, Fe, Pb, Li, Mo, Se, Tl)	6020 Metals, total (Sb, As, Ba, Be, B, Ca, Cd, Cr, Co, Fe, Pb, Li, Mg, Mn, Mo, K, Se, Na, Tl)	6020 Metals total (As, Fe, Li, Mo)	6020 Metals, Total (As, Ca, Fe, Li, Mn, Mg, Mo, Na, K)	7470 Mercury Total	TDS and pH	Chloride, Fluoride, Sulfate	Chloride, Sulfate	EPA 903/904 Radium 226 + 228	Bicarbonate & carbonate alkalinity					Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	D	D		I	I	I	I	I						
MW-314	10/31/24	09 51	G	W	N		X				X	X	X		X							
MW-314A	10/31/24	11 18	G	W	N		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:	Date/Time:	Company	Received by:	Date/Time:	Company
Michael Morgan	11/1/24 09:30	SCS	CGL	11.01.24 1650	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No | Cooler Temperature(s) °C and Other Remarks:

09/02/2025 - Classification: Internal - ECRM13574470

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

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Fredrick, Sandie	Carrier Tracking No(s): N/A	COC No: 310-78046.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Iowa		Job #: 310-294296-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/4/2024			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: ML Kapp 25224077	Project #: 31011020			
Site: N/A	SSOW#: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	903.0/PrecSep_21 Radium-226 (GFPC)	904.0/PrecSep_0 Radium-228 (GFPC)	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-314 (310-294296-1)	10/31/24	09:51 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS
MW-314A (310-294296-2)	10/31/24	11:18 Central	G	Water			X	X	X	2	DO NOT SHIP ON ICE TO ST. LOUIS

Preservation Codes: -

Other: N/A

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC

Possible Hazard Identification: Unconfirmed	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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/6/24 1225				
2	Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time: 0845 NOV 07 2024	Company ETA-SL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

12/5/2024 (Rev. 1)

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294296-1

Login Number: 294296
List Number: 1
Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294296-1

Login Number: 294296
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 11/07/24 12:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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?	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

Client: SCS Engineers
Project/Site: ML Kapp 25224077

Job ID: 310-294296-1

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (30-110)
310-294296-1	MW-314	85.3
310-294296-1 DU	MW-314	87.6
310-294296-2	MW-314A	84.8
LCS 160-687519/2-A	Lab Control Sample	97.5
MB 160-687519/1-A	Method Blank	92.4

Tracer/Carrier Legend

Ba = Barium

Method: 904.0 - 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)
310-294296-1	MW-314	85.3	81.1
310-294296-1 DU	MW-314	87.6	80.4
310-294296-2	MW-314A	84.8	83.0
LCS 160-687520/2-A	Lab Control Sample	97.5	84.9
MB 160-687520/1-A	Method Blank	92.4	81.9

Tracer/Carrier Legend

Ba = Barium
Y = Y Carrier

Groundwater Monitoring Results - Field Parameters
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00
October 2024

Eurofins Report Number	Sample	Sample Date	GW Elevation (ft amsl)	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	ORP (mV)	Turbidity
310-294299-1,2	MW-301	10/30/2024	576.22	15.8	6.54	0.51	1,187	215.9	8.86
	MW-302	10/29/2024	573.66	17.3	6.99	0.92	1,194	196.3	4.85
	MW-303	10/29/2024	574.59	15.9	6.82	0.53	1,104	88.1	13.58
	MW-304	10/29/2024	574.07	14.5	6.70	0.41	1,274	173.3	18.22
	MW-304A	10/29/2024	574.01	20.0	7.11	3.71	699	139.2	4.93
	MW-305	10/29/2024	573.99	16.7	6.90	0.52	1,656	104.9	9.83
	MW-306	10/30/2024	574.77	14.9	6.94	0.95	1,794	208.7	5.53
	MW-307	10/30/2024	589.81	15.9	6.34	1.56	1,421	240.1	5.63
	MW-308	10/28/2024	574.22	15.5	6.39	0.47	804	222.3	4.74
	~~MW-309~~	~~10/28/2024~~	DRY	--	--	--	--	--	--
	MW-310	10/28/2024	588.10	15.0	6.91	1.91	1,171	210.4	4.14
	MW-313	10/30/2024	573.28	16.4	7.15	2.14	779	204.1	6.52
310-294297-1	MW-311	10/30/2024	573.37	15.3	6.89	4.85	941	231.2	9.54
	MW-311A	10/30/2024	573.46	16.2	7.44	1.88	987	196.6	4.79
310-294298-1,2	MW-312	10/31/2024	573.36	13.7	7.16	2.60	629	198.1	1.67
310-294296-1,2	MW-314	10/31/2024	572.69	13.5	7.06	2.75	826	210.3	7.21
	MW-314A	10/30/2024	572.79	12.2	7.42	2.92	1924	121.7	6.61

Abbreviations:
mg/L = milligrams per liter
mV = millivolts
-- = not measured
amsl = above mean sea level

Created by: RM Date: 10/6/2021
Last revision by: KMV Date: 11/4/2024
Checked by: RM Date: 11/14/2024

09/02/2025 - Classification: Internal - ECRM13574470

Appendix D

Historical Monitoring Results

09/02/2025 - Classification: Internal - ECRM13574470

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-301
Number of Sampling Dates: 22

Parameter Name	Units	3/28/2018	5/22/2018	6/25/2018	7/25/2018	10/5/2018	11/29/2018	1/10/2019	2/13/2019	4/9/2019	10/7/2019	12/10/2019	2/4/2020	4/29/2020	10/22/2020	4/5/2021	10/19/2021	4/18/2022	11/2/2022	5/2/2023
Boron	ug/L	15700	12500	2280	2040	3620	10900	13000	13800	15000	13000	12000	13000	10000	13000	14000	13000	12000	12000	11000
Calcium	mg/L	131	123	105	118	114	121	140	137	150	140	140	110	130	130	130	130	120	110	110
Chloride	mg/L	21.7	24.3	67.1	75.5	63.5	32.1	23	25.6	21	28	37	37	48	50	51	53	53	66	63
Field pH	Std. Units	6.83	6.94	7.25	8.39	7.05	6.79	6.95	6.52	6.66	6.28	6.38	6.54	7.08	6.7	7/6.52	6.69	6.69	6.43	6.51
Fluoride	mg/L	0.32	0.25	0.23	0.22	0.3	0.25	0.22	0.23	<0.23	0.32	<0.23	--	0.35	<0.23	0.39	<0.28	<0.22	<0.22	0.51
Sulfate	mg/L	475	456	61	54.3	130	306	418	450	360	350	320	360	250	310	250	310	240	230	220
Total Dissolved Solids	mg/L	776	833	567	611	608	762	892	826	820	840	760	790	720	820	690	630	660	680	610
Antimony	ug/L	0.092	<0.15	<0.15	0.21	0.1	<0.078	0.17	0.086	--	--	<2.1	--	<0.58	--	<1.1	<1.1	<2.8	<0.69	<2
Arsenic	ug/L	0.66	0.82	0.67	1	0.99	1.2	0.94	0.76	--	--	<0.75	<0.88	0.95	<3.5	<0.75	1.7	<3	<0.75	<1.1
Barium	ug/L	72.9	116	167	193	165	208	149	119	--	--	120	72	140	76	79	77	71	64	64
Beryllium	ug/L	<0.012	<0.12	<0.12	0.13	<0.089	<0.089	<0.089	<0.089	--	--	<0.27	--	<0.27	--	<0.27	<0.27	<1.1	<0.27	<0.66
Cadmium	ug/L	0.14	0.13	<0.07	0.16	0.05	0.044	0.11	0.15	--	--	0.1	0.11	0.095	0.28	0.44	0.22	0.23	0.26	0.22
Chromium	ug/L	0.24	0.32	0.25	0.3	0.13	0.58	0.35	0.14	--	--	<0.98	--	<1.1	--	<1.1	<1.1	<4.4	<1.1	<2.2
Cobalt	ug/L	3.3	1.7	0.17	0.29	0.22	2	3.6	4.7	--	--	5.2	4.5	3.5	4.4	4.6	5.1	3.4	4.3	3.5
Lead	ug/L	0.059	0.12	<0.12	0.28	<0.13	<0.13	<0.13	<0.13	--	--	<0.27	<0.27	<0.27	<0.44	<0.21	0.48	<0.96	<0.24	<0.48
Lithium	ug/L	9.7	<4.6	6.5	6.1	5.8	10.1	4.9	8.7	--	--	<11	4.4	7.4	<10	6.9	5.8	<10	7.9	8.2
Mercury	ug/L	<0.09	<0.09	<0.09	<0.09	0.15	<0.09	<0.09	<0.037	--	--	<0.1	--	<0.1	--	<0.15	<0.15	<0.11	<0.11	<0.14
Molybdenum	ug/L	345	251	33.1	31.1	42.8	237	294	242	--	--	310	300	250	510	430	430	380	490	480
Selenium	ug/L	<0.086	<0.16	<0.16	0.23	0.086	<0.085	0.12	<0.085	--	--	<1	<1	<1	--	<0.96	1.4	<3.8	<0.96	<2.8
Thallium	ug/L	<0.036	<0.14	<0.14	0.19	<0.099	<0.099	<0.099	<0.099	--	--	<0.27	--	<0.26	--	<0.26	0.29	<1	<0.26	<0.52
Total Radium	pCi/L	1.19	0.872	0.813	1.18	1.31	1.67	1.99	0.966	--	--	0.321	0.413	0.538	0.388	0.414	0.861	0.472	0.9	0.807
Radium-226	pCi/L	0.676	0.573	0.481	0.589	0.281	0.973	1.01	0.39	--	--	0.0849	0.187	0.156	0.0134	0.192	0.128	0.167	0.226	0.228
Radium-228	pCi/L	0.514	0.299	0.332	0.587	1.03	0.701	0.978	0.576	--	--	0.236	0.226	0.382	0.374	0.222	0.732	0.305	0.675	0.579
Field Specific Conductance	umhos/cm	930	1060	902	953	780	690	725	938	1139	1058	1026	1054	1069	979	991	1012	885	840	1006
Field Temperature	deg C	11.1	11.3	13	13.3	13.8	13.57	12.65	11.5	11.2	13.96	11.7	10.92	10.5	14.6	12.7	15.4	9.5	15.3	11.3
Groundwater Elevation	feet	577.65	579.2	578.57	577.83	580.04	577.55	577.36	577.23	585.25	580.97	577.39	578.07	578.76	577.42	577.3	576.35	577.53	576.16	586.13
Turbidity	NTU	0.73	3.16	4.13	9.4	3.94	0.91	1.75	6.68	20	2.97	5.02	3.15	9.87	3.84	4.5	57	26.3	2.76	8.1
Collected By		--	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--
Collected Date		--	--	--	7	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--
Collected Time		--	--	--	14	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--
Field Oxidation Potential	millivolts	-8.8	-106	-153	-180	-110	-89.7	0	-33.2 mV	-19.4	-39.5	-42.3	-4.2	-44.1	-19.6	49.4	107.4	24.9	90.1	49.2
Oxygen, Dissolved	mg/L	0.2	0.27	0.47	0.09	0.18	0.22	0.2	0.09	0.09	0.37	0.48	0.56	0.13	0.1	0.2	0.42	0.37	0.05	0.02
pH at 25 Degrees C	Std. Units	7.1	6.8	7	7	7	7	6.6	6.8	6.8	6.8	6.9	7	7.2	7.5	--	6.7	6.8	6.8	6.8
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	220	240	240	200	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.3	<4.6	<4.6	<4.6	--
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	670	250	200	410	--
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1000	1900	2600	570	870
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33000	33000	30000	29000	--
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	750	830	900	750	--
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	750	840	780	730	--
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	430	430	460	550	--
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3300	3200	2500	2900	--
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	46000	46000	44000	48000	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	220	240	240	200	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-301
Number of Sampling Dates: 22

Parameter Name	Units	10/25/2023	4/30/2024	10/30/2024
Boron	ug/L	12000	8000	8800
Calcium	mg/L	120	140	140
Chloride	mg/L	79	95	95
Field pH	Std. Units	6.53	6.47	6.54
Fluoride	mg/L	<0.38	<0.38	<0.38
Sulfate	mg/L	200	130	140
Total Dissolved Solids	mg/L	660	650	720
Antimony	ug/L	<1	<1	<1
Arsenic	ug/L	0.75	0.57	<0.53
Barium	ug/L	75	64	60
Beryllium	ug/L	<0.33	<0.33	<0.33
Cadmium	ug/L	0.27	0.46	0.43
Chromium	ug/L	1.9	<1.2	<1.2
Cobalt	ug/L	4.3	4.3	4.6
Lead	ug/L	<0.24	<0.26	<0.26
Lithium	ug/L	<25	6.3	6.5
Mercury	ug/L	<0.14	<0.11	<0.11
Molybdenum	ug/L	550	530	540
Selenium	ug/L	<1.4	<1.4	<1.4
Thallium	ug/L	1.3	<0.57	<0.57
Total Radium	pCi/L	1.54	0.792	0.909
Radium-226	pCi/L	0.197	0.183	0.226
Radium-228	pCi/L	1.35	0.609	0.683
Field Specific Conductance	umhos/cm	1074	1258	1187
Field Temperature	deg C	15.4	12.6	15.8
Groundwater Elevation	feet	576.21	577.11	576.22
Turbidity	NTU	5.26	19.01	8.86
Collected By		--	--	--
Collected Date		--	--	--
Collected Time		--	--	--
Field Oxidation Potential	millivolts	6.8	103.4	215.9
Oxygen, Dissolved	mg/L	0.84	0.26	0.51
pH at 25 Degrees C	Std. Units	6.8	6.9	6.7
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--
Iron, dissolved	ug/L	--	--	--
Iron, total	ug/L	800	660	310
Magnesium, total	ug/L	--	--	--
Manganese, dissolved	ug/L	--	--	--
Manganese, total	ug/L	--	--	--
Molybdenum, dissolved	ug/L	--	--	--
Potassium, total	ug/L	--	--	--
Sodium, total	ug/L	--	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-302
Number of Sampling Dates: 22

Parameter Name	Units	3/28/2018	5/22/2018	6/25/2018	7/25/2018	10/5/2018	11/29/2018	1/10/2019	2/13/2019	4/9/2019	10/7/2019	12/10/2019	2/4/2020	4/29/2020	10/22/2020	4/5/2021	10/19/2021	4/18/2022	11/1/2022	5/1/2023
Boron	ug/L	5620	4720	4100	4950	5190	6300	5940	6420	4700	4600	6100	5900	4700	5700	5500	6200	5800	6300	5500
Calcium	mg/L	67.9	73	46.7	54.8	58.9	63.7	77.4	94.5	120	75	70	64	61	65	96	100	120	110	140
Chloride	mg/L	18.8	17.6	19.4	19	18.2	15	13.9	10.9	8.9	14	14	16	17	14	11	13	10	9.3	8.1
Field pH	Std. Units	8.32	9.11	10.11	10.64	7.83	8.16	8.51	7.75	7	7.97	7.97	7.79	8.45	8.37	7.8/7.56	7.47	7.42	7.36	7.16
Fluoride	mg/L	0.45	0.39	0.5	0.43	0.45	0.3	0.19	<0.19	<0.23	0.33	<0.23	--	0.37	<0.23	<0.28	<0.28	<0.22	<0.22	<0.38
Sulfate	mg/L	221	199	201	208	215	203	214	211	200	180	240	250	230	260	210	260	240	270	230
Total Dissolved Solids	mg/L	430	494	426	442	467	505	534	564	620	510	530	550	490	580	580	510	590	640	590
Antimony	ug/L	0.27	0.33	0.29	0.32	0.25	0.3	0.37	0.35	--	--	<1.1	--	<0.58	--	<1.1	<1.1	<2.8	<0.69	<2
Arsenic	ug/L	8.5	8.8	10.3	8.7	8.7	9.3	7.7	7.1	--	--	6.7	6.1	8.6	7.3	7.1	7.5	6.6	8.3	5.2
Barium	ug/L	41.6	60.4	43.4	50.1	42.3	47.1	55.7	63.1	--	--	80	58	66	63	92	73	83	83	75
Beryllium	ug/L	<0.012	<0.12	<0.12	<0.12	<0.089	<0.089	<0.089	<0.089	--	--	<0.27	--	<0.27	--	<0.27	<0.27	<1.1	<0.27	<0.66
Cadmium	ug/L	0.046	0.12	0.084	0.087	0.087	0.052	0.087	0.14	--	--	0.13	0.13	0.12	0.16	<0.2	0.11	<0.22	0.093	<0.2
Chromium	ug/L	0.27	1.4	0.59	<0.19	0.29	0.32	0.64	0.36	--	--	<0.98	--	<1.1	--	<1.1	<1.1	<4.4	<1.1	<2.2
Cobalt	ug/L	0.14	0.46	0.24	<0.15	0.12	0.24	0.14	0.29	--	--	0.67	0.16	0.23	0.29	0.19	0.3	<0.76	0.38	<0.34
Lead	ug/L	0.068	0.6	0.13	<0.12	<0.13	0.28	<0.13	0.38	--	--	0.6	<0.27	<0.27	<0.11	<0.21	<0.21	<0.96	<0.24	<0.48
Lithium	ug/L	17.2	14.2	<4.6	7.2	9.9	19.5	21	31.8	--	--	19	12	4	12	18	20	19	25	46
Mercury	ug/L	<0.09	<0.09	<0.09	<0.09	0.14	<0.09	<0.09	<0.037	--	--	<0.1	--	<0.1	--	<0.15	<0.15	<0.11	<0.11	<0.14
Molybdenum	ug/L	281	235	274	260	212	185	214	127	--	--	260	280	360	320	170	200	140	170	98
Selenium	ug/L	5.1	6.7	0.5	1.1	0.4	1.5	2.9	8.1	--	--	<1	<1	<1	--	6.9	<0.96	46	<0.96	36
Thallium	ug/L	<0.036	<0.14	<0.14	<0.14	<0.099	<0.099	<0.099	0.12	--	--	<0.27	--	<0.26	--	<0.26	<0.26	<1	<0.26	<0.52
Total Radium	pCi/L	1.02	0.987	0.611	0.367	0.63	0.644	1.69	0.663	--	--	0.659	0.122	0.577	1.13	0.178	0.624	0.598	0.341	0.338
Radium-226	pCi/L	0.495	0.399	0.37	0.367	0.0932	0.344	0.887	0.499	--	--	0.342	0.115	0.0158	0.232	0.178	0.229	0.194	0.2	0.0574
Radium-228	pCi/L	0.523	0.588	0.241	-0.106	0.537	0.3	0.802	0.164	--	--	0.317	0.00694	0.562	0.894	-0.0548	0.395	0.404	0.141	0.281
Field Specific Conductance	umhos/cm	492	687	633	641	11	495	503	713	870	714	727	781	785	743	834	832	815	759	883
Field Temperature	deg C	11	10.9	12.4	13.2	14.9	13.76	12.23	10.8	9.9	14.3	12	11.14	9.9	13.7	10.4	14.1	9.8	15.4	10.3
Groundwater Elevation	feet	576.62	579.37	578.04	577.62	579.88	576.52	577.05	576.51	585.29	580.74	577.41	577.74	579.38	574.64	577.47	573.32	577.59	573.23	586.44
Turbidity	NTU	1.83	38.63	1.74	4.32	3.65	9.12	1.37	5.54	11.89	1.21	61.54	1.94	1.33	0.02	0.02	11	4.51	0.86	3.73
Collected By		--	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--
Collected Date		--	--	--	7	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--
Collected Time		--	--	--	12	--	--	--	13	--	--	--	--	--	--	--	--	--	--	--
Field Oxidation Potential	millivolts	-132.7	-27	-183	-45	194	-179.8	-75.9	-62.4 mV	116.5	12.3	21.1	37.7	2.7	-64.1	122.6	118.8	119.2	179.7	193.4
Oxygen, Dissolved	mg/L	1.02	0.28	0.21	0.19	3.79	0.47	0.33	0.61	1.99	0.38	0.42	1.49	0.14	0.11	0.98	0.23	0.14	0.21	1.61
pH at 25 Degrees C	Std. Units	8.6	8.2	9.1	8.6	8.4	8.4	7.5	7.8	7.2	8.2	8.1	7.8	8.5	8.3	--	7.7	7.5	7.7	7.2
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	250	190	250	210	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.3	<4.6	<4.6	<4.6	--
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<36	<36	<36	<36	--
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<36	<36	<140	<36	<72
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8100	10000	9800	13000	--
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	120	260	140	350	--
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	110	290	130	330	--
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	170	200	150	180	--
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13000	9500	11000	9400	--
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63000	50000	52000	52000	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	250	190	250	210	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-302
Number of Sampling Dates: 22

Parameter Name	Units	10/25/2023	4/30/2024	10/29/2024
Boron	ug/L	6700	6100	10000
Calcium	mg/L	140	130	180
Chloride	mg/L	13	9.7	12
Field pH	Std. Units	7.15	7.04	6.99
Fluoride	mg/L	<0.38	<0.38	<0.38
Sulfate	mg/L	410	280	460
Total Dissolved Solids	mg/L	770	650	810
Antimony	ug/L	<1	<1	<1
Arsenic	ug/L	7.8	9.1	4.4
Barium	ug/L	97	78	140
Beryllium	ug/L	<0.33	<0.33	<0.33
Cadmium	ug/L	0.13	<0.1	0.14
Chromium	ug/L	1.4	<1.2	<1.2
Cobalt	ug/L	0.31	0.26	0.84
Lead	ug/L	<0.24	<0.26	<0.26
Lithium	ug/L	<25	28	48
Mercury	ug/L	<0.14	<0.11	<0.11
Molybdenum	ug/L	270	150	180
Selenium	ug/L	1.4	5.7	<1.4
Thallium	ug/L	<0.26	<0.57	<0.57
Total Radium	pCi/L	0.385	0.624	0.52
Radium-226	pCi/L	0.198	0.0795	0.222
Radium-228	pCi/L	0.187	0.545	0.298
Field Specific Conductance	umhos/cm	1084	1115	1194
Field Temperature	deg C	15	11.7	17.3
Groundwater Elevation	feet	573.31	576.29	573.66
Turbidity	NTU	6.02	28.45	4.85
Collected By		--	--	--
Collected Date		--	--	--
Collected Time		--	--	--
Field Oxidation Potential	millivolts	30.1	41.5	196.3
Oxygen, Dissolved	mg/L	0.41	0.69	0.92
pH at 25 Degrees C	Std. Units	7.5	7.4	7.1
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--
Iron, dissolved	ug/L	--	--	--
Iron, total	ug/L	<36	55	37
Magnesium, total	ug/L	--	--	--
Manganese, dissolved	ug/L	--	--	--
Manganese, total	ug/L	--	--	--
Molybdenum, dissolved	ug/L	--	--	--
Potassium, total	ug/L	--	--	--
Sodium, total	ug/L	--	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-303
Number of Sampling Dates: 22

Parameter Name	Units	3/28/2018	5/22/2018	6/25/2018	7/25/2018	10/5/2018	11/29/2018	1/10/2019	2/13/2019	4/9/2019	10/7/2019	12/10/2019	2/4/2020	4/29/2020	10/22/2020	4/5/2021	10/18/2021	4/18/2022	11/1/2022	5/2/2023	10/25/2023
Boron	ug/L	2510	3080	3500	1910	3980	3080	3720	3780	2600	2900	3200	4000	4200	3800	5200	5300	5800	5800	2400	4100
Calcium	mg/L	72	84.5	109	69.3	129	116	213	198	150	200	110	130	220	71	170	70	230	85	210	80
Chloride	mg/L	24.7	23.5	19.7	23.9	14.7	14.6	7.3	8.4	19	5.6	16	11	6	23	11	24	13	21	14	19
Field pH	Std. Units	10.41	9.05	9.86	10.74	8.7	9.28	7.39	8.54	7.43	6.76	9.35	7.26	7.33	9.97	7.5/7.19	8.89	6.81	7.26	6.73	7.05
Fluoride	mg/L	0.45	0.39	0.31	0.66	0.35	0.37	<0.19	<0.19	<0.23	0.32	<0.23	--	<0.23	0.67	<0.28	<0.28	<0.22	<0.22	<0.38	<0.38
Sulfate	mg/L	256	308	379	243	459	378	644	659	440	480	350	380	590	260	470	240	600	290	680	310
Total Dissolved Solids	mg/L	438	562	690	452	753	703	1080	968	790	1000	620	760	1000	510	920	430	1300	720	1000	660
Antimony	ug/L	0.24	0.64	0.26	0.27	0.26	0.22	0.23	0.22	--	--	<0.53	--	<0.58	--	<1.1	<1.1	<2.8	<0.69	<1	<1
Arsenic	ug/L	6.6	6.2	6.4	8.8	5.6	7.9	4.1	4.4	--	--	9.2	4	5.8	20	14	81	34	67	44	9.9
Barium	ug/L	28.5	25.7	35.8	21.7	39	44.2	64	53.8	--	--	47	48	96	52	81	220	140	140	97	61
Beryllium	ug/L	<0.012	0.35	<0.12	<0.12	<0.089	<0.089	<0.089	<0.089	--	--	<0.27	--	<0.27	--	<0.27	<0.27	<1.1	<0.27	<0.33	<0.33
Cadmium	ug/L	<0.018	0.46	<0.07	<0.07	0.12	<0.033	0.044	<0.033	--	--	0.045	<0.039	<0.039	0.093	<0.051	0.064	<0.22	0.16	0.19	<0.1
Chromium	ug/L	0.11	0.52	0.45	<0.19	0.2	<0.078	0.38	0.15	--	--	<0.98	--	<1.1	--	<1.1	<1.1	<4.4	<1.1	1.2	<1.1
Cobalt	ug/L	0.18	0.57	0.44	<0.15	0.33	0.18	0.47	0.41	--	--	0.36	0.46	0.77	0.3	1	0.74	2	0.78	1.8	0.64
Lead	ug/L	0.039	0.42	0.18	<0.12	<0.13	<0.13	1.4	<0.13	--	--	0.57	<0.27	<0.27	<0.11	<0.21	<0.21	<0.96	<0.24	<0.24	<0.24
Lithium	ug/L	10.1	9.8	13.6	<4.6	15.6	17.2	23.6	24.4	--	--	17	26	44	14	47	14	67	53	30	32
Mercury	ug/L	<0.09	<0.09	<0.09	<0.09	0.15	<0.09	<0.09	<0.037	--	--	<0.1	--	<0.1	--	<0.15	<0.15	<0.11	<0.11	<0.14	<0.14
Molybdenum	ug/L	135	152	122	145	110	127	55.9	67.1	--	--	140	96	74	180	150	190	96	200	110	250
Selenium	ug/L	8.6	1.4	1.7	6.5	0.72	3	0.69	0.86	--	--	2	2.3	<1	--	<0.96	2.7	<3.8	2.6	5.2	<1.4
Thallium	ug/L	<0.036	0.36	<0.14	<0.14	<0.099	<0.099	<0.099	<0.099	--	--	<0.27	--	<0.26	--	<0.26	<0.26	<1	<0.26	<0.26	<0.26
Total Radium	pCi/L	0.821	0.614	0.876	0.581	1.09	0.202	0.49	1.04	--	--	0.242	0.409	0.348	0.676	0.415	3.8	1.72	1.02	1.15	0.542
Radium-226	pCi/L	0.519	0.0661	0.0823	0.276	0.424	-0.248	0.095	0.566	--	--	0.112	0.123	0.154	0.234	0.214	1.35	0.427	0.424	0.268	0.132
Radium-228	pCi/L	0.302	0.548	0.794	0.305	0.668	0.202	0.394	0.47	--	--	0.131	0.286	0.194	0.442	0.201	2.45	1.29	0.598	0.88	0.41
Field Specific Conductance	umhos/cm	608.7	797	927	706	872	668	948	1092	1024	1220	861	1057	1484	723	1306	768	1592	894	1431	1086
Field Temperature	deg C	12.6	12.3	14	13.8	13.9	13.58	12.82	12.1	12.2	14.11	12	11.93	10.9	13.1	11.6	14.3	10.8	14.3	11.1	14.4
Groundwater Elevation	feet	577.37	580	577.24	577.83	579.74	578.74	579.06	578.9	584.61	581.39	578.9	579.58	580.82	575.82	578.57	573.97	577.7	574.26	585.5	574.45
Turbidity	NTU	0.77	1.32	2.97	2.17	4.61	0.58	6.53	6.13	12.01	1.91	30.09	1.64	41.9	35.2	45.4	110	565	83	81.2	78.11
Collected By		--	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--
Collected Date		--	--	--	7	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--
Collected Time		--	--	--	13	--	--	--	14	--	--	--	--	--	--	--	--	--	--	--	--
Field Oxidation Potential	millivolts	-42.7	-180	-257	-98	-211.8	-286.5	13.8	-160.8 mV	-47	39.5	42.3	34	-97.7	-32.1	-57.8	61.5	132	102.8	51.7	-69.1
Oxygen, Dissolved	mg/L	0.77	0.19	0.23	0.11	0.09	0.2	0.47	0.1	0.08	1.32	0.47	1.73	0.22	0.19	0.3	0.25	0.2	0.2	0.71	0.37
pH at 25 Degrees C	Std. Units	9.7	9	8.9	10.6	8.7	9	7	8.5	7.6	7.2	9.2	7.6	7.8	9.6	--	9.6	6.9	7.6	7	7.3
Arsenic, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.1	11	2.9	7.5	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	230	69	320	170	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.6	79	<4.6	<4.6	--	--
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	790	130	810	430	--	--
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7000	40000	16000	15000	28000	1500
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16000	1700	24000	4900	--	--
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3000	180	9800	1700	--	--
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3000	1600	9800	2200	--	--
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140	200	110	210	--	--
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22000	14000	22000	16000	--	--
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81000	80000	110000	96000	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	230	150	320	170	--	--
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	67	41	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-303
Number of Sampling Dates: 22

Parameter Name	Units	4/30/2024	10/29/2024
Boron	ug/L	5600	5600
Calcium	mg/L	140	91
Chloride	mg/L	17	21
Field pH	Std. Units	6.76	6.82
Fluoride	mg/L	<0.38	<0.38
Sulfate	mg/L	400	340
Total Dissolved Solids	mg/L	830	660
Antimony	ug/L	<1	<1
Arsenic	ug/L	15	29
Barium	ug/L	72	80
Beryllium	ug/L	<0.33	<0.33
Cadmium	ug/L	0.1	0.15
Chromium	ug/L	<1.2	<1.2
Cobalt	ug/L	1.1	1.1
Lead	ug/L	<0.26	<0.26
Lithium	ug/L	59	53
Mercury	ug/L	<0.11	<0.11
Molybdenum	ug/L	170	220
Selenium	ug/L	1.5	<1.4
Thallium	ug/L	<0.57	<0.57
Total Radium	pCi/L	0.355	0.357
Radium-226	pCi/L	0.0309	0.0355
Radium-228	pCi/L	0.324	0.322
Field Specific Conductance	umhos/cm	1518	1104
Field Temperature	deg C	12.5	15.9
Groundwater Elevation	feet	578.28	574.59
Turbidity	NTU	28.42	13.58
Collected By		--	--
Collected Date		--	--
Collected Time		--	--
Field Oxidation Potential	millivolts	-27.1	88.1
Oxygen, Dissolved	mg/L	0.23	0.53
pH at 25 Degrees C	Std. Units	7.2	7
Arsenic, dissolved	ug/L	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--
Iron, dissolved	ug/L	--	--
Iron, total	ug/L	9800	10000
Magnesium, total	ug/L	--	--
Manganese, dissolved	ug/L	--	--
Manganese, total	ug/L	--	--
Molybdenum, dissolved	ug/L	--	--
Potassium, total	ug/L	--	--
Sodium, total	ug/L	--	--
Total Alkalinity as CaCO3	mg/L	--	--
Lithium, dissolved	ug/L	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-304
Number of Sampling Dates: 23

Parameter Name	Units	3/28/2018	5/22/2018	6/25/2018	7/25/2018	10/5/2018	11/29/2018	1/10/2019	2/13/2019	4/9/2019	10/7/2019	12/10/2019	2/4/2020	4/29/2020	7/7/2020	10/22/2020	4/5/2021	10/18/2021	4/18/2022	11/2/2022	5/2/2023
Boron	ug/L	10900	6880	8530	8330	8820	9140	8920	9920	10000	10000	10000	10000	8900	--	9400	11000	8900	10000	11000	8700
Calcium	mg/L	63.2	49.4	52	48.5	56	70.9	85	79.3	54	92	89	85	81	--	86	130	78	130	100	81
Chloride	mg/L	28.4	31.4	28.4	28.7	35.3	28	25.6	26.5	28	24	23	25	26	--	23	20	26	20	22	27
Field pH	Std. Units	7.87	7.65	7.81	7.64	7.47	7.51	7.34	7.24	7.97	7.08	7.31	7.31	6.48	6.81	7.07	7.1/6.8	7.4	6.97	6.69	6.93
Fluoride	mg/L	0.2	0.26	0.25	0.28	0.36	0.24	0.31	0.2	<0.23	0.34	<0.23	--	0.32	--	<0.23	0.45	<0.28	<0.22	<0.22	<0.38
Sulfate	mg/L	213	188	186	177	206	286	349	319	200	330	330	310	290	--	340	490	300	380	370	260
Total Dissolved Solids	mg/L	441	419	443	443	459	601	645	602	440	660	660	620	590	--	660	920	520	830	710	520
Antimony	ug/L	0.035	<0.15	<0.15	0.23	<0.078	<0.078	0.082	<0.078	--	--	<2.1	--	<0.58	--	--	<1.1	<1.1	<2.8	<0.69	<2
Arsenic	ug/L	3.1	3	3.7	4.5	3.3	4.5	3.8	3.1	--	--	4.5	3.7	18	4.4	4.5	6.6	3.1	3.3	3.5	4.1
Barium	ug/L	59.4	39.1	55.7	60.2	47.7	73.3	78.1	64.6	--	--	86	78	420	--	95	180	100	93	140	83
Beryllium	ug/L	<0.012	<0.12	0.13	0.15	<0.089	<0.089	<0.089	<0.089	--	--	<0.27	--	<0.27	--	--	<0.27	<0.27	<1.1	<0.27	<0.66
Cadmium	ug/L	0.11	0.48	0.24	0.38	0.25	0.17	0.19	0.29	--	--	0.28	0.31	0.43	--	0.39	<0.2	0.33	<0.22	0.29	<0.2
Chromium	ug/L	0.49	0.68	3.9	1.8	0.33	0.1	0.23	0.18	--	--	<0.98	--	<1.1	--	--	<1.1	<1.1	<4.4	<1.1	<2.2
Cobalt	ug/L	0.44	0.56	1.9	1.4	0.56	0.73	0.75	0.83	--	--	1.1	0.92	1.2	--	1	1.2	1.1	0.78	1.3	0.53
Lead	ug/L	0.19	0.6	2.3	2.6	0.26	<0.13	<0.13	<0.13	--	--	0.4	<0.27	0.51	--	<0.44	<0.21	<0.21	<0.96	<0.24	<0.48
Lithium	ug/L	4.7	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	5.8	--	--	<11	<2.3	2.9	--	<10	3.2	<2.5	<10	4.2	<5
Mercury	ug/L	<0.09	<0.09	<0.09	<0.09	0.14	<0.09	<0.09	<0.037	--	--	<0.1	--	<0.1	--	--	<0.15	<0.15	<0.11	<0.11	<0.14
Molybdenum	ug/L	1530	1260	807	828	788	790	778	640	--	--	820	950	1200	--	930	650	1200	500	880	740
Selenium	ug/L	<0.086	<0.16	1	0.79	0.11	<0.085	0.14	<0.085	--	--	<1	<1	<1	--	--	<0.96	<0.96	<3.8	<0.96	<2.8
Thallium	ug/L	<0.036	<0.14	<0.14	<0.14	<0.099	<0.099	<0.099	<0.099	--	--	<0.27	--	<0.26	--	--	<0.26	<0.26	<1	<0.26	<0.52
Total Radium	pCi/L	1.1	1.64	0.641	0.645	0.466	1.2	0.978	0.869	--	--	0.277	0.622	4.39	--	0.839	2.95	4.77	0.898	1.34	1.47
Radium-226	pCi/L	0.659	0.867	0.266	0.249	0.0953	0.501	0	0.588	--	--	0.277	0.189	2.31	--	0.363	1.29	2.54	0.368	0.381	0.652
Radium-228	pCi/L	0.437	0.769	0.375	0.396	0.371	0.702	0.978	0.281	--	--	0.155	0.434	2.08	--	0.476	1.66	2.23	0.53	0.96	0.814
Field Specific Conductance	umhos/cm	579.5	611	629	607	560.5	587	630	757	707	909	932	934	924	1004	918	1289	868	1154	920	844
Field Temperature	deg C	12	11.8	13.7	13.6	13.6	13.55	12.68	12.2	11.7	14.62	12.1	12.02	10.8	13.4	13.2	12.1	15.3	10.5	13.6	11.4
Groundwater Elevation	feet	577.05	579.47	570.77	577.56	579.32	578.43	578.56	578.26	585.25	581.62	578.85	578.73	580.95	577.15	575.32	577.25	573.33	576.47	573.39	586.17
Turbidity	NTU	2.9	11.84	78.2	51.08	13.86	18.9	3.65	4.16	2.12	3.5	13.5	2.94	49.9	12.8	1.05	22	110	56.5	84	40
Collected By		--	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--
Collected Date		--	--	--	7	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--
Collected Time		--	--	--	13	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--
Field Oxidation Potential	millivolts	-130.3	-121	-113	-117	-96.7	-69	34.9	-36.8 mV	18.7	-37.4	-42	36.3	74.5	-23.6	-65.2	-18.1	84	-42.2	103.1	12.1
Oxygen, Dissolved	mg/L	0.1	0.57	0.41	0.12	0.1	0.36	0.2	0.06	0.07	0.25	0.28	0.82	0.13	0.28	0.1	0.11	0.1	0.14	0.09	0.13
pH at 25 Degrees C	Std. Units	7.5	7.7	7.4	7.7	7.4	7.6	6.8	7.3	7.5	7.3	7.3	7.3	7.5	--	7.7	--	7.3	7.1	7.1	7.2
Arsenic, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.2	2.3	3.7	1.8	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	160	130	250	180	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.6	<4.6	<4.6	<4.6	--
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	640	<36	<36	<36	--
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3100	1100	330	1200	1700
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22000	20000	18000	23000	--
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2300	450	1600	660	--
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2300	460	1600	620	--
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	640	1200	640	1000	--
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25000	10000	21000	13000	--
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100000	62000	90000	80000	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	160	130	250	180	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-304
Number of Sampling Dates: 23

Parameter Name	Units	10/25/2023	4/30/2024	10/29/2024
Boron	ug/L	8800	11000	9600
Calcium	mg/L	110	140	130
Chloride	mg/L	21	21	21
Field pH	Std. Units	6.76	6.67	6.7
Fluoride	mg/L	<0.38	<0.38	<0.38
Sulfate	mg/L	390	410	420
Total Dissolved Solids	mg/L	850	860	850
Antimony	ug/L	<1	<1	<1
Arsenic	ug/L	2.4	3.9	3.2
Barium	ug/L	110	110	130
Beryllium	ug/L	<0.33	<0.33	<0.33
Cadmium	ug/L	0.34	0.35	0.37
Chromium	ug/L	<1.1	<1.2	<1.2
Cobalt	ug/L	1.6	1.1	1.5
Lead	ug/L	<0.24	<0.26	<0.26
Lithium	ug/L	<25	2.6	3.4
Mercury	ug/L	<0.14	<0.11	<0.11
Molybdenum	ug/L	900	820	800
Selenium	ug/L	<1.4	<1.4	<1.4
Thallium	ug/L	<0.26	<0.57	<0.57
Total Radium	pCi/L	0.364	0.159	1.27
Radium-226	pCi/L	0.215	0.159	0.224
Radium-228	pCi/L	0.149	-0.109	1.05
Field Specific Conductance	umhos/cm	1260	1440	1274
Field Temperature	deg C	13.4	12	14.5
Groundwater Elevation	feet	573.43	576.55	574.07
Turbidity	NTU	6.32	16.08	18.22
Collected By		--	--	--
Collected Date		--	--	--
Collected Time		--	--	--
Field Oxidation Potential	millivolts	11.4	7.6	173.3
Oxygen, Dissolved	mg/L	0.09	0.18	0.41
pH at 25 Degrees C	Std. Units	7	7.1	6.9
Arsenic, dissolved	ug/L	--	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--
Iron, dissolved	ug/L	--	--	--
Iron, total	ug/L	270	780	1500
Magnesium, total	ug/L	--	--	--
Manganese, dissolved	ug/L	--	--	--
Manganese, total	ug/L	--	--	--
Molybdenum, dissolved	ug/L	--	--	--
Potassium, total	ug/L	--	--	--
Sodium, total	ug/L	--	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-304A
Number of Sampling Dates: 9

Parameter Name	Units	2/22/2021	4/5/2021	10/18/2021	4/18/2022	11/2/2022	5/2/2023	10/25/2023	4/30/2024	10/29/2024
Boron	ug/L	380	490	470	460	480	--	--	--	--
Calcium	mg/L	87	89	85	89	82	--	--	--	--
Chloride	mg/L	9.7	11	11	10	11	--	--	--	--
Field pH	Std. Units	7.08	7.4/6.99	7.09	7.12	6.94	7.04	7.03	6.93	7.11
Fluoride	mg/L	<0.28	<0.28	<0.28	<0.22	<0.22	--	--	--	--
Sulfate	mg/L	65	64	72	66	71	--	--	--	--
Total Dissolved Solids	mg/L	390	390	350	360	390	--	--	--	--
Antimony	ug/L	<1.1	<1.1	<1.1	<0.69	<0.69	--	--	--	--
Arsenic	ug/L	2.7	1.8	1.7	1.4	1.5	1.4	1.3	1.3	0.85
Barium	ug/L	150	140	110	100	110	--	--	--	--
Beryllium	ug/L	<0.27	<0.27	<0.27	<0.27	<0.27	--	--	--	--
Cadmium	ug/L	<0.051	<0.051	<0.051	<0.055	<0.055	--	--	--	--
Chromium	ug/L	3.1	<1.1	<1.1	<1.1	<1.1	--	--	--	--
Cobalt	ug/L	1.3	0.54	0.35	0.33	0.36	--	--	--	--
Lead	ug/L	1.1	0.24	<0.21	<0.24	<0.24	--	--	--	--
Lithium	ug/L	3.9	2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Mercury	ug/L	<0.15	<0.15	<0.15	<0.11	<0.11	--	--	--	--
Molybdenum	ug/L	3.1	17	6	3.2	3.8	3.4	42	3.5	2.9
Selenium	ug/L	<0.96	<0.96	<0.96	<0.96	<0.96	--	--	--	--
Thallium	ug/L	<0.26	<0.26	<0.26	<0.26	<0.26	--	--	--	--
Total Radium	pCi/L	1.02	0.747	0.773	0.566	0.814	--	--	--	--
Radium-226	pCi/L	0.291	0.175	0.137	0.16	0.0633	--	--	--	--
Radium-228	pCi/L	0.727	0.572	0.636	0.406	0.751	--	--	--	--
Field Specific Conductance	umhos/cm	628.1	650	654	596	561	682	686	785	699
Field Temperature	deg C	12.1	12.6	13.2	11.2	12.4	11.9	13.7	12.6	20
Groundwater Elevation	feet	573.91	577.35	573.41	576.65	573.47	586.14	573.53	576.81	574.01
Turbidity	NTU	33.1	2.31	9.6	6.7	1.06	2.62	10.05	16.08	4.93
Field Oxidation Potential	millivolts	-153.5	-11.2	10.2	83.9	15.8	1.8	-39.1	2.8	139.2
Oxygen, Dissolved	mg/L	0.23	0.45	0.15	0.17	0.01	1.99	1.26	0.27	3.71
pH at 25 Degrees C	Std. Units	7.4	--	7.3	7.3	7.3	--	--	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	300	430	290	280	--	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	<4.6	<4.6	<4.6	<4.6	--	--	--	--
Iron, dissolved	ug/L	--	330	330	420	480	--	--	--	--
Iron, total	ug/L	--	530	350	400	480	470	250	420	380
Magnesium, total	ug/L	--	30000	28000	28000	28000	--	--	--	--
Manganese, dissolved	ug/L	--	680	670	700	610	--	--	--	--
Manganese, total	ug/L	--	680	660	680	610	--	--	--	--
Potassium, total	ug/L	--	2300	1800	1900	1700	--	--	--	--
Sodium, total	ug/L	--	13000	18000	19000	16000	--	--	--	--
Total Alkalinity as CaCO3	mg/L	--	300	430	290	280	--	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-305
Number of Sampling Dates: 23

Parameter Name	Units	3/28/2018	5/22/2018	6/25/2018	7/25/2018	10/5/2018	11/29/2018	1/10/2019	2/13/2019	4/9/2019	9/6/2019	10/7/2019	12/10/2019	2/4/2020	4/29/2020	10/22/2020	4/5/2021	10/18/2021	4/18/2022	11/2/2022	5/2/2023
Boron	ug/L	16800	14000	16400	11900	16500	18500	18800	18700	1600	17000	20000	15000	15000	16000	16000	16000	13000	16000	14000	14000
Calcium	mg/L	131	122	148	88.4	137	150	172	167	170	--	210	160	160	190	190	190	130	200	160	210
Chloride	mg/L	20.2	21.7	17.7	25.5	19.6	16.3	15.7	16.9	20	--	14	17	19	18	15	18	23	15	18	12
Field pH	Std. Units	6.28	7.27	9.01	7.6	7.31	7.27	7.38	7.12	7.53	8.02	7.04	7.19	7.2	6.41	7.3	7.6/7.31	7.49	7.36	7.22	6.58
Fluoride	mg/L	0.17	0.21	0.39	0.32	0.31	0.22	0.36	0.29	2.3	3.2	0.41	<0.23	--	0.33	<0.23	<0.28	<0.28	<0.22	<0.22	<0.38
Sulfate	mg/L	623	468	673	341	472	<0.24	689	619	480	--	690	620	590	690	760	710	470	810	600	650
Total Dissolved Solids	mg/L	885	872	1080	690	941	1040	1140	1110	1100	--	1300	1100	1100	1200	1300	1200	810	1200	1100	1200
Antimony	ug/L	0.23	<0.15	0.27	0.2	0.088	<0.078	<0.078	<0.078	--	--	--	<2.1	--	<0.58	--	<1.1	<1.1	<2.8	<0.69	<2
Arsenic	ug/L	0.62	0.86	2.1	1.2	1.1	1.4	1.4	1.3	--	--	--	1.4	1.4	3.1	<3.5	1.6	3.1	<3	1.6	<1.1
Barium	ug/L	83.9	81.7	89.5	61	78.6	95.9	97.8	92.6	--	--	--	92	90	120	100	100	74	82	82	87
Beryllium	ug/L	<0.012	<0.12	<0.12	<0.12	<0.089	<0.089	<0.089	<0.089	--	--	--	<0.27	--	<0.27	--	<0.27	<0.27	<1.1	<0.27	<0.66
Cadmium	ug/L	0.16	0.3	0.15	0.18	0.23	0.17	0.21	0.26	--	--	--	0.25	0.24	0.26	0.34	<0.36	0.18	<0.22	0.19	0.2
Chromium	ug/L	0.44	0.2	0.93	<0.19	<0.079	<0.078	0.24	0.45	--	--	--	<0.98	--	<1.1	--	<1.1	<1.1	<4.4	<1.1	<2.2
Cobalt	ug/L	0.62	0.49	0.8	0.29	0.38	0.4	0.54	0.61	--	--	--	0.57	0.55	0.68	0.69	0.8	0.33	<0.76	0.62	0.77
Lead	ug/L	0.099	0.24	0.58	0.15	<0.13	<0.13	<0.13	0.14	--	--	--	<0.27	<0.27	<0.27	<0.44	<0.21	<0.21	<0.96	<0.24	<0.48
Lithium	ug/L	21.4	13.6	17.9	10.9	16.6	21.8	18.1	23.4	--	--	--	19	16	20	22	23	13	21	20	15
Mercury	ug/L	<0.09	<0.09	<0.09	<0.09	0.15	<0.09	<0.09	<0.037	--	--	--	<0.1	--	<0.1	--	<0.15	<0.15	<0.11	<0.11	<0.14
Molybdenum	ug/L	613	671	724	886	666	670	663	468	--	--	--	650	680	720	580	650	810	560	690	380
Selenium	ug/L	0.19	0.5	0.23	0.23	0.088	<0.085	0.094	0.13	--	--	--	<1	<1	<1	--	<0.96	<0.96	<3.8	<0.96	7.8
Thallium	ug/L	<0.036	<0.14	0.21	<0.14	<0.099	<0.099	<0.099	<0.099	--	--	--	<0.27	--	<0.26	--	<0.26	<0.26	<1	<0.26	<0.52
Total Radium	pCi/L	0.962	0.189	1.67	0.702	2.01	0.616	0.987	0.817	--	--	--	0.634	0.28	0.0301	0.75	0.429	0.849	0.496	0.317	0.0603
Radium-226	pCi/L	0.425	0.189	0.649	0.134	0.398	0.157	0.417	0.178	--	--	--	0.0928	0.151	0.0301	0.181	0.135	0.142	0.143	0.173	0.0198
Radium-228	pCi/L	0.537	-0.038	1.02	0.568	1.61	0.459	0.57	0.639	--	--	--	0.541	0.129	-0.0563	0.57	0.295	0.707	0.353	0.144	0.0405
Field Specific Conductance	umhos/cm	934	1155	1405	954	1069	950	958	1272	1425	1590	1604	1391	1415	1545	1354	1585	1224	1438	1178	1605
Field Temperature	deg C	10.9	11.4	14.3	13.7	14.3	13.73	12.3	11.3	10.5	15.3	15.33	11.8	10.63	10.1	13.7	12.1	18.9	10.1	13.9	10.7
Groundwater Elevation	feet	576.58	579.34	571.28	577.52	579.15	578.69	578.84	578.45	585.23	577.42	581.88	578.89	578.85	580.4	575.25	577.16	573.2	576.1	573.3	586.15
Turbidity	NTU	11.92	4.18	41.01	3.29	4.18	0.69	2.91	5.26	4.23	19.31	5.04	11.4	1.72	11.9	3.2	2.63	28.5	6.78	3.39	13.4
Collected By		--	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--
Collected Date		--	--	--	7	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--
Collected Time		--	--	--	14	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--
Field Oxidation Potential	millivolts	63.9 mV	17	-83	-36	-50.2	-72	30.3	-47.7 mV	115.9	157 mV	-41.8	-67.4	14	-50.8	-8.4	-82.4	-85	-34.8	74.8	65.8
Oxygen, Dissolved	mg/L	1.9	0.64	0.54	0.15	0.14	0.2	0.27	0.09	0.08	0.39	0.33	0.83	1.12	0.16	0.13	0.16	0.29	0.17	0	0.02
pH at 25 Degrees C	Std. Units	7.2	7.2	7.6	7.4	7.3	7.6	7.4	7.3	6.9	--	7.2	7.5	7.4	7.6	7.9	--	7.4	7.5	7.4	6.9
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	190	170	250	220	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.6	<4.6	<4.6	<4.6	--
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	880	1200	1200	1300	--
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1200	2600	1200	1600	760
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30000	21000	28000	25000	--
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3200	1100	3600	2500	--
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3200	1100	3100	2400	--
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	630	800	700	780	--
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13000	11000	12000	12000	--
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140000	97000	130000	120000	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	190	170	250	220	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-305
Number of Sampling Dates: 23

Parameter Name	Units	10/25/2023	4/30/2024	10/29/2024
Boron	ug/L	9000	19000	16000
Calcium	mg/L	130	260	190
Chloride	mg/L	20	12	31
Field pH	Std. Units	7.18	6.93	6.9
Fluoride	mg/L	<0.38	<0.38	<0.38
Sulfate	mg/L	480	850	510
Total Dissolved Solids	mg/L	990	1500	1200
Antimony	ug/L	<1	<1	<1
Arsenic	ug/L	1.7	1.8	1.2
Barium	ug/L	79	110	83
Beryllium	ug/L	<0.33	<0.33	<0.33
Cadmium	ug/L	0.16	0.24	0.19
Chromium	ug/L	<1.1	<1.2	<1.2
Cobalt	ug/L	0.39	1.1	0.81
Lead	ug/L	<0.24	<0.26	<0.26
Lithium	ug/L	<25	29	23
Mercury	ug/L	<0.14	<0.11	<0.11
Molybdenum	ug/L	790	490	430
Selenium	ug/L	<1.4	<1.4	<1.4
Thallium	ug/L	<0.26	<0.57	<0.57
Total Radium	pCi/L	0.465	0.979	0.347
Radium-226	pCi/L	0.233	0.159	0.0377
Radium-228	pCi/L	0.233	0.82	0.31
Field Specific Conductance	umhos/cm	1244	2308	1656
Field Temperature	deg C	14.9	11.5	16.7
Groundwater Elevation	feet	573.29	576.68	573.99
Turbidity	NTU	6.38	24.9	9.83
Collected By		--	--	--
Collected Date		--	--	--
Collected Time		--	--	--
Field Oxidation Potential	millivolts	-106.6	-33.6	104.9
Oxygen, Dissolved	mg/L	0.38	0.32	0.52
pH at 25 Degrees C	Std. Units	7.3	7.3	7
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--
Iron, dissolved	ug/L	--	--	--
Iron, total	ug/L	1500	1600	910
Magnesium, total	ug/L	--	--	--
Manganese, dissolved	ug/L	--	--	--
Manganese, total	ug/L	--	--	--
Molybdenum, dissolved	ug/L	--	--	--
Potassium, total	ug/L	--	--	--
Sodium, total	ug/L	--	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-306
Number of Sampling Dates: 22

Parameter Name	Units	3/28/2018	5/22/2018	6/25/2018	7/25/2018	10/5/2018	11/29/2018	1/10/2019	2/13/2019	4/9/2019	10/7/2019	12/10/2019	2/4/2020	4/29/2020	10/22/2020	4/5/2021	10/18/2021	4/19/2022	11/2/2022	5/2/2023
Boron	ug/L	17600	18600	15600	17900	17000	17600	17300	18900	14000	12000	15000	20000	22000	14000	15000	15000	9300	10000	3900
Calcium	mg/L	168	164	165	155	154	141	152	154	150	160	130	120	130	150	150	160	210	160	120
Chloride	mg/L	52.1	59.9	78.5	63.7	83.8	79.4	97.4	93.5	100	83	74	75	76	110	120	190	210	270	99
Field pH	Std. Units	7.42	7.33	8.13	8.31	7.33	7.3	7.46	7.25	7.64	7.01	7.31	7.5	6.59	7.21	7.4/7.05	7.24	6.88	6.93	6.79
Fluoride	mg/L	0.27	0.18	0.27	0.29	0.26	<0.19	<0.19	<0.19	<0.23	0.3	<0.23	--	<0.46	<0.23	<0.28	<0.28	<0.22	<0.22	<0.38
Sulfate	mg/L	488	600	396	454	419	416	452	457	340	270	390	500	560	340	270	320	170	180	72
Total Dissolved Solids	mg/L	1100	1130	1080	1090	1020	1030	1110	1070	1000	910	960	1100	1200	1000	970	1000	1100	1200	660
Antimony	ug/L	0.13	0.16	<0.15	0.17	0.14	0.092	0.24	0.12	--	--	<2.1	--	<0.58	--	<1.1	<1.1	3.1	<0.69	<1
Arsenic	ug/L	0.054	0.42	0.33	0.49	0.37	0.53	0.65	0.37	--	--	<0.75	<0.88	<0.88	<3.5	<0.75	<0.75	<3	<0.75	<0.53
Barium	ug/L	53.6	56.8	55.5	53.8	51.1	54.7	57.9	55.9	--	--	49	53	59	71	84	84	76	110	45
Beryllium	ug/L	<0.012	<0.12	<0.12	<0.12	<0.089	<0.089	<0.089	<0.089	--	--	<0.27	--	<0.27	--	<0.27	<0.27	<1.1	<0.27	<0.33
Cadmium	ug/L	0.025	0.08	<0.07	0.07	0.041	<0.033	0.094	0.05	--	--	<0.039	0.072	<0.039	<0.2	<0.051	<0.051	<0.22	<0.055	<0.1
Chromium	ug/L	0.22	<0.19	<0.19	<0.19	0.13	0.16	0.3	0.16	--	--	<0.98	--	<1.1	--	<1.1	<1.1	<4.4	<1.1	<1.1
Cobalt	ug/L	0.1	0.16	<0.15	0.17	0.13	0.09	0.24	0.19	--	--	0.18	0.26	0.2	<0.36	<0.091	0.19	<0.76	0.21	<0.17
Lead	ug/L	0.033	<0.12	<0.12	<0.12	<0.13	<0.13	<0.13	0.19	--	--	<0.27	<0.27	<0.27	<0.44	<0.21	<0.21	<0.96	<0.24	0.48
Lithium	ug/L	58	63.5	56.4	60.2	65.4	72.6	76.9	81.4	--	--	68	69	80	60	70	89	51	100	26
Mercury	ug/L	<0.09	<0.09	<0.09	<0.09	0.14	<0.09	<0.09	<0.037	--	--	<0.1	--	<0.1	--	<0.15	<0.15	<0.11	<0.11	<0.14
Molybdenum	ug/L	46.4	75.3	53.3	92	87.6	96.1	97.6	89.5	--	--	88	100	120	49	46	57	8.8	25	27
Selenium	ug/L	2.9	0.51	1.2	1	2.8	2.3	0.73	0.68	--	--	1.6	<1	<1	--	1	<0.96	7.1	<0.96	8.5
Thallium	ug/L	<0.036	<0.14	<0.14	<0.14	<0.099	<0.099	0.13	<0.099	--	--	<0.27	--	<0.26	--	<0.26	<0.26	<1	<0.26	<0.26
Total Radium	pCi/L	0.666	0	0.267	0.175	0.577	0.638	1	0.221	--	--	0.61	0.068	0.137	0.189	0.0138	0.216	0.154	0.12	0.193
Radium-226	pCi/L	0.0948	0	0.267	0.168	0.37	0.275	0.417	0.221	--	--	0.0472	0.068	0.03	0.138	0.0138	0.0797	0.0258	0.12	-0.0355
Radium-228	pCi/L	0.571	-0.204	-0.0597	0.00726	0.207	0.363	0.585	-0.115	--	--	0.563	-0.0785	0.107	0.0513	-0.0349	0.136	0.128	-0.135	0.193
Field Specific Conductance	umhos/cm	1355	1511	1498	1431	15.4	936	980	1344	1499	1290	1304	1557	1683	1427	1461	1594	1588	1508	1168
Field Temperature	deg C	10	10.6	11.9	13.2	13.8	13.22	11.78	10.4	9.8	14.56	11.3	11.08	9.9	13.7	11.1	15.3	9.5	14.6	10.1
Groundwater Elevation	feet	577.93	579.47	576.93	577.97	579.46	579.28	579.47	579.4	585.29	582.28	579.49	579.31	580.7	576.82	578.15	567.49	577.24	574.63	586.28
Turbidity	NTU	3.95	1.12	0.88	3.58	8.14	0.64	0.44	4.61	3.01	0.57	3.34	0.71	1.47	0.02	0.02	10	4.35	1.42	4.07
Collected By		--	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--
Collected Date		--	--	--	7	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--
Collected Time		--	--	--	15	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--
Field Oxidation Potential	millivolts	59.9	87	83	99	228.1	-7.7	34.7	-12.2 mV	104.6	19.7	22.4	26	105.4	-3.5	141.9	134.4	114.2	126.4	135.8
Oxygen, Dissolved	mg/L	2.33	0.44	0.4	0.14	5.3	0.26	0.29	0.07	0.08	0.3	0.58	1.87	0.11	0.1	0.18	0.7	1.56	0.19	4.92
pH at 25 Degrees C	Std. Units	7.2	7.4	7.1	7.4	7.3	7.6	7.4	7.4	7.5	7.3	7.6	7.7	7.8	7.8	--	7.3	7	7.2	7.1
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	380	300	510	350	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<4.6	<4.6	<4.6	<4.6	--
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<36	<36	<140	<36	--
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<36	<36	<140	<36	<36
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27000	21000	35000	25000	--
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	370	500	<3.6	540	--
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	410	560	<14	470	--
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13000	13000	11000	11000	--
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	120000	150000	110000	130000	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	380	300	510	350	--
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	84	57	95	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-306
Number of Sampling Dates: 22

Parameter Name	Units	10/25/2023	4/30/2024	10/30/2024
Boron	ug/L	13000	8900	11000
Calcium	mg/L	160	210	160
Chloride	mg/L	250	180	210
Field pH	Std. Units	6.88	6.65	6.94
Fluoride	mg/L	<0.38	<0.38	<0.38
Sulfate	mg/L	200	160	200
Total Dissolved Solids	mg/L	1100	990	1000
Antimony	ug/L	<1	<1	<1
Arsenic	ug/L	<0.53	<0.53	<0.53
Barium	ug/L	110	81	79
Beryllium	ug/L	<0.33	<0.33	<0.33
Cadmium	ug/L	<0.1	<0.1	<0.1
Chromium	ug/L	<1.1	<1.2	<1.2
Cobalt	ug/L	<0.17	<0.17	<0.17
Lead	ug/L	<0.24	<0.26	<0.26
Lithium	ug/L	120	54	95
Mercury	ug/L	<0.14	<0.11	<0.11
Molybdenum	ug/L	63	8.6	20
Selenium	ug/L	<1.4	4	<1.4
Thallium	ug/L	<0.26	<0.57	<0.57
Total Radium	pCi/L	0.251	0.0728	0.531
Radium-226	pCi/L	0.0979	0.0728	0.0364
Radium-228	pCi/L	0.153	-0.253	0.494
Field Specific Conductance	umhos/cm	1825	1921	1794
Field Temperature	deg C	13.9	11.1	14.9
Groundwater Elevation	feet	574.58	575.35	574.77
Turbidity	NTU	3.33	22.99	5.53
Collected By		--	--	--
Collected Date		--	--	--
Collected Time		--	--	--
Field Oxidation Potential	millivolts	40.8	104.6	208.7
Oxygen, Dissolved	mg/L	1.66	1.83	0.95
pH at 25 Degrees C	Std. Units	7.1	7.1	7.1
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--
Iron, dissolved	ug/L	--	--	--
Iron, total	ug/L	46	<36	<36
Magnesium, total	ug/L	--	--	--
Manganese, dissolved	ug/L	--	--	--
Manganese, total	ug/L	--	--	--
Potassium, total	ug/L	--	--	--
Sodium, total	ug/L	--	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--
Lithium, dissolved	ug/L	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-307
Number of Sampling Dates: 14

Parameter Name	Units	7/7/2020	8/7/2020	10/22/2020	2/22/2021	4/5/2021	6/17/2021	7/22/2021	10/19/2021	4/19/2022	11/3/2022	5/2/2023	10/24/2023	5/2/2024	10/30/2024
Boron	ug/L	280	<80	130	<58	<230	<58	<58	<58	<58	63	170	<76	<76	<76
Calcium	mg/L	260	260	230	230	230	210	240	200	180	170	260	170	240	190
Chloride	mg/L	53	55	52	53	63	77	82	71	64	62	64	60	81	73
Field pH	Std. Units	6.57	7.45	6.63	6.58	6.9/6.64	7/6.66	6.7/7.71	6.63	6.52	6.22	6.59	6.34	6.43	6.34
Fluoride	mg/L	<0.23	<0.23	<0.23	<0.28	<0.28	<0.28	<0.28	<0.28	<0.22	<0.22	<0.38	<0.38	<0.38	<0.38
Sulfate	mg/L	15	17	21	19	19	19	18	22	23	24	26	23	17	22
Total Dissolved Solids	mg/L	1100	980	940	860	930	750	710	770	680	770	1000	720	870	740
Antimony	ug/L	<0.51	<0.51	--	<1.1	<1.1	<1.1	<1.1	<1.1	<0.69	<0.69	<1	<1	<1	<1
Arsenic	ug/L	1.7	1.1	0.92	<0.75	0.96	<0.75	0.98	0.99	1	1.1	3.1	0.99	1	0.92
Barium	ug/L	320	330	330	310	310	310	290	330	290	320	360	410	280	380
Beryllium	ug/L	<0.27	<0.27	--	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.33	<0.33	<0.33	<0.33
Cadmium	ug/L	0.098	0.13	0.13	0.21	<0.2	0.11	0.083	0.085	0.07	<0.055	0.33	<0.1	0.2	<0.1
Chromium	ug/L	<1.1	<1.1	--	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2
Cobalt	ug/L	6.3	1.9	2.4	3	3.4	3.1	1.6	4.8	5	5.5	6.8	6.8	3	7.2
Lead	ug/L	0.12	<0.11	<0.11	<0.21	<0.21	<0.21	<0.21	<0.21	<0.24	<0.24	0.37	<0.24	<0.26	<0.26
Lithium	ug/L	<2.5	<2.5	3	3.3	2.5	<2.5	<2.5	4.8	5.3	7	<2.5	6.5	<2.5	6.2
Mercury	ug/L	<0.1	<0.1	--	<0.15	<0.15	<0.15	<0.15	<0.15	<0.11	<0.11	<0.14	<0.14	<0.11	<0.11
Molybdenum	ug/L	2.5	<1.1	<1.1	<1.3	3.4	<1.3	<1.3	<1.3	<1.2	5.1	2.2	4.5	<1.3	<1.3
Selenium	ug/L	<1	<1	--	<0.96	<0.96	<0.96	<0.96	<0.96	1.1	<0.96	<1.4	<1.4	<1.4	<1.4
Thallium	ug/L	<0.26	<0.26	--	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.57	<0.57
Total Radium	pCi/L	0.841	0.666	0.623	3.46	0.54	0.629	0.238	1.46	0.549	0.863	0.433	0.705	0.36	1.01
Radium-226	pCi/L	0.381	0.21	0.177	3.28	0.227	0.331	0.111	1.2	0.109	0.322	0.266	0.25	0.156	0.154
Radium-228	pCi/L	0.461	0.455	0.447	0.18	0.313	0.298	0.127	0.262	0.44	0.541	0.167	0.455	0.204	0.86
Field Specific Conductance	umhos/cm	1911	1759	1590	1563	1627	1565	1712	1501	1199	1096	1938	1401	2140	1421
Field Temperature	deg C	14.2	15.6	15.7	12.46	10.3	12.4	16	15.3	9.8	14.7	9.8	16.2	10.8	15.9
Groundwater Elevation	feet	593.85	593.06	592.77	592.12	594.32	593.33	592.65	590.84	592.46	589.14	593.89	590.47	593.4	589.81
Turbidity	NTU	3.5	6.61	2.68	0	0.77	0.71	0	13.1	6.6	2.11	3.12	4.64	12.71	5.63
Field Oxidation Potential	millivolts	-0.4	31.8	22.4	55.4	62.7	90	69.5	50.4	11.2	66.5	-30.8	15.4	85.1	240.1
Oxygen, Dissolved	mg/L	0.39	0.13	0.09	0.2	0.17	0.2	0.74	1.15	0.12	0.08	0.03	0.37	0.3	1.56
pH at 25 Degrees C	Std. Units	6.7	6.9	7.4	7.7	--	--	--	6.7	6.7	6.8	6.9	6.7	6.8	6.5
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	930	--	860	800	690	660	--	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	<4.6	--	<4.2	<4.6	<4.6	<4.6	--	--	--	--
Iron, dissolved	ug/L	--	--	--	--	460	--	85	620	1900	1500	--	--	--	--
Iron, total	ug/L	--	--	--	--	460	--	65	620	1600	980	4200	380	450	1000
Magnesium, total	ug/L	--	--	--	--	97000	--	92000	80000	69000	66000	--	--	--	--
Manganese, dissolved	ug/L	--	--	--	--	3000	--	1000	2200	3400	2700	--	--	--	--
Manganese, total	ug/L	--	--	--	--	3000	--	1100	2200	3200	2600	--	--	--	--
Potassium, total	ug/L	--	--	--	--	430	--	320	630	700	730	--	--	--	--
Sodium, total	ug/L	--	--	--	--	16000	--	17000	14000	13000	13000	--	--	--	--
Total Alkalinity as CaCO3	mg/L	--	--	--	--	930	--	860	800	690	660	--	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-308
Number of Sampling Dates: 8

Parameter Name	Units	6/17/2021	10/19/2021	4/19/2022	11/2/2022	5/3/2023	10/24/2023	5/1/2024	10/28/2024
Boron	ug/L	400	460	380	430	--	--	--	--
Calcium	mg/L	84	92	87	79	--	--	--	--
Chloride	mg/L	33	36	34	30	--	--	--	--
Field pH	Std. Units	6.7/6.51	6.52	6.46	6.14	6.26	6.46	6.44	6.39
Fluoride	mg/L	<0.28	<0.28	<0.22	<0.22	--	--	--	--
Sulfate	mg/L	74	86	81	91	--	--	--	--
Total Dissolved Solids	mg/L	530	470	470	500	--	--	--	--
Antimony	ug/L	<1.1	<1.1	<0.69	<0.69	--	--	--	--
Arsenic	ug/L	<0.75	<0.75	<0.75	0.88	<0.53	0.58	<0.53	<0.53
Barium	ug/L	92	77	69	90	--	--	--	--
Beryllium	ug/L	<0.27	<0.27	<0.27	<0.27	--	--	--	--
Cadmium	ug/L	0.14	0.052	0.065	0.09	--	--	--	--
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	--	--	--	--
Cobalt	ug/L	1.3	1.2	0.4	0.64	--	--	--	--
Lead	ug/L	0.46	<0.21	<0.24	<0.24	--	--	--	--
Lithium	ug/L	<2.5	<2.5	<2.5	3	<2.5	<2.5	<2.5	2.5
Mercury	ug/L	<0.15	<0.15	<0.11	<0.11	--	--	--	--
Molybdenum	ug/L	<1.3	<1.3	<1.2	1.3	1.7	1.6	<1.3	<1.3
Selenium	ug/L	<0.96	<0.96	<0.96	<0.96	--	--	--	--
Thallium	ug/L	<0.26	<0.26	<0.26	<0.26	--	--	--	--
Total Radium	pCi/L	0.893	1.1	0.444	0.89	--	--	--	--
Radium-226	pCi/L	0.245	0.858	0.0503	0.172	--	--	--	--
Radium-228	pCi/L	0.648	0.241	0.394	0.719	--	--	--	--
Field Specific Conductance	umhos/cm	863	959	817	730	653	784	1037	804
Field Temperature	deg C	12.1	16.2	9.8	16	10.4	18.8	11.8	15.5
Groundwater Elevation	feet	576.05	573.43	576.93	573.8	585.9	573.76	577.17	574.22
Turbidity	NTU	48.2	22.7	6.06	12.5	8.45	5.22	14.12	4.74
Field Oxidation Potential	millivolts	101	61.8	103.2	137.7	165.1	44.7	30.8	222.3
Oxygen, Dissolved	mg/L	0.3	1.06	1.02	0.21	3.34	1.14	1.35	0.47
pH at 25 Degrees C	Std. Units	--	6.7	6.7	6.6	--	--	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	420	470	390	400	--	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	<4.6	<4.6	<4.6	<4.6	--	--	--	--
Iron, dissolved	ug/L	340	370	190	150	--	--	--	--
Iron, total	ug/L	940	650	270	1100	400	220	88	<36
Magnesium, total	ug/L	52000	53000	45000	48000	--	--	--	--
Manganese, dissolved	ug/L	970	1100	690	930	--	--	--	--
Manganese, total	ug/L	990	1100	590	900	--	--	--	--
Molybdenum, dissolved	ug/L	<1.3	--	--	--	--	--	--	--
Potassium, total	ug/L	1100	800	1100	630	--	--	--	--
Sodium, total	ug/L	42000	43000	46000	43000	--	--	--	--
Total Alkalinity as CaCO3	mg/L	420	470	390	400	--	--	--	--
Lithium, dissolved	ug/L	<2.5	--	--	--	--	--	--	--

09/02/2025 - Classification: Internal - ECRM13574470

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-309
Number of Sampling Dates: 7

Parameter Name	Units	6/17/2021	10/19/2021	4/19/2022	11/2/2022	5/3/2023	10/24/2023	5/1/2024
Boron	ug/L	480	550	470	490	--	--	--
Calcium	mg/L	140	170	190	160	--	--	--
Chloride	mg/L	39	47	41	55	--	--	--
Field pH	Std. Units	6.9/6.79	6.87	6.94	6.59	6.62	6.7	6.74
Fluoride	mg/L	0.34	<0.28	<0.22	<0.22	--	--	--
Sulfate	mg/L	<2.5	<2.5	20	<2	--	--	--
Total Dissolved Solids	mg/L	460	580	670	640	--	--	--
Antimony	ug/L	<1.1	<1.1	<0.69	<0.69	--	--	--
Arsenic	ug/L	0.84	1.4	2.3	1.3	5.6	2.4	1.2
Barium	ug/L	210	180	180	160	--	--	--
Beryllium	ug/L	<0.27	<0.27	<0.27	<0.27	--	--	--
Cadmium	ug/L	<0.051	<0.051	<0.055	<0.055	--	--	--
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	--	--	--
Cobalt	ug/L	0.91	0.6	0.49	0.39	--	--	--
Lead	ug/L	0.34	<0.21	<0.24	<0.24	--	--	--
Lithium	ug/L	<2.5	<2.5	<2.5	<2.5	2.6	<2.5	<2.5
Mercury	ug/L	<0.15	<0.15	<0.11	<0.11	--	--	--
Molybdenum	ug/L	<1.3	<1.3	<1.2	1.4	<0.91	<0.91	<1.3
Selenium	ug/L	<0.96	<0.96	<0.96	<0.96	--	--	--
Thallium	ug/L	<0.26	<0.26	<0.26	<0.26	--	--	--
Total Radium	pCi/L	1.64	2.17	1.08	1.23	--	--	--
Radium-226	pCi/L	0.578	1.02	0.321	0.455	--	--	--
Radium-228	pCi/L	1.07	1.15	0.754	0.776	--	--	--
Field Specific Conductance	umhos/cm	961	1192	1196	1021	1528	1289	1324
Field Temperature	deg C	18	19	9.1	15.8	10.4	20.8	11.9
Groundwater Elevation	feet	571.84	571.64	576.75	--	585.33	571.7	574.4
Turbidity	NTU	47.2	27.3	5.33	2.89	4.49	6.19	7.69
Field Oxidation Potential	millivolts	-91	124	-124.3	-126.9	-171.5	-148.9	-117.9
Oxygen, Dissolved	mg/L	0.3	0.16	0.16	0	0.02	0.78	0.24
pH at 25 Degrees C	Std. Units	--	6.9	7.1	6.9	--	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	520	570	660	510	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	<4.6	<4.6	<4.6	<4.6	--	--	--
Iron, dissolved	ug/L	16000	23000	34000	32000	--	--	--
Iron, total	ug/L	16000	23000	31000	32000	43000	29000	31000
Magnesium, total	ug/L	37000	41000	43000	40000	--	--	--
Manganese, dissolved	ug/L	3100	3700	4800	3900	--	--	--
Manganese, total	ug/L	3100	3700	4900	3900	--	--	--
Molybdenum, dissolved	ug/L	<1.3	--	--	--	--	--	--
Potassium, total	ug/L	3200	3000	2700	2600	--	--	--
Sodium, total	ug/L	10000	17000	26000	13000	--	--	--
Total Alkalinity as CaCO3	mg/L	520	570	660	510	--	--	--
Lithium, dissolved	ug/L	<2.5	--	--	--	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-310
Number of Sampling Dates: 9

Parameter Name	Units	10/5/2021	10/19/2021	2/21/2022	4/19/2022	11/3/2022	5/4/2023	10/26/2023	5/1/2024	10/28/2024
Boron	ug/L	1000	1100	1000	1000	900	1000	1000	880	730
Calcium	mg/L	100	110	100	110	110	110	110	120	120
Chloride	mg/L	81	83	78	68	70	74	67	71	63
Field pH	Std. Units	7.2	7.17	7.21	7.04	6.88	6.69	6.95	6.88	6.91
Fluoride	mg/L	<0.28	<0.28	<0.22	<0.22	<0.22	<0.38	<0.38	<0.38	<0.38
Sulfate	mg/L	120	120	120	110	120	130	120	110	120
Total Dissolved Solids	mg/L	640	610	590	630	640	620	660	680	670
Antimony	ug/L	<1.1	<1.1	<0.69	<0.69	<0.69	<1	<1	<1	<1
Arsenic	ug/L	<0.75	<0.75	<0.75	<0.75	<0.75	<0.53	<0.53	<0.53	<0.53
Barium	ug/L	110	96	55	50	39	43	43	36	32
Beryllium	ug/L	<0.27	<0.27	<0.27	<0.27	<0.27	<0.33	<0.33	<0.33	<0.33
Cadmium	ug/L	<0.051	<0.051	<0.055	<0.055	<0.055	<0.1	<0.1	<0.1	<0.1
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2
Cobalt	ug/L	0.67	0.68	0.43	0.48	0.43	0.45	0.55	0.26	0.37
Lead	ug/L	<0.21	<0.21	<0.24	<0.24	<0.24	0.4	<0.24	<0.26	<0.26
Lithium	ug/L	4	3	2.8	2.7	3.1	2.9	3.9	3.4	3.6
Mercury	ug/L	<0.15	<0.15	<0.11	<0.11	<0.11	<0.14	<0.14	<0.11	<0.11
Molybdenum	ug/L	2	<1.3	<1.2	1.5	<1.2	<0.91	<0.91	<1.3	<1.3
Selenium	ug/L	<0.96	<0.96	<0.96	1.7	<0.96	<1.4	<1.4	<1.4	<1.4
Thallium	ug/L	<0.26	<0.26	<0.26	0.26	<0.26	<0.26	<0.26	<0.57	<0.57
Total Radium	pCi/L	1.08	0.783	0.213	0.317	0.384	0.12	0.366	0.972	1.21
Radium-226	pCi/L	0.206	0.471	0.213	0.135	0.159	0.12	0.0854	0.166	0.0316
Radium-228	pCi/L	0.878	0.313	-0.0116	0.182	0.225	-0.119	0.281	0.806	1.18
Field Specific Conductance	umhos/cm	1141	1150	1060	1004	943	1115	1164	1324	1171
Field Temperature	deg C	14.3	13.9	12.4	12.2	13.7	12.9	14.1	13.4	15
Groundwater Elevation	feet	--	589.55	589.1	590.2	578.18	589.98	589.3	589.12	588.1
Turbidity	NTU	2.74	20.8	2	4.91	1.49	4.8	3.3	12.98	4.14
Field Oxidation Potential	millivolts	53.7	83.5	48.8	-35.3	130.3	44.1 mV	27.8	35.5	210.4
Oxygen, Dissolved	mg/L	1.52	0.28	0.3	0.29	0.05	0.41	0.37	0.57	1.91
pH at 25 Degrees C	Std. Units	7.3	7.3	7.2	7.1	7.3	7.2	7.2	7.2	7.1
Bicarbonate Alkalinity as CaCO3	mg/L	--	390	410	390	420	--	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	<4.6	<4.6	<4.6	<4.6	--	--	--	--
Iron, dissolved	ug/L	--	<36	--	<36	<36	--	--	--	--
Iron, total	ug/L	--	90	<36	<36	<36	43	<36	<36	<36
Magnesium, total	ug/L	--	46000	44000	44000	46000	--	--	--	--
Manganese, dissolved	ug/L	--	300	--	160	--	--	--	--	--
Manganese, total	ug/L	--	310	210	150	160	--	--	--	--
Potassium, total	ug/L	--	1600	1100	1000	910	--	--	--	--
Sodium, total	ug/L	--	71000	67000	67000	61000	--	--	--	--
Total Alkalinity as CaCO3	mg/L	--	390	410	390	420	--	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-311
Number of Sampling Dates: 9

Parameter Name	Units	12/30/2021	2/21/2022	4/19/2022	8/22/2022	11/3/2022	5/3/2023	10/24/2023	5/2/2024	10/30/2024
Boron	ug/L	5200	4600	5600	--	6400	--	--	--	--
Calcium	mg/L	96	110	110	--	100	--	--	--	--
Chloride	mg/L	15	16	15	--	16	--	--	--	--
Field pH	Std. Units	7.98	7.27	7.16	7.28	7.18	6.58	7.2	6.76	6.89
Fluoride	mg/L	<0.28	0.34	<0.22	--	<0.22	--	--	--	--
Sulfate	mg/L	120	110	110	--	120	--	--	--	--
Total Dissolved Solids	mg/L	460	440	480	--	520	--	--	--	--
Antimony	ug/L	<1.1	<0.69	<2.8	--	<0.69	--	--	--	--
Arsenic	ug/L	<0.75	<0.75	<3	--	<0.75	<0.53	<0.53	<0.53	<0.53
Barium	ug/L	49	49	45	--	44	--	--	--	--
Beryllium	ug/L	<0.27	<0.27	<1.1	--	<0.27	--	--	--	--
Cadmium	ug/L	<0.051	<0.055	<0.22	--	<0.055	--	--	--	--
Chromium	ug/L	<1.1	<1.1	<4.4	--	<1.1	--	--	--	--
Cobalt	ug/L	<0.19	<0.19	<0.76	--	<0.19	--	--	--	--
Lead	ug/L	<0.21	<0.24	<0.96	--	<0.24	--	--	--	--
Lithium	ug/L	43	34	45	45	53	5.5	69	6.7	25
Mercury	ug/L	<0.15	<0.11	<0.11	--	<0.11	--	--	--	--
Molybdenum	ug/L	30	31	25	29	26	18	30	21	24
Selenium	ug/L	2.8	3.7	<3.8	--	2.8	--	--	--	--
Thallium	ug/L	<0.26	<0.26	<1	--	<0.26	--	--	--	--
Total Radium	pCi/L	0.155	0.00283	0.517	--	0.0356	--	--	--	--
Radium-226	pCi/L	0.137	-0.0299	0.0434	--	0.0251	--	--	--	--
Radium-228	pCi/L	0.0185	0.00283	0.473	--	0.0105	--	--	--	--
Field Specific Conductance	umhos/cm	811	785	718	842	684	903	833	1290	941
Field Temperature	deg C	12.4	12	11.4	13.8	14.2	10.6	16.2	11.6	15.3
Groundwater Elevation	feet	572.33	572.14	574.77	574.51	572.54	583.83	572.75	574.74	573.37
Turbidity	NTU	2.88	3	5.94	1.9	1.94	44.9	10.01	51.4	9.54
Field Oxidation Potential	millivolts	6.6	100.9	111.8	89.7	149	90.3	24.9	188.2	231.2
Oxygen, Dissolved	mg/L	3.33	3.39	2.43	4.89	2.72	7.12	2.16	6.73	4.85
pH at 25 Degrees C	Std. Units	7.4	7.3	7.4	--	7.4	--	--	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	320	320	--	300	--	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	<4.6	<4.6	--	<4.6	--	--	--	--
Iron, dissolved	ug/L	--	--	<36	--	<36	--	--	--	--
Iron, total	ug/L	--	<36	<140	--	<36	75	<36	40	<36
Magnesium, total	ug/L	--	26000	24000	--	21000	--	--	--	--
Manganese, dissolved	ug/L	--	--	<3.6	--	<3.6	--	--	--	--
Manganese, total	ug/L	--	<3.6	<14	--	<3.6	--	--	--	--
Molybdenum, dissolved	ug/L	--	29	--	--	--	--	--	--	--
Potassium, total	ug/L	--	6200	6400	--	7200	--	--	--	--
Sodium, total	ug/L	--	30000	31000	--	31000	--	--	--	--
Total Alkalinity as CaCO3	mg/L	--	320	320	--	300	--	--	--	--
Lithium, dissolved	ug/L	--	33	45	--	53	--	--	--	--

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-311A
Number of Sampling Dates: 9

Parameter Name	Units	12/30/2021	2/21/2022	4/19/2022	8/22/2022	11/3/2022	5/3/2023	10/24/2023	5/2/2024	10/30/2024
Boron	ug/L	7600	10000	10000	--	10000	--	--	--	--
Calcium	mg/L	88	110	110	--	100	--	--	--	--
Chloride	mg/L	17	23	19	--	28	--	--	--	--
Field pH	Std. Units	8.38	7.63	7.39	7.55	7.42	7.58	7.1	7.39	7.44
Fluoride	mg/L	<0.28	<0.22	<0.22	--	<0.22	--	--	--	--
Sulfate	mg/L	210	300	210	--	270	--	--	--	--
Total Dissolved Solids	mg/L	480	520	470	--	660	--	--	--	--
Antimony	ug/L	<1.1	<0.69	<2.8	--	<0.69	--	--	--	--
Arsenic	ug/L	<0.75	<0.75	<3	--	<0.75	<0.53	<0.53	<0.53	<0.53
Barium	ug/L	21	24	22	--	23	--	--	--	--
Beryllium	ug/L	<0.27	<0.27	<1.1	--	<0.27	--	--	--	--
Cadmium	ug/L	0.075	0.067	<0.22	--	<0.055	--	--	--	--
Chromium	ug/L	<1.1	<1.1	<4.4	--	<1.1	--	--	--	--
Cobalt	ug/L	<0.19	<0.19	<0.76	--	<0.19	--	--	--	--
Lead	ug/L	<0.21	<0.24	<0.96	--	<0.24	--	--	--	--
Lithium	ug/L	15	19	21	19	20	9.2	6.5	15	15
Mercury	ug/L	<0.15	<0.11	<0.11	--	<0.11	--	--	--	--
Molybdenum	ug/L	160	210	140	180	140	210	23	240	170
Selenium	ug/L	<0.96	1.2	<3.8	--	2.8	--	--	--	--
Thallium	ug/L	<0.26	<0.26	<1	--	<0.26	--	--	--	--
Total Radium	pCi/L	0.33	0.193	0.346	--	0.618	--	--	--	--
Radium-226	pCi/L	0.148	0.0302	0.0677	--	0.0539	--	--	--	--
Radium-228	pCi/L	0.182	0.163	0.278	--	0.564	--	--	--	--
Field Specific Conductance	umhos/cm	755	830	689	870	770	838	686	1292	987
Field Temperature	deg C	11.8	12.3	12.2	13.6	12.9	12.3	18.4	12.8	16.2
Groundwater Elevation	feet	572.54	572.34	575.17	574.76	572.9	583.44	573.05	574.78	573.46
Turbidity	NTU	2.49	1	4.57	0.14	1.05	2.78	4.82	10.3	4.79
Field Oxidation Potential	millivolts	-6	80.7	95.1	79.6	147.4	68.1	24.9	128.6	196.6
Oxygen, Dissolved	mg/L	0.19	0.1	0.13	0.89	0	0.08	1.33	0.3	1.88
pH at 25 Degrees C	Std. Units	7.6	6.5	7.6	--	7.6	--	--	--	--
Bicarbonate Alkalinity as CaCO3	mg/L	--	150	200	--	200	--	--	--	--
Carbonate Alkalinity as CaCO3	mg/L	--	<4.6	<4.6	--	<4.6	--	--	--	--
Iron, dissolved	ug/L	--	--	<36	--	<36	--	--	--	--
Iron, total	ug/L	--	<36	<140	--	<36	<36	<36	<36	<36
Magnesium, total	ug/L	--	21000	18000	--	23000	--	--	--	--
Manganese, dissolved	ug/L	--	--	<3.6	--	6.4	--	--	--	--
Manganese, total	ug/L	--	4	<14	--	6.9	--	--	--	--
Molybdenum, dissolved	ug/L	--	190	160	--	150	--	--	--	--
Potassium, total	ug/L	--	7300	7000	--	7400	--	--	--	--
Sodium, total	ug/L	--	45000	33000	--	46000	--	--	--	--
Total Alkalinity as CaCO3	mg/L	--	150	200	--	200	--	--	--	--
Lithium, dissolved	ug/L	--	18	--	--	--	--	--	--	--

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Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-312
Number of Sampling Dates: 4

Parameter Name	Units	5/3/2023	10/24/2023	5/1/2024	10/31/2024
Boron	ug/L	370	160	110	<76
Calcium	mg/L	78	67	77	72
Chloride	mg/L	10	9.5	11	8.9
Field pH	Std. Units	7	7.13	7.13	7.16
Fluoride	mg/L	<0.38	<0.38	<0.38	<0.38
Sulfate	mg/L	33	25	23	23
Total Dissolved Solids	mg/L	290	330	310	320
Antimony	ug/L	<1	<1	<1	<1
Arsenic	ug/L	<0.53	<0.53	<0.53	<0.53
Barium	ug/L	63	44	35	30
Beryllium	ug/L	<0.33	<0.33	<0.33	<0.33
Cadmium	ug/L	<0.1	<0.1	<0.1	<0.1
Chromium	ug/L	<1.1	<1.1	<1.2	<1.2
Cobalt	ug/L	<0.17	<0.17	<0.17	<0.17
Lead	ug/L	<0.24	<0.24	<0.26	<0.26
Lithium	ug/L	<2.5	<2.5	<2.5	<2.5
Mercury	ug/L	<0.14	<0.14	<0.11	<0.11
Molybdenum	ug/L	1.4	1.3	<1.3	<1.3
Selenium	ug/L	<1.4	<1.4	<1.4	<1.4
Thallium	ug/L	<0.26	<0.26	<0.57	<0.57
Total Radium	pCi/L	0.132	0.662	0.0822	1.1
Radium-226	pCi/L	0.132	0.0982	0.044	0.0869
Radium-228	pCi/L	-0.00515	0.564	0.0382	1.01
Field Specific Conductance	umhos/cm	598	621	699	629
Field Temperature	deg C	12.7	14.6	12.9	13.7
Groundwater Elevation	feet	577.84	573.84	573.25	573.36
Turbidity	NTU	4.96	3.83	9.55	1.67
Field Oxidation Potential	millivolts	40.1	60	81.3	198.1
Oxygen, Dissolved	mg/L	1.1	0.69	0.69	2.6
pH at 25 Degrees C	Std. Units	7.6	7.5	7.5	7.5
Bicarbonate Alkalinity as CaCO3	mg/L	260	270	370	270
Carbonate Alkalinity as CaCO3	mg/L	<2.5	<2.5	<2.5	<2.5
Iron, total	ug/L	<36	<36	<36	<36
Magnesium, total	ug/L	36000	32000	35000	34000
Manganese, total	ug/L	98	26	12	<3.6
Potassium, total	ug/L	890	860	690	650
Sodium, total	ug/L	6300	6400	6200	6000
Total Alkalinity as CaCO3	mg/L	260	270	370	270

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-313
Number of Sampling Dates: 4

Parameter Name	Units	5/3/2023	10/26/2023	5/1/2024	10/30/2024
Calcium	mg/L	54	56	61	58 ug/L
Chloride	mg/L	87	75	58	50
Field pH	Std. Units	7.1	7.23	7.16	7.15
Sulfate	mg/L	4.3	4	8.7	5.8
Arsenic	ug/L	2.4	3	1.8	1.6
Lithium	ug/L	4	<2.5	<2.5	<2.5
Molybdenum	ug/L	5.6	1.2	<1.3	<1.3
Field Specific Conductance	umhos/cm	790	845	877	779
Field Temperature	deg C	11.3	14	11.5	16.4
Groundwater Elevation	feet	577.93	573.34	575	573.28
Turbidity	NTU	11.3	34.81	9.9	6.52
Field Oxidation Potential	millivolts	-83.4	-110.4	144.2	204.1
Oxygen, Dissolved	mg/L	0.69	1.23	2.61	2.14
Bicarbonate Alkalinity as CaCO3	mg/L	280	280	330	320
Carbonate Alkalinity as CaCO3	mg/L	<2.5	<2.5	<2.5	<2.5
Iron, total	ug/L	250	830	120	90
Magnesium, total	ug/L	25000	25000	25000	25000
Manganese, total	ug/L	550	510	21	14
Potassium, total	ug/L	2800	3400	3000	2700
Sodium, total	ug/L	88000	94000	74000	64000
Total Alkalinity as CaCO3	mg/L	280	280	330	320

Single Location

Name: IPL - M.L. Kapp Generating Station

Location ID: MW-314

Number of Sampling Dates: 2

Parameter Name	Units	5/1/2024	10/31/2024
Field pH	Std. Units	7.15	7.06
Arsenic	ug/L	<0.53	0.93
Lithium	ug/L	<2.5	<2.5
Molybdenum	ug/L	<1.3	1.6
Field Specific Conductance	umhos/cm	518	826
Field Temperature	deg C	9.5	13.5
Groundwater Elevation	feet	574.33	572.69
Turbidity	NTU	64.34	7.21
Field Oxidation Potential	millivolts	115.9	210.3
Oxygen, Dissolved	mg/L	5.68	2.75
pH at 25 Degrees C	Std. Units	7.5	7.3
Iron, total	ug/L	760	98

Single Location
Name: IPL - M.L. Kapp Generating Station

Location ID: MW-314A
Number of Sampling Dates: 2

Parameter Name	Units	5/1/2024	10/31/2024
Field pH	Std. Units	7.36	7.42
Arsenic	ug/L	2.3	2
Lithium	ug/L	5.4	3.9
Molybdenum	ug/L	2.4	2.2
Field Specific Conductance	umhos/cm	2153	1924
Field Temperature	deg C	11.6	12.2
Groundwater Elevation	feet	574.38	572.79
Turbidity	NTU	163.3	6.61
Field Oxidation Potential	millivolts	-69.4	121.7
Oxygen, Dissolved	mg/L	1.6	2.92
pH at 25 Degrees C	Std. Units	7.7	7.4
Iron, total	ug/L	2100	1100

Appendix E

Statistical Evaluation

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E1 LCL Evaluation – April/May 2024 Event: Arsenic, Lithium & Molybdenum with Eight Most Recent Events

09/02/2025 - Classification: Internal - ECRM13574470

September 3, 2024
File No. 25224077.00

Mr. Brad Weber
Alliant Energy
201 N. 2nd Street
Clinton, IA 52732

Subject: Assessment Groundwater Monitoring Results – April/May 2024
M.L. Kapp Generating Station, Clinton, Iowa

Dear Mr. Weber:

This letter provides the laboratory analytical results report for groundwater monitoring at the M.L. Kapp Generating Station (KAP) in April and May 2024. The sampling event was performed as part of the ongoing semiannual assessment monitoring program for the KAP groundwater monitoring system and in support of the Selection of Remedy (SOR) process for KAP.

The groundwater monitoring system at KAP is monitoring a single closed coal combustion residual (CCR) Unit:

- Main Ash Pond (Inactive surface impoundment)

The Main Ash Pond closure and capping project was completed in January 2018.

An Assessment of Corrective Measures (ACM) was initiated for the KAP CCR Units in July 2020 and completed in March 2021. Additional delineation of the off-site extent of groundwater impacts is in progress. The additional investigation will be used to update the corrective action alternatives and inform the SOR. The ACM was initiated in response to the detection of molybdenum at statistically significant levels (SSLs) exceeding the Groundwater Protection Standards (GPS). In 2021, lithium was determined to be at an SSL above the GPS at one monitoring well. In 2023, arsenic was determined to be at an SSL above the GPS at one monitoring well. Arsenic and lithium will also be addressed in the SOR. Assessment monitoring continued during the ACM and will continue during the SOR.

SAMPLE COLLECTION AND ANALYSIS

Groundwater samples were collected from the CCR Rule monitoring wells by SCS Engineers (SCS) on April 30 through May 2. The samples collected from the background wells, supplemental background wells, and compliance wells were analyzed for Appendix III and Appendix IV parameters. Samples collected from the delineation wells were analyzed for arsenic, lithium, and molybdenum. Total iron and field pH were also included in the April 2024 event for all monitoring wells to characterize groundwater conditions in support of the SOR. Monitoring wells MW-312 and MW-313 were sampled for additional general water quality parameters to provide information on aquifer conditions at these locations.

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The April event was the third sampling event for MW-312 and MW-313, which were installed in February 2023. Delineation wells MW-314 and MW-314A were installed in February 2024. The April 2024 monitoring event is the first sampling event at these wells.

The field parameter results were compiled by SCS and provided to the laboratory for inclusion in the laboratory report. The laboratory report is provided in Attachment A.

The April 2024 sampling event was completed in accordance with the Sampling and Analysis Plan for the monitoring system. One laboratory flag, F1, was noted on the chloride sample collected from supplemental background well MW-310 and two laboratory flags, F1 and F2, were noted on the mercury sample collected at compliance well MW-302. F1 flags indicate the matrix spike (MS) and/or matrix spike duplicate (MSD) recovery exceeded control limits. F2 flags indicate the MS/MSD relative percent difference (RPD) exceeded control limits.

The MS and MSD recoveries for MW-310 chloride were below the percent recovery limit range, but the results were accepted as usable because the laboratory control sample was within the control limits. MW-310 is a supplemental background well and is not used for compliance determination.

The MS and MSD for MW-302 mercury were below the percent recovery limit range, and the RPD was above the limit. The results were accepted as usable because the laboratory control sample was within the control limits and because the sample result was non-detect, which is consistent with historical results for this well.

The original laboratory report issued on June 3, 2024, was revised and split into four separate reports that were issued on June 6, 2024. The report was split to provide separate reports to individual property owners because multiple wells in the KAP network are on properties with owners other than Alliant Energy.

No additional problems were identified during the initial review of the analytical report.

COMPARISON TO GROUNDWATER PROTECTION STANDARDS

The April/May 2024 results for Appendix IV parameters were compared to the GPSs established under 40 CFR 257.95(h) to evaluate whether any Appendix IV parameter was present at an SSL above the GPS. The April/May 2024 results and GPS values are shown in Table 1. SSLs for the current and most recent previous sampling event are shown in Table 2.

For the April/May 2024 monitoring event, assessment monitoring parameters for which an individual monitoring result exceeded the GPS at a compliance well included the following:

- Arsenic: MW-303
- Lithium: MW-303, MW-306
- Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305

Lithium also exceeded the GPS at downgradient delineation well MW-311A.

U.S. Environmental Protection Agency's Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at Resource Conservation and Recovery Act (RCRA) Facilities (EPA 530-R-09-007, March 2009) recommends the use of confidence intervals for comparison of assessment monitoring data to fixed GPS values. Specifically, the suggested approach for comparing assessment

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groundwater monitoring data to GPS values based on long-term chronic health risk, such as drinking water Maximum Contaminant Levels (MCLs), is to compare the lower confidence limit (LCL) around the arithmetic mean with the fixed GPS.

An LCL evaluation was completed for each Appendix IV parameter that has been detected at a concentration exceeding the GPS in at least one sample result since assessment monitoring was initiated, which includes arsenic, lithium, and molybdenum. The LCLs were calculated with Sanitas™ using historical concentrations measured in the most recent eight events for each well, or all of the results if less than eight events have been completed. A minimum of four sample results are required for the LCL evaluation. The evaluation is provided in **Attachment B**.

For the April/May 2024 event, arsenic at MW-303 was detected at a concentration above the GPS, but the LCL calculated based on the samples collected for the most recent eight events remained below the GPS. Review of the arsenic results at MW-303 indicated a potentially significant increasing trend; therefore, the arsenic results for this well were also evaluated for trends using both a linear regression analysis and a Mann-Kendall analysis (**Attachment B**). Neither the Mann-Kendall analysis nor the linear regression analysis indicated significant trends. Based on these results, arsenic was determined not to be at an SSL above the GPS at MW-303 for the April 2024 event.

Lithium at MW-306 was determined to be at an SSL above the GPS for the October 2024 event, but the subsequent sampling result in April 2024 caused the LCL to drop slightly below the GPS. The lithium results for this well were also evaluated for trends using both a linear regression analysis and a Mann-Kendall analysis (**Attachment B**). Neither analysis indicated a significant trend.

For compliance wells, the SSLs above the GPS were:

- Arsenic: No wells
- Lithium: No wells
- Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305

The statistical analysis did not identify new parameters and/or compliance wells with SSLs, except that molybdenum was not previously at an SSL at MW-303. Although arsenic and lithium were not determined to be at an SSL above the GPS for any well in the current monitoring event, they will still be addressed in the SOR based on previous SSL determinations.

For the delineation wells, there were no SSLs above the GPS identified. Monitoring wells MW-312, MW-313, MW-314, and MW-314A were not included in the LCL evaluation because they do not meet the minimum required number of four samples required to calculate LCLs.

COMPARISON TO BACKGROUND

The comparison of Appendix III and Appendix IV parameters results to background concentrations was completed in accordance with 40 CFR 257.93(f)(3) using a prediction interval procedure, in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the Upper Prediction Limit (UPL). Because the site is already in assessment monitoring and in the process of selecting a remedy, the purpose of the UPL analysis is to provide a basis for comparison of downgradient water quality to background. The UPLs are shown in **Table 1**. Statistically significant increases (SSIs) above background at the compliance wells for the current and most recent previous sampling event are shown in **Table 2**.

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The UPLs for detection and assessment monitoring parameters were calculated based on a 1-of-2 resampling approach. The UPLs are based on background sampling at upgradient well MW-307. Supplemental background monitoring wells MW-310 and MW-312 were installed to evaluate background conditions in the bedrock groundwater, but results from these wells are not being used in the statistical analysis. MW-310 is located approximately 2 miles northeast of the site, and MW-312 is located approximately 0.5 mile southwest of the site. Data from MW-310 and MW-312 is currently being used for comparison purposes only.

Detection monitoring parameters for which SSIs above background were identified for at least one monitoring well included the following:

- Boron, chloride, sulfate, and total dissolved solids (TDS)

Assessment monitoring parameters for which SSIs above background were identified at one or more compliance wells included the following:

- Arsenic: MW-302, MW-303, MW-304
- Cadmium: MW-301, MW-304
- Lithium: MW-302, MW-303, MW-305, MW-306
- Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305, MW-306
- Selenium: MW-302

Assessment monitoring parameters for which SSIs above background were identified at one or more delineation wells included the following:

- Arsenic: MW-314A
- Lithium: MW-311A
- Molybdenum: MW-304A, MW-311, MW-311A

SELECTION OF REMEDY

An SOR is currently in progress in response to the detection of arsenic, molybdenum, and lithium at SSLs above the GPS. Assessment monitoring of KAP is required while the SOR is completed, as established under 40 CFR 257.96(b).

In accordance with 40 CFR 257.95(d)(3), IPL must include the 2024 assessment monitoring results, background concentrations for the Appendix IV parameters, and GPSs in the annual groundwater monitoring and corrective action report due August 1, 2025.

Please contact us if you have any questions regarding these results.

Sincerely,

Sherren C. Clark
Project Director
SCS Engineers

Thomas J. Karwoski
Project Manager
SCS Engineers

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BLR/RM/jsn/TK/SCC

cc: Jeff Maxted, Alliant Energy
Tracy McCampbell, Director, IPL Distribution and Capital
Matt Bizjack, Alliant Energy

Encl. Table 1. Groundwater Analytical Results Summary
Table 2. SSIs and SSLs for Previous and Current Events
Attachment A – Laboratory Analytical Report
Attachment B – Confidence Interval Analysis

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Tables

1 Groundwater Analytical Results Summary
2 SSIs and SSLs for Previous and Current Event

Table 1. Groundwater Analytical Results Summary - Assessment Monitoring
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00

Parameter Name	UPL Method	UPL	GPS	Background Well	Supplemental Background Wells		Compliance Wells						Delineation Wells							
				MW-307	MW-310	MW-312	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-304A	MW-308	MW-309	MW-311	MW-311A	MW-313	MW-314	MW-314A
				5/2/2024	5/1/2024	5/1/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	4/30/2024	5/1/2024	5/1/2024	5/2/2024	5/2/2024	5/1/2024	5/1/2024	5/1/2024
Groundwater Elevation, ft amsl				593.40	589.12	573.25	577.11	576.29	578.28	576.55	576.68	575.35	576.81	577.17	574.40	574.74	574.78	575.00	574.33	574.38
Appendix III																				
Boron, µg/L	NP	280		<76	<1.0	110	8000	6100	5600	11000	19000	8900	--	--	--	--	--	--	--	--
Calcium, mg/L	P	294		240	120	77	140	130	140	140	260	210	--	--	--	--	--	61	--	--
Chloride, mg/L	P	91.9		81	71 F1	11	95	9.7	17	21	12	180	--	--	--	--	--	58	--	--
Fluoride, mg/L	DQ	DQ		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--
Field pH, Std. Units	NP	7.71		6.43	6.88	7.13	6.47	7.04	6.76	6.67	6.93	6.65	6.93	6.44	6.74	6.76	7.39	7.16	7.15	7.36
Sulfate, mg/L	P	25.6		17	110	23	130	280	400	410	850	140	--	--	--	--	--	8.7	--	--
Total Dissolved Solids, mg/L	P	1,220		870	680	310	650	650	830	860	1,500	990	--	--	--	--	--	--	--	--
Appendix IV																				
Antimony, ug/L	DQ	DQ	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--	--
Arsenic, ug/L	P	1.85	10	1.0 J	<0.53	<0.53	0.57 J	9.1	15	3.9	1.8 J	<0.53	1.3 J	<0.53	1.2 J	<0.53	<0.53	1.8 J	<0.53	2.3
Barium, ug/L	P	357	2,000	280	36	35	64	78	72	110	110	81	--	--	--	--	--	--	--	--
Beryllium, ug/L	DQ	DQ	4	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	--	--	--	--	--	--
Cadmium, ug/L	P	0.263	5	0.20	<0.10	<0.10	0.46	<0.10	0.10 J	0.35	0.24	<0.10	--	--	--	--	--	--	--	--
Chromium, ug/L	DQ	DQ	100	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	--	--	--	--	--	--	--	--
Cobalt, ug/L	P	7.83	7.83	3.0	0.26 J	<0.17	4.3	0.26 J	1.1	1.1	1.1	<0.17	--	--	--	--	--	--	--	--
Fluoride, mg/L	DQ	DQ	4	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--
Lead, ug/L	NP	0.240	15	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	--	--	--	--	--	--	--	--
Lithium, ug/L	NP	5.3	40	<2.5	3.4 J	<2.5	6.3 J	28	59	2.6 J	29	54	<2.5	<2.5	<2.5	6.7 J	15	<2.5	<2.5	5.4 J
Mercury, ug/L	DQ	DQ	2	<0.11	<0.11	<0.11	<0.11	<0.11 F1, F2	<0.11	<0.11	<0.11	<0.11	--	--	--	--	--	--	--	--
Molybdenum, ug/L	NP	3.40	100	<1.3	<1.3	<1.3	530	150	170	820	490	8.6	3.5	<1.3	<1.3	21	240	<1.3	<1.3	2.4
Selenium, ug/L	NP	1.1	50	<1.4	<1.4	<1.4	<1.4	5.7	1.5 J	<1.4	<1.4	4.0 J	--	--	--	--	--	--	--	--
Thallium, ug/L	DQ	DQ	2	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	--	--	--	--	--	--	--	--
Radium 226/228 Combined, pCi/L	P	5.85	5.85	0.360	0.972	0.0822	0.792	0.624	0.355	0.159	0.979	0.0728	--	--	--	--	--	--	--	--
Additional Parameters - Selection of Remedy																				
Iron, ug/L	UPL or GPS not applicable			450	<36	<36	660	55 J	9,800	780	1,600	<36	420	88 J	31,000	40 J	<36	120	760	2,100
Magnesium, ug/L				--	--	35,000	--	--	--	--	--	--	--	--	--	--	--	25,000	--	--
Manganese, ug/L				--	--	12	--	--	--	--	--	--	--	--	--	--	--	21	--	--
Potassium, ug/L				--	--	690	--	--	--	--	--	--	--	--	--	--	--	3,000	--	--
Sodium, ug/L				--	--	6,200	--	--	--	--	--	--	--	--	--	--	--	74,000	--	--
Total Alkalinity, mg/L				--	--	370	--	--	--	--	--	--	--	--	--	--	--	330	--	--
Carbonate Alkalinity, mg/L				--	--	<2.5	--	--	--	--	--	--	--	--	--	--	--	<2.5	--	--
Bicarbonate Alkalinity, mg/L				--	--	370	--	--	--	--	--	--	--	--	--	--	--	330	--	--

Blue highlighted cell indicates the compliance or delineation well results exceeds the UPL and the LOQ.
Yellow highlighted cell indicates the compliance or delineation well result exceeds the GPS.
Grayscale indicates additional parameters sampled for selection of remedy and evaluation of MNA.

Abbreviations:
UPL = Upper Prediction Limit
ug/L = micrograms per Liter
mg/L = milligrams per Liter
GPS = Groundwater Protection Standard
LOD = Limit of Detection
LOQ = Limit of Quantification
-- = Not measured

Lab Notes/Qualifiers:
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1= MS and/or MSD recovery exceeds control limits
F2= MS/MSD RPD exceeds control limits

Notes:
1. An individual result above the UPL or GPS does not constitute an SSI above background or statistically significant level above the GPS. See the accompanying letter text for identification of statistically significant results.
2. GPS is the United States Environmental Protection Agency (USEPA) Maximum Contamination Level (MCLs), if established; otherwise, the values from 40 CFR 257.95(h)(2). UPL for Total Radium is greater than the MCL and will be used as the GPS.
3. Interwell UPLs calculated based on results from background well MW-307. The UPLs were updated in July 2022.
4. For compliance wells, only results confirmed above the LOQ are evaluated as potential SSIs above background.

Created by: NDK Date: 7/10/2019
Last revision by: GK Date: 6/5/2024
Checked by: RM Date: 6/7/2024
Proj Mgr QA/QC: TK Date: 8/6/2024

I:\25224077.00\Deliverables\2024 April Results Letter\Tables\[Table 1_2024 April_CCR GW Screening Summary_ML Kapp.xlsx]Single event

09/02/2025 - Classification: Internal - ECRM13574470

Table 2. SSIs and SSLs for Previous and Current Events
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00

	Compliance Well Results	
Statistically Significant Increases (SSIs): Appendix III Parameters	**October 2023**	**April 2024**
Boron	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306
Chloride	MW-306	MW-301, MW-306
Sulfate	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306
Total Dissolved Solids	--	MW-305
Statistically Significant Levels (SSLs): Appendix IV Parameters	**October 2023**	**April 2024**
Lithium	MW-306	--
Molybdenum	MW-301, MW-302, MW-304, MW-305	MW-301, MW-302, MW-303, MW-304, MW-305

Created by:	RM	Date:	7/26/2024
Last revision by:	RM	Date:	7/26/2024
Checked by:	TK	Date:	8/6/2024

09/02/2025 - Classification: Internal - ECRM13574470

Attachment A

Laboratory Analytical Reports

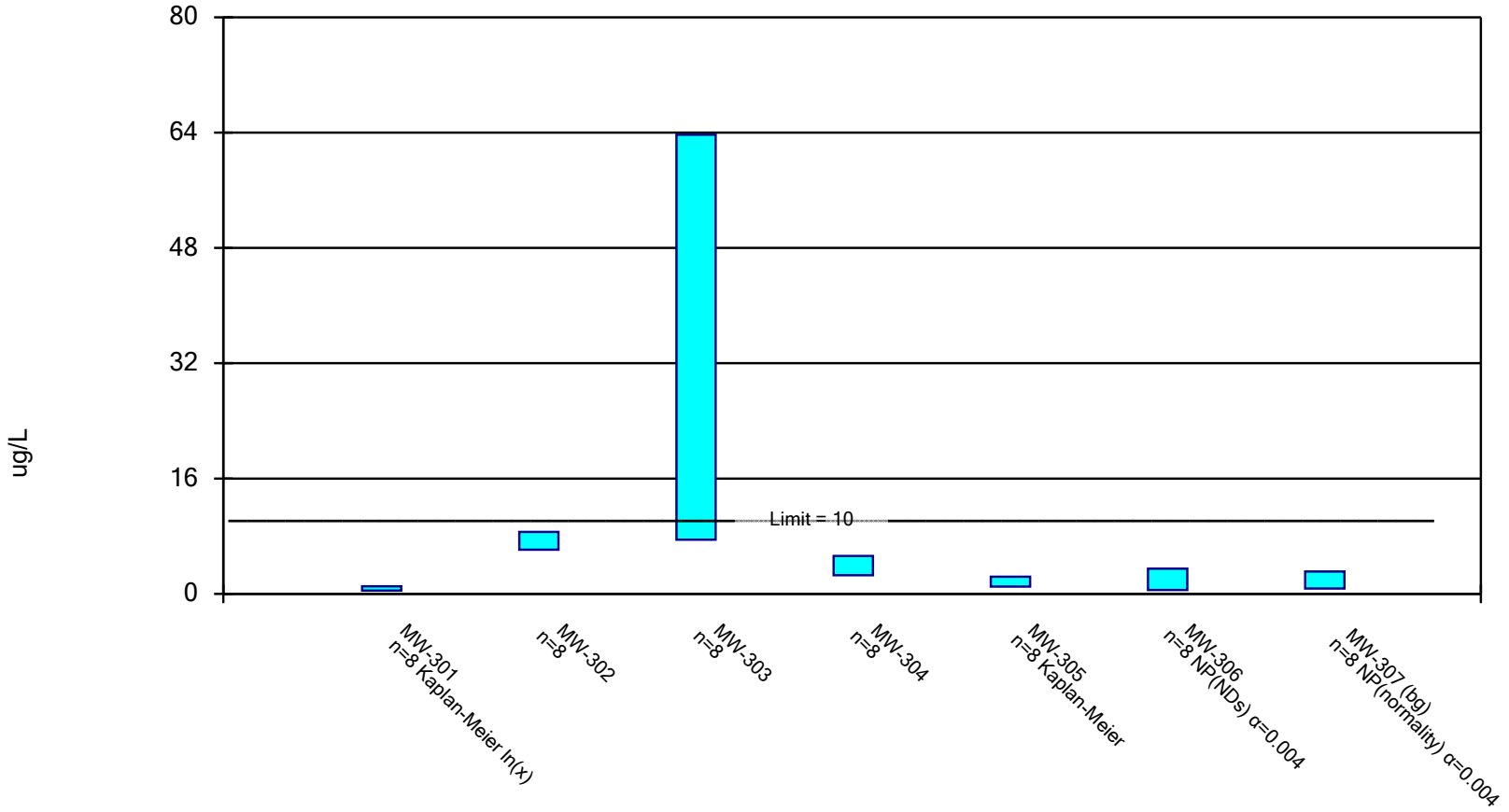
(Removed)

Attachment B

Confidence Interval Analysis

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/11/2024 1:28 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Arsenic (ug/L) Analysis Run 7/11/2024 1:29 PM

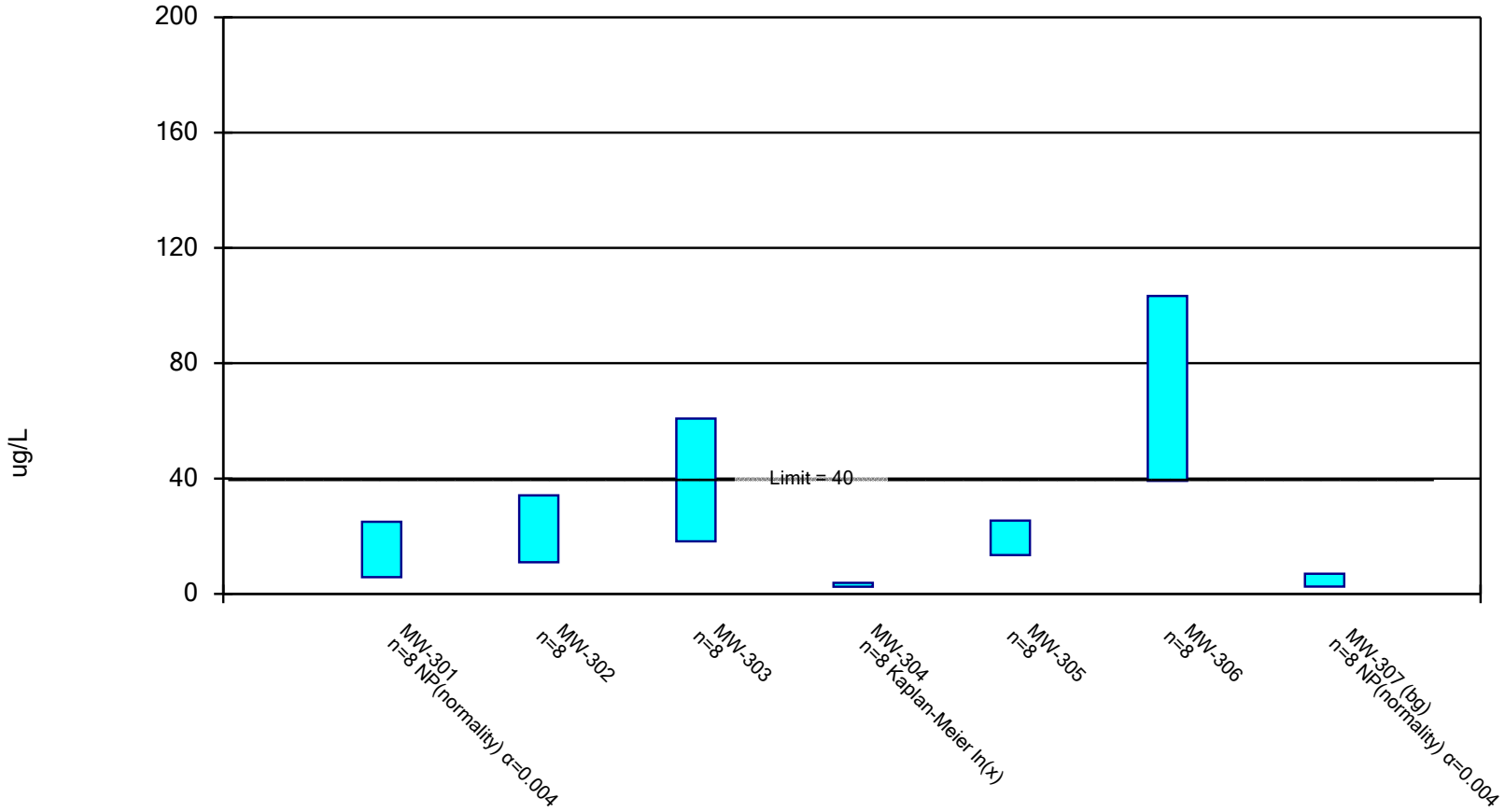
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307 (bg)
10/22/2020	<3.5 (U)	7.3	20	4.5 (J)	<3.5 (U)	<3.5 (U)	
4/5/2021	<0.75 (U)	7.1	14	6.6	1.6 (J)	<0.75 (U)	
6/17/2021							<0.75 (U)
7/22/2021							0.98 (J)
10/18/2021			81	3.1	3.1	<0.75 (U)	
10/19/2021	1.7 (J)	7.5					0.99 (J)
4/18/2022	<3 (U)	6.6 (J)	34	3.3 (J)	<3 (U)		
4/19/2022						<3 (U)	1 (J)
11/1/2022		8.3	67				
11/2/2022	<0.75 (U)			3.5	1.6 (J)	<0.75 (U)	
11/3/2022							1.1 (J)
5/1/2023		5.2					
5/2/2023	<1.1 (U)		44	4.1	<1.1 (U)	<0.53 (U)	3.1
10/24/2023							0.99 (J)
10/25/2023	0.75 (J)	7.8	9.9	2.4	1.7 (J)	<0.53 (U)	
4/30/2024	0.57 (J)	9.1	15	3.9	1.8 (J)	<0.53	
5/2/2024							1 (J)
Mean	1.515	7.363	35.61	3.925	2.175	1.292	1.239
Std. Dev.	1.134	1.161	26.5	1.259	0.8844	1.22	0.7585
Upper Lim.	1.053	8.593	63.7	5.259	2.37	3.5	3.1
Lower Lim.	0.4441	6.132	7.526	2.591	1.018	0.53	0.75

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/11/2024 1:28 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Lithium (ug/L) Analysis Run 7/11/2024 1:29 PM

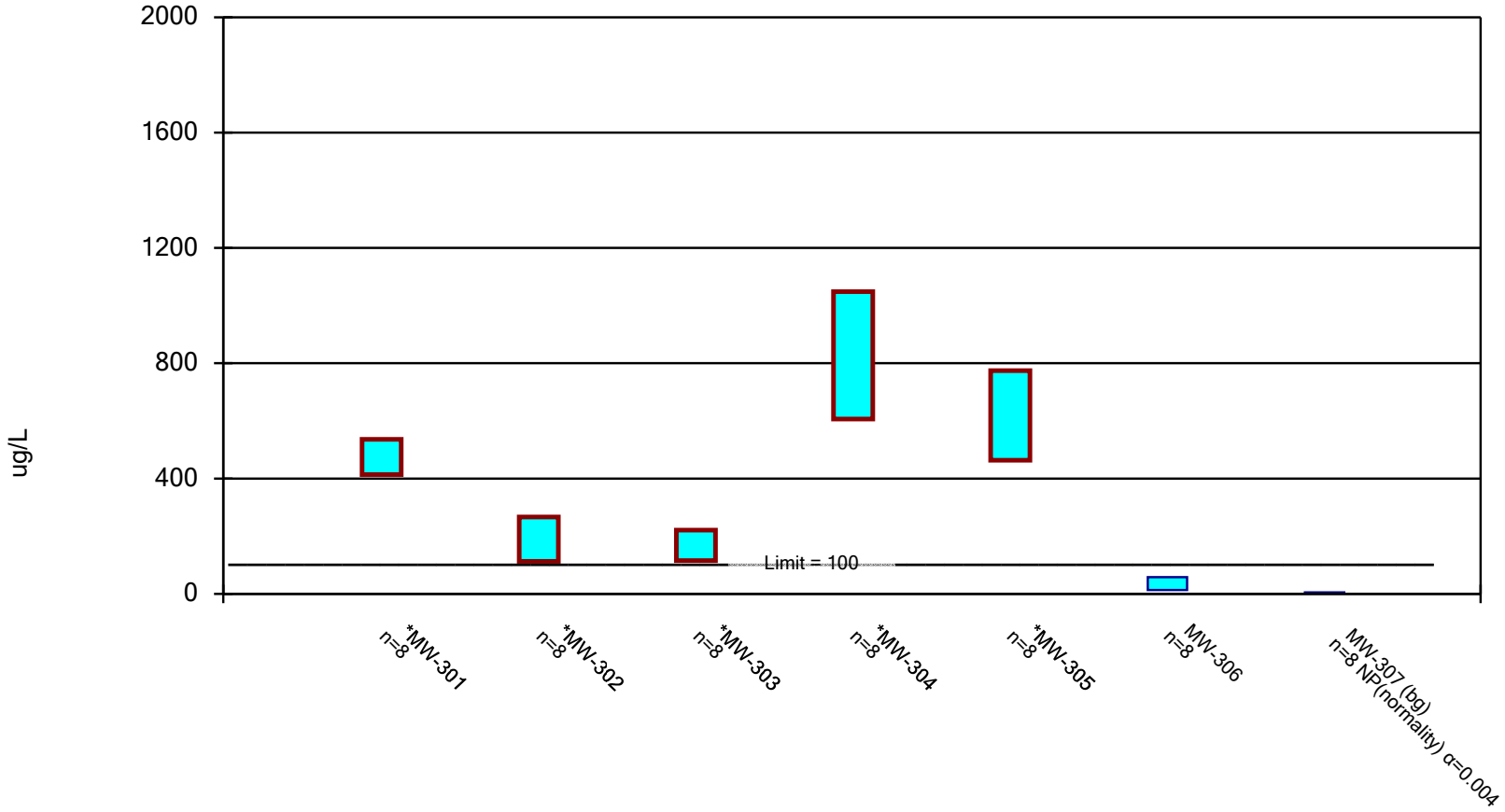
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307 (bg)
10/22/2020	<10 (U)	12	14	<10 (U)	22 (J)	60	
4/5/2021	6.9 (J)	18	47	3.2 (J)	23	70	
6/17/2021							<2.5 (U)
7/22/2021							<2.5 (U)
10/18/2021			14	<2.5 (U)	13	89	
10/19/2021	5.8 (J)	20					4.8 (J)
4/18/2022	<10 (U)	19 (J)	67	<10 (U)	21 (J)		
4/19/2022						51	5.3 (J)
11/1/2022		25	53				
11/2/2022	7.9 (J)			4.2 (J)	20	100	
11/3/2022							7 (J)
5/1/2023		46					
5/2/2023	<8.2 (J)		30	<5 (U)	15 (J)	26	<2.5 (U)
10/24/2023							6.5 (J)
10/25/2023	<25 (U)	<25 (U)	32 (J)	<25 (U)	<25 (U)	120	
4/30/2024	6.3 (J)	28	59	2.6 (J)	29	54	
5/2/2024							<2.5
Mean	10.01	22.56	39.5	7.813	19.44	71.25	4.2
Std. Dev.	6.252	10.94	20.08	7.584	5.641	30.24	1.937
Upper Lim.	25	34.16	60.78	3.803	25.42	103.3	7
Lower Lim.	5.8	10.97	18.22	2.458	13.46	39.2	2.5

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/11/2024 1:28 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Molybdenum (ug/L) Analysis Run 7/11/2024 1:29 PM

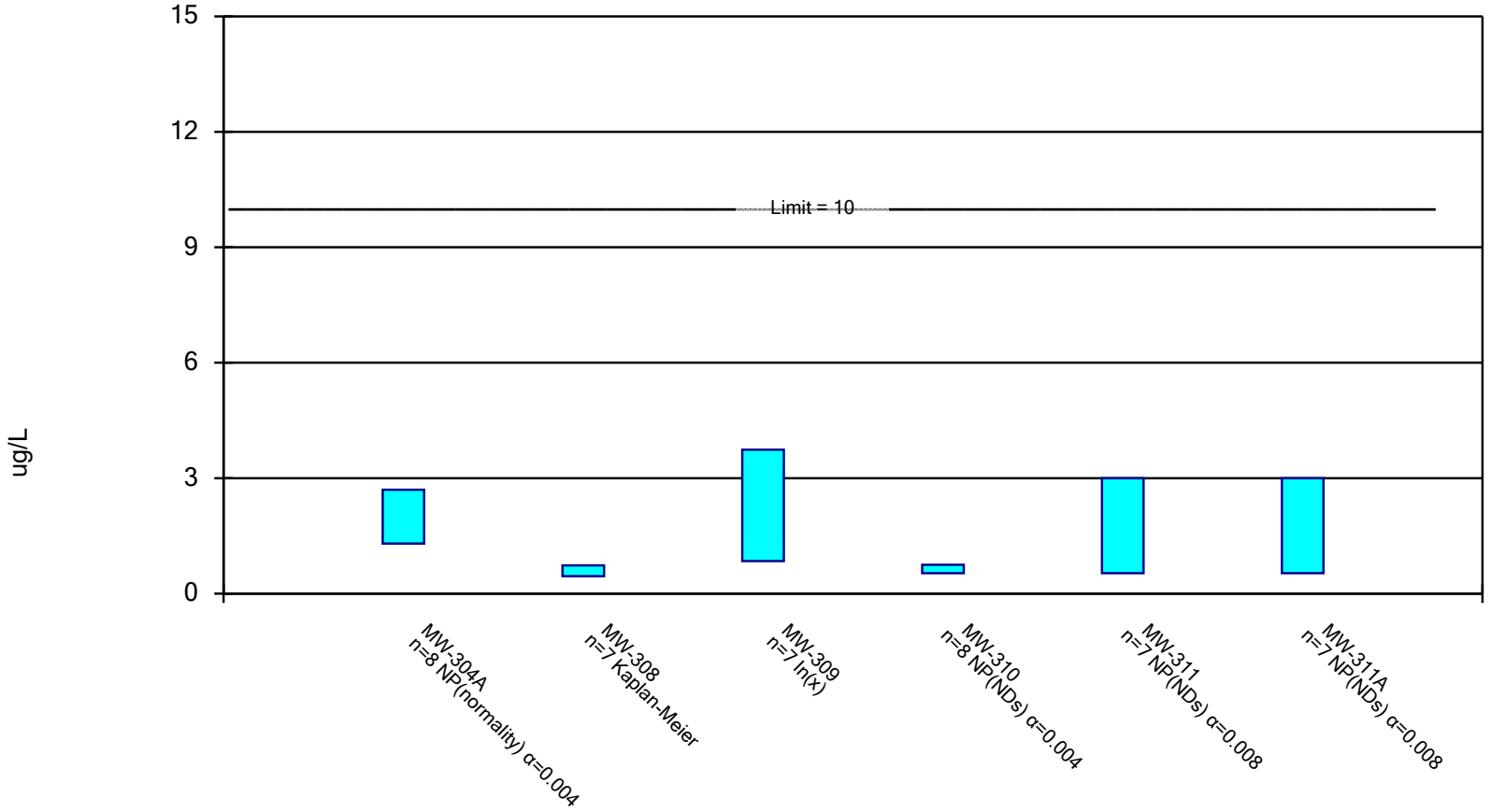
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307 (bg)
10/22/2020	510	320	180	930	580	49	
4/5/2021	430	170	150	650	650	46	
6/17/2021							<1.3 (U)
7/22/2021							<1.3 (U)
10/18/2021			190	1200	810	57	
10/19/2021	430	200					<1.3 (U)
4/18/2022	380	140	96	500	560		
4/19/2022						8.8	<1.2 (U)
11/1/2022		170	200				
11/2/2022	490			880	690	25	
11/3/2022							5.1
5/1/2023		98					
5/2/2023	480		110	740	380	27	2.2
10/24/2023							4.5
10/25/2023	550	270	250	900	790	63	
4/30/2024	530	150	170	820	490	8.6	
5/2/2024							<1.3
Mean	475	189.8	168.3	827.5	618.8	35.55	2.275
Std. Dev.	57.57	72.47	49.64	208.3	146.6	21.15	1.599
Upper Lim.	536	266.6	220.9	1048	774.2	57.96	5.1
Lower Lim.	414	112.9	115.6	606.7	463.3	13.14	1.2

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/11/2024 1:46 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Arsenic (ug/L) Analysis Run 7/11/2024 1:47 PM

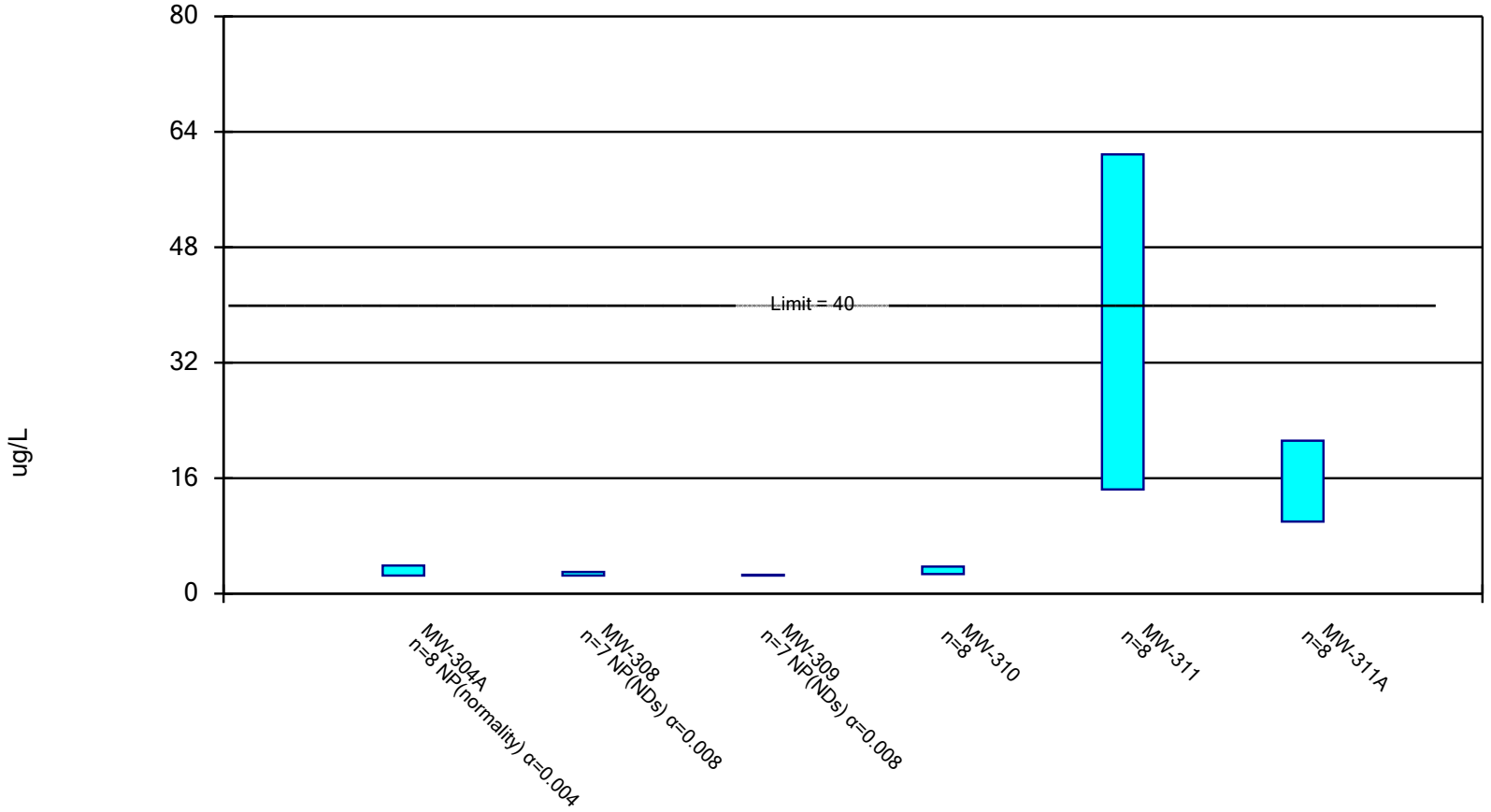
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-304A	MW-308	MW-309	MW-310	MW-311	MW-311A
2/22/2021	2.7					
4/5/2021	1.8 (J)					
6/17/2021		<0.75 (U)	0.84 (J)			
10/5/2021				<0.75 (U)		
10/18/2021	1.7 (J)					
10/19/2021		<0.75 (U)	1.4 (J)	<0.75 (U)		
12/30/2021					<0.75 (U)	<0.75 (U)
2/21/2022				<0.75 (U)	<0.75 (U)	<0.75 (U)
4/18/2022	1.4 (J)					
4/19/2022		<0.75 (U)	2.3	<0.75 (U)	<3 (U)	<3 (U)
11/2/2022	1.5 (J)	0.88 (J)	1.3 (J)			
11/3/2022				<0.75 (U)	<0.75 (U)	<0.75 (U)
5/2/2023	1.4 (J)					
5/3/2023		<0.53 (U)	5.6		<0.53 (U)	<0.53 (U)
5/4/2023				<0.53 (U)		
10/24/2023		0.58 (J)	2.4		<0.53 (U)	<0.53 (U)
10/25/2023	1.3 (J)					
10/26/2023				<0.53 (U)		
4/30/2024	1.3 (J)					
5/1/2024		<0.53	1.2 (J)	<0.53		
5/2/2024					<0.53	<0.53
Mean	1.638	0.6814	2.149	0.6675	0.9771	0.9771
Std. Dev.	0.4658	0.1352	1.627	0.1139	0.8988	0.8988
Upper Lim.	2.7	0.7352	3.741	0.75	3	3
Lower Lim.	1.3	0.4533	0.8473	0.53	0.53	0.53

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/11/2024 1:46 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Lithium (ug/L) Analysis Run 7/11/2024 1:47 PM

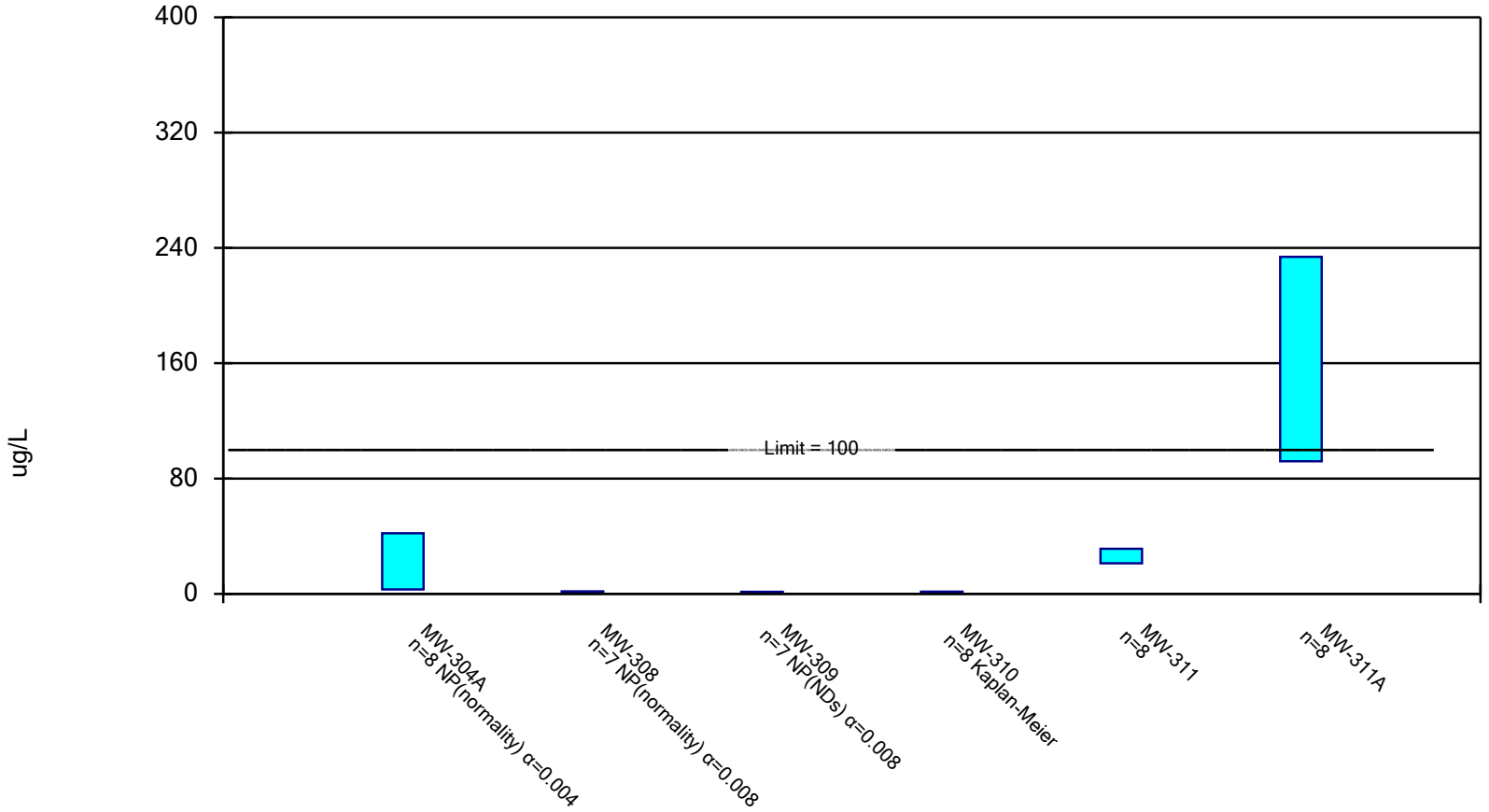
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-304A	MW-308	MW-309	MW-310	MW-311	MW-311A
2/22/2021	3.9 (J)					
4/5/2021	2.5 (J)					
6/17/2021		<2.5 (U)	<2.5 (U)			
10/5/2021				4 (J)		
10/18/2021	<2.5 (U)					
10/19/2021		<2.5 (U)	<2.5 (U)	3 (J)		
12/30/2021					43	15
2/21/2022				2.8 (J)	34	19
4/18/2022	<2.5 (U)					
4/19/2022		<2.5 (U)	<2.5 (U)	2.7 (J)	45	21 (J)
8/22/2022					45	19
11/2/2022	<2.5 (U)	3 (J)	<2.5 (U)			
11/3/2022				3.1 (J)	53	20
5/2/2023	<2.5 (U)					
5/3/2023		<2.5 (U)	2.6 (J)		5.5 (J)	9.2 (J)
5/4/2023				2.9 (J)		
10/24/2023		<2.5 (U)	<2.5 (U)		69	6.5 (J)
10/25/2023	<2.5 (U)					
10/26/2023				3.9 (J)		
4/30/2024	<2.5					
5/1/2024		<2.5	<2.5	3.4 (J)		
5/2/2024					6.7 (J)	15
Mean	2.675	2.571	2.514	3.225	37.65	15.59
Std. Dev.	0.495	0.189	0.0378	0.495	21.91	5.293
Upper Lim.	3.9	3	2.6	3.75	60.87	21.2
Lower Lim.	2.5	2.5	2.5	2.7	14.43	9.977

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/11/2024 1:46 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Molybdenum (ug/L) Analysis Run 7/11/2024 1:47 PM

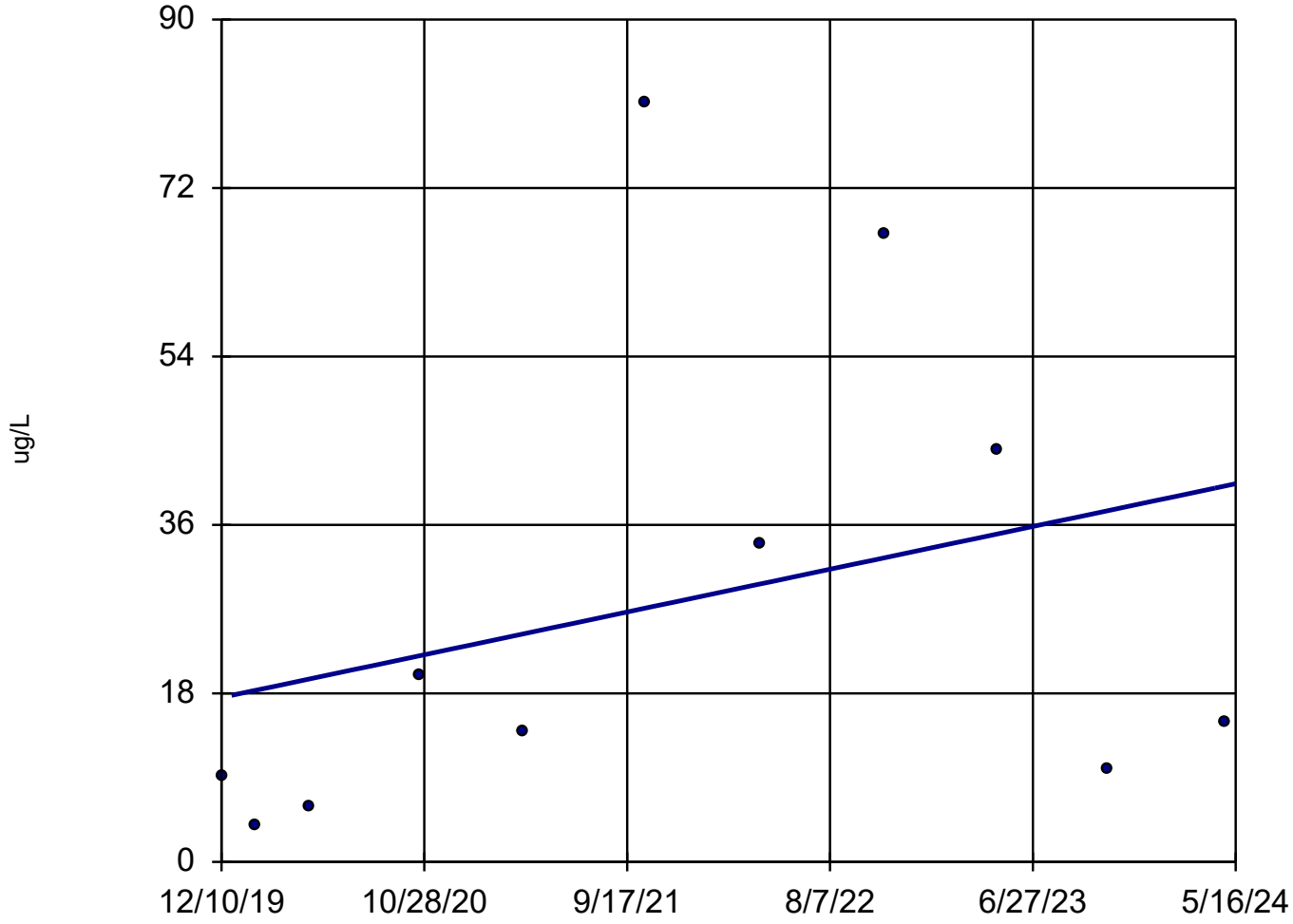
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-304A	MW-308	MW-309	MW-310	MW-311	MW-311A
2/22/2021	3.1					
4/5/2021	17					
6/17/2021		<1.3 (U)	<1.3 (U)			
10/5/2021				2		
10/18/2021	6					
10/19/2021		<1.3 (U)	<1.3 (U)	<1.3 (U)		
12/30/2021					30	160
2/21/2022				<1.2 (U)	31	210
4/18/2022	3.2					
4/19/2022		<1.2 (U)	<1.2 (U)	1.5 (J)	25	140
8/22/2022					29	180
11/2/2022	3.8	1.3 (J)	1.4 (J)			
11/3/2022				<1.2 (U)	26	140
5/2/2023	3.4					
5/3/2023		1.7 (J)	<0.91 (U)		18	210
5/4/2023				<0.91 (U)		
10/24/2023		1.6 (J)	<0.91 (U)		30	23
10/25/2023	42					
10/26/2023				<0.91 (U)		
4/30/2024	3.5					
5/1/2024		<1.3	<1.3	<1.3		
5/2/2024					21	240
Mean	10.25	1.386	1.189	1.29	26.25	162.9
Std. Dev.	13.66	0.1864	0.1989	0.3492	4.713	66.87
Upper Lim.	42	1.7	1.4	1.528	31.25	233.8
Lower Lim.	3.1	1.2	0.91	0.7123	21.25	91.99

ND substitution: RL or RL/2 if <15% NDs.

Arsenic

MW-303



n = 11

Slope = 5.152
units/year.

alpha = 0.02
t = 0.9602
critical = 2.398

No significant trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.8848, critical
= 0.792.

Linear Regression Analysis Run 7/11/2024 1:51 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Linear Regression

Constituent: Arsenic (ug/L) Analysis Run 7/11/2024 2:00 PM

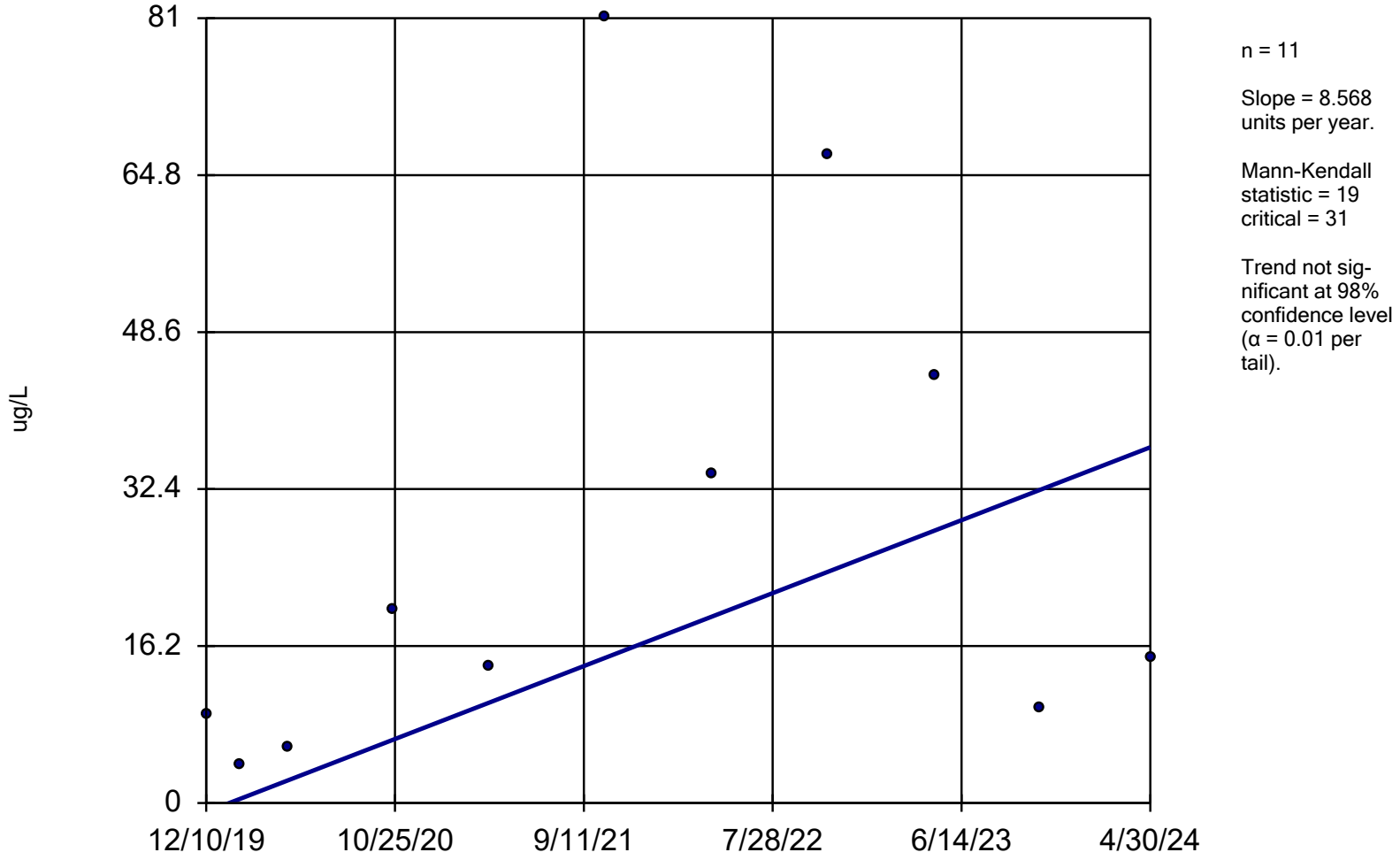
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-303
12/10/2019	9.2
2/4/2020	4
4/29/2020	5.8
10/22/2020	20
4/5/2021	14
10/18/2021	81
4/18/2022	34
11/1/2022	67
5/2/2023	44
10/25/2023	9.9
4/30/2024	15

09/02/2025 - Classification: Internal - ECRM13574470

Arsenic

MW-303



Sen's Slope and 95% Confidence Band Analysis Run 7/11/2024 2:00 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Sen's Slope Estimator

Constituent: Arsenic (ug/L) Analysis Run 7/11/2024 2:01 PM

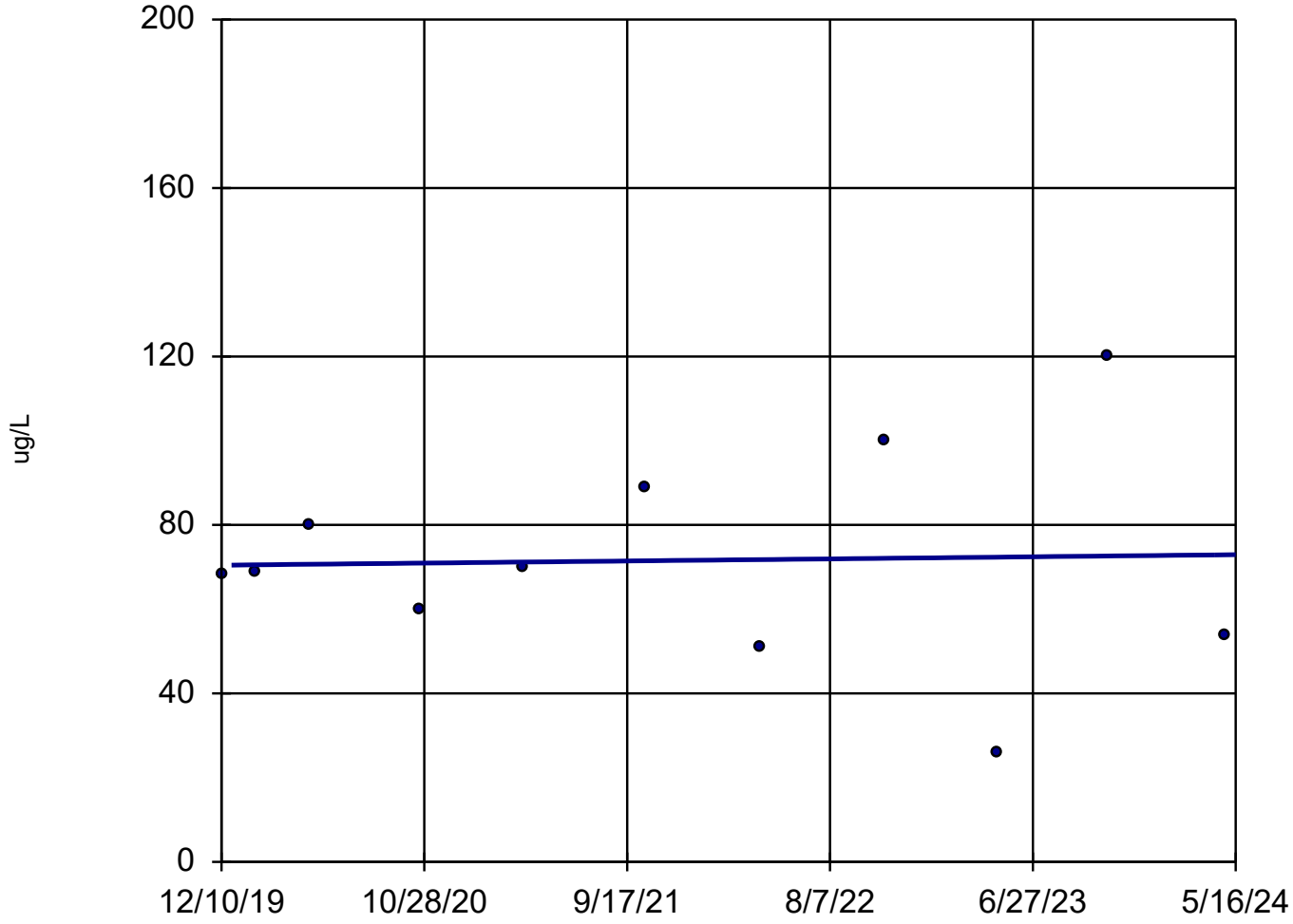
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-303
12/10/2019	9.2
2/4/2020	4
4/29/2020	5.8
10/22/2020	20
4/5/2021	14
10/18/2021	81
4/18/2022	34
11/1/2022	67
5/2/2023	44
10/25/2023	9.9
4/30/2024	15

09/02/2025 - Classification: Internal - ECRM13574470

Lithium

MW-306



n = 11

Slope = 0.5627
units/year.

alpha = 0.02
t = 0.1023
critical = 2.398

No significant trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9833, critical
= 0.792.

Linear Regression Analysis Run 7/25/2024 2:57 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Linear Regression

Constituent: Lithium (ug/L) Analysis Run 7/25/2024 2:59 PM

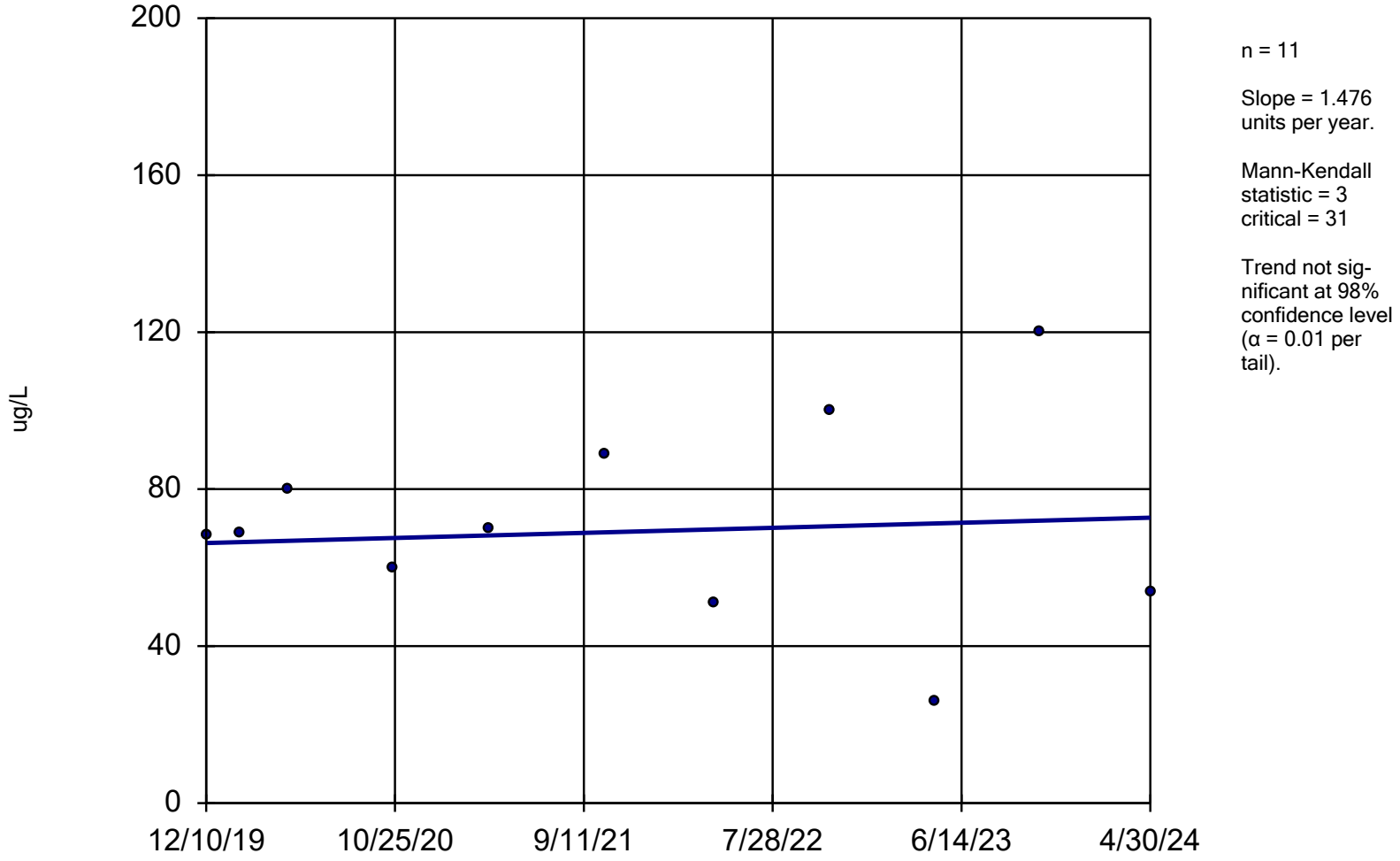
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-306
12/10/2019	68
2/4/2020	69
4/29/2020	80
10/22/2020	60
4/5/2021	70
10/18/2021	89
4/19/2022	51
11/2/2022	100
5/2/2023	26
10/25/2023	120
4/30/2024	54

09/02/2025 - Classification: Internal - ECRM13574470

Lithium

MW-306



Sen's Slope and 95% Confidence Band Analysis Run 7/25/2024 3:05 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Sen's Slope Estimator

Constituent: Lithium (ug/L) Analysis Run 7/25/2024 3:06 PM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-306
12/10/2019	68
2/4/2020	69
4/29/2020	80
10/22/2020	60
4/5/2021	70
10/18/2021	89
4/19/2022	51
11/2/2022	100
5/2/2023	26
10/25/2023	120
4/30/2024	54

E2 LCL Evaluation – October 2024 Event: Arsenic, Lithium & Molybdenum with Eight Most Recent Events

09/02/2025 - Classification: Internal - ECRM13574470

March 5, 2025
File No. 25224077.00

Mr. Brad Weber
Alliant Energy
201 N. 2nd Street
Clinton, IA 52732

Subject: Assessment Groundwater Monitoring Results – October 2024
M.L. Kapp Generating Station, Clinton, Iowa

Dear Mr. Weber:

This letter provides the laboratory analytical results report for groundwater monitoring at the M.L. Kapp Generating Station (KAP) in October 2024. The sampling event was performed as part of the ongoing semiannual assessment monitoring program for the KAP groundwater monitoring system and in support of the Selection of Remedy (SOR) process for KAP.

The groundwater monitoring system at KAP is monitoring a single closed coal combustion residual (CCR) Unit:

- Main Ash Pond (Inactive surface impoundment)

The Main Ash Pond closure and capping project was completed in January 2018.

An Assessment of Corrective Measures (ACM) was initiated for the KAP CCR Units in July 2020 and completed in March 2021. Additional delineation of the off-site extent of groundwater impacts is in progress. The additional investigation will be used to update the corrective action alternatives and inform the SOR. The ACM was initiated in response to the detection of molybdenum at statistically significant levels (SSLs) exceeding the Groundwater Protection Standards (GPS). In 2021, lithium was determined to be at an SSL above the GPS at one monitoring well. In 2023, arsenic was determined to be at an SSL above the GPS at one monitoring well. Arsenic and lithium will also be addressed in the SOR. Assessment monitoring continued during the ACM and will continue during the SOR.

SAMPLE COLLECTION AND ANALYSIS

Groundwater samples were collected from the CCR Rule monitoring wells by SCS Engineers (SCS) on October 28 through 31. The samples collected from the background wells, supplemental background wells, and compliance wells were analyzed for Appendix III and Appendix IV parameters. Samples collected from the delineation wells were analyzed for arsenic, lithium, and molybdenum. Total iron and field pH were included in the October 2024 event for all monitoring wells to characterize groundwater conditions in support of the SOR. Monitoring well MW-313 was sampled for additional general water quality parameters to provide information on aquifer conditions at this location.

09/02/2025 - Classification: Internal - ECRM13574470

The October event was the fourth sampling event for MW-312 and MW-313, which were installed in February 2023. Delineation wells MW-314 and MW-314A were installed in February 2024. The October 2024 monitoring event was the second sampling event at these wells.

The field parameter results were compiled by SCS and provided to the laboratory for inclusion in the laboratory report. The laboratory report is provided in **Attachment A**.

The October 2024 sampling event was completed in accordance with the Sampling and Analysis Plan for the monitoring system. Delineation well MW-309 was dry during the October 2024 sampling event and no sample was collected at this well during this event.

The results were split to provide separate reports to individual property owners because multiple wells in the KAP network are on properties with owners other than Alliant Energy.

No additional problems were identified during the initial review of the analytical report.

COMPARISON TO GROUNDWATER PROTECTION STANDARDS

The October 2024 results for Appendix IV parameters were compared to the GPSs established under 40 CFR 257.95(h) to evaluate whether any Appendix IV parameter was present at an SSL above the GPS. The October 2024 results and GPS values are shown in **Table 1**. SSLs for the current and most recent previous sampling event are shown in **Table 2**.

For the October 2024 monitoring event, assessment monitoring parameters for which an individual monitoring result exceeded the GPS at a compliance well included the following:

- Arsenic: MW-303
- Lithium: MW-302, MW-303, MW-306
- Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305

Molybdenum also exceeded the GPS at downgradient delineation well MW-311A.

U.S. Environmental Protection Agency's Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at Resource Conservation and Recovery Act (RCRA) Facilities (EPA 530-R-09-007, March 2009) recommends the use of confidence intervals for comparison of assessment monitoring data to fixed GPS values. Specifically, the suggested approach for comparing assessment groundwater monitoring data to GPS values based on long-term chronic health risk, such as drinking water Maximum Contaminant Levels (MCLs), is to compare the lower confidence limit (LCL) around the arithmetic mean with the fixed GPS.

An LCL evaluation was completed for each Appendix IV parameter that has been detected at a concentration exceeding the GPS in at least one sample result since assessment monitoring was initiated, which includes arsenic, lithium, and molybdenum. The LCLs were calculated with Sanitas™ using historical concentrations measured in the most recent eight events for each well, or all of the results if less than eight events have been completed. A minimum of four sample results are required for the LCL evaluation. The evaluation is provided in **Attachment B**.

For the October 2024 event, arsenic at MW-303 was detected at a concentration above the GPS, but the LCL calculated based on the samples collected for the most recent eight events remained below the GPS. Review of the arsenic results at MW-303 indicated a potentially significant increasing trend;

therefore, the arsenic results for this well were also evaluated for trends using both a linear regression analysis and a Mann-Kendall analysis (**Attachment B**). Neither the Mann-Kendall analysis nor the linear regression analysis indicated significant trends. Based on these results, arsenic was determined not to be at an SSL above the GPS at MW-303 for the October 2024 event.

Lithium at MW-306 was determined to be at an SSL above the GPS for the October 2023 event, but the subsequent sampling result in April 2024 caused the LCL to drop slightly below the GPS. With the October 2024 result and the previous seven events, the LCL was above the GPS. The lithium results for this well were also evaluated for trends using both a linear regression analysis and a Mann-Kendall analysis (**Attachment B**). Neither analysis indicated a significant trend; therefore, lithium at MW-306 is at an SSL above the GPS.

For compliance wells, the SSLs above the GPS were:

- Arsenic: No wells
- Lithium: MW-306
- Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305

The statistical analysis did not identify new parameters and/or compliance wells with SSLs. Although arsenic was not determined to be at an SSL above the GPS for any well in the current monitoring event, it will still be addressed in the SOR based on previous SSL determinations.

There were no SSLs above the GPS identified for delineation wells. Monitoring wells MW-314 and MW-314A were not included in the LCL evaluation because they do not meet the minimum number of samples required to calculate LCLs.

COMPARISON TO BACKGROUND

The comparison of Appendix III and Appendix IV parameters results to background concentrations was completed in accordance with 40 CFR 257.93(f)(3) using a prediction interval procedure, in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the Upper Prediction Limit (UPL). Because the site is already in assessment monitoring and in the process of selecting a remedy, the purpose of the UPL analysis is to provide a basis for comparison of downgradient water quality to background. The UPLs are shown in **Table 1**. Statistically significant increases (SSIs) above background for Appendix III parameters at the compliance wells for the current and most recent previous sampling event are shown in **Table 2**.

The UPLs for detection and assessment monitoring parameters were calculated based on a 1-of-2 resampling approach. The UPLs are based on background sampling at upgradient well MW-307. Supplemental background monitoring wells MW-310 and MW-312 were installed to evaluate background conditions in the bedrock groundwater, but results from these wells are not being used in the statistical analysis. MW-310 is located approximately 2 miles northeast of the site, and MW-312 is located approximately 0.5 mile southwest of the site. Data from MW-310 and MW-312 is currently being used for comparison purposes only.

Detection monitoring parameters for which SSIs above background were identified for at least one monitoring well included the following:

- Boron, chloride, and sulfate

Assessment monitoring parameters for which SSIs above background were identified at one or more compliance wells included the following:

- Arsenic: MW-302, MW-303, MW-304
- Cadmium: MW-301, MW-304
- Lithium: MW-302, MW-303, MW-305, MW-306
- Molybdenum: MW-301, MW-302, MW-303, MW-304, MW-305, MW-306

Assessment monitoring parameters for which SSIs above background were identified at one or more delineation wells included the following:

- Arsenic: MW-314A
- Lithium: MW-311, MW-311A
- Molybdenum: MW-311, MW-311A

SELECTION OF REMEDY

An SOR is currently in progress in response to the detection of arsenic, molybdenum, and lithium at SSLs above the GPS. Assessment monitoring of KAP is required while the SOR is completed, as established under 40 CFR 257.96(b).

In accordance with 40 CFR 257.95(d)(3), IPL must include the 2024 assessment monitoring results, background concentrations for the Appendix IV parameters, and GPSs in the annual groundwater monitoring and corrective action report due August 1, 2025.

Please contact us if you have any questions regarding these results.

Sincerely,

Sherren C. Clark
Project Director
SCS Engineers

Thomas J. Karwoski
Project Manager
SCS Engineers

BLR/AJR/RM/TK/SCC

cc: Jeff Maxted, Alliant Energy
Tracy McCampbell, Director, IPL Distribution and Capital
Matt Bizjack, Alliant Energy

Encl. Table 1. Groundwater Analytical Results Summary
Table 2. SSIs and SSLs for Previous and Current Events
Attachment A – Laboratory Analytical Report
Attachment B – Confidence Interval Analysis

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09/02/2025 - Classification: Internal - ECRM13574470

Tables

1 Groundwater Analytical Results Summary
2 SSIs and SSLs for Previous and Current Event

Table 1. Groundwater Analytical Results Summary - Assessment Monitoring
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00

Parameter Name	UPL Method	UPL	GPS	Background Well	Compliance Wells						Delineation Wells								Supplemental Background Wells	
				MW-307	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-304A	MW-308	MW-309	MW-311	MW-311A	MW-313	MW-314	MW-314A	MW-310	MW-312
				10/30/2024	10/30/2024	10/29/2024	10/29/2024	10/29/2024	10/29/2024	10/30/2024	10/29/2024	10/28/2024	10/29/2024	10/30/2024	10/30/2024	10/30/2024	10/31/2024	10/31/2024	10/28/2024	10/31/2024
Groundwater Elevation, ft amsl				589.81	576.22	573.66	574.59	574.07	573.99	574.77	574.01	574.22	DRY	573.37	573.46	573.28	572.69	572.79	588.10	573.36
Appendix III																				
Boron, µg/L	NP	280		<76	8800	10000	5600	9600	16000	11000	--	--	--	--	--	--	--	--	730	<76
Calcium, mg/L	P	294		190	140	180.00	91	130	190	160	--	--	--	--	--	58	--	--	120	72
Chloride, mg/L	P	91.9		73	95	12	21	21	31	210	--	--	--	--	--	50	--	--	63	8.9
Fluoride, mg/L	DQ	DQ		<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--	<0.38	<0.38
Field pH, Std. Units	NP	7.71		6.34	6.54	6.99	6.82	6.70	6.90	6.94	7.11	6.39	--	6.89	7.44	7.15	7.06	7.42	6.91	7.16
Sulfate, mg/L	P	25.6		22	140	460	340	420	510	200	--	--	--	--	--	5.8	--	--	120	23
Total Dissolved Solids, mg/L	P	1,220		740	720	810	660	850	1,200	1,000	--	--	--	--	--	--	--	--	670	320
Appendix IV																				
Antimony, ug/L	DQ	DQ	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--	--	<1.0	<1.0
Arsenic, ug/L	P	1.85	10	0.92 J	<0.53	4.4	29	3.2	1.2 J	<0.53	0.85 J	<0.53	--	<0.53	<0.53	1.6 J	0.9 J	2.0	<0.53	<0.53
Barium, ug/L	P	357	2,000	380	60	140	80	130	83	79	--	--	--	--	--	--	--	--	32	30
Beryllium, ug/L	DQ	DQ	4	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	--	--	--	--	--	--	--	--	<0.33	<0.33
Cadmium, ug/L	P	0.263	5	<0.10	0.43	0.14 J	0.15 J	0.37	0.19 J	<0.10	--	--	--	--	--	--	--	--	<0.10	<0.10
Chromium, ug/L	DQ	DQ	100	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	--	--	--	--	--	--	--	--	<1.2	<1.2
Cobalt, ug/L	P	7.83	7.83	7.2	4.6	0.84	1.1	1.5	0.81	<0.17	--	--	--	--	--	--	--	--	0.37 J	<0.17
Fluoride, mg/L	DQ	DQ	4	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	--	--	--	--	--	--	--	--	<0.38	<0.38
Lead, ug/L	NP	0.240	15	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	--	--	--	--	--	--	--	--	<0.26	<0.26
Lithium, ug/L	NP	5.3	40	6.2 J	6.5 J	48	53	3.4 J	23	95	<2.5	2.5 J	--	25	15	<2.5	<2.5	3.9 J	3.6 J	<2.5
Mercury, ug/L	DQ	DQ	2	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	--	--	--	--	--	--	--	--	<0.11	<0.11
Molybdenum, ug/L	NP	3.40	100	<1.3	540	180	220	800	430	20	2.9	<1.3	--	24	170	<1.3	1.6 J	2.2	<1.3	<1.3
Selenium, ug/L	NP	1.1	50	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	--	--	--	--	--	--	--	--	<1.4	<1.4
Thallium, ug/L	DQ	DQ	2	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	--	--	--	--	--	--	--	--	<0.57	<0.57
Radium 226/228 Combined, pCi/L	P	5.85	5.85	1.01	0.909	0.520	0.357	1.27	0.347	0.531	--	--	--	--	--	--	--	--	1.21	1.01
Additional Parameters - Selection of Remedy																				
Iron, ug/L	UPL or GPS not applicable			1,000	310	37 J	10,000	1,500	910	<36	380	<36	--	<36	<36	90 J	98 J	1,100	<36	<36
Magnesium, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	25,000	--	--	--	34,000
Manganese, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--	<3.6
Potassium, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	2,700	--	--	--	650
Sodium, ug/L				--	--	--	--	--	--	--	--	--	--	--	--	64,000	--	--	--	6,000
Total Alkalinity, mg/L				--	--	--	--	--	--	--	--	--	--	--	--	320	--	--	--	270
Carbonate Alkalinity, mg/L				--	--	--	--	--	--	--	--	--	--	--	--	<2.5	--	--	--	<2.5
Bicarbonate Alkalinity, mg/L				--	--	--	--	--	--	--	--	--	--	--	--	320	--	--	--	270

Blue highlighted cell indicates the compliance or delineation well results exceeds the UPL and the LOQ.
Yellow highlighted cell indicates the compliance or delineation well result exceeds the GPS.
Grayscale indicates additional parameters sampled for selection of remedy and evaluation of MNA.

Abbreviations:
UPL = Upper Prediction Limit
GPS = Groundwater Protection Standard
ug/L = micrograms per Liter
mg/L = milligrams per Liter
ft amsl = feet above mean sea level

LOD = Limit of Detection
LOQ = Limit of Quantitation
MCL = Maximum Contaminant Level
DQ = Double Quantitation

-- = Not analyzed
pCi/L = picocuries per Liter
Std. Units = Standard Units
MNA = Monitored Natural Attentuation

P = Parametric
NP = Nonparametric

Lab Notes/Qualifiers:
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Notes:
1. An individual result above the UPL or GPS does not constitute an SSI above background or statistically significant level above the GPS. See the accompanying report text for identification of statistically significant results.
2. GPS is the United States Environmental Protection Agency (USEPA) Maximum Contamination Level (MCLs), if established; otherwise, the values from 40 CFR 257.95(h)(2). The UPL for Total Radium is greater than the MCL and will be used as the GPS.
3. Interwell UPLs calculated based on results from background well MW-307. The UPLs were updated in July 2022.
4. For compliance wells, only results confirmed above the LOQ are evaluated as potential SSIs above background.

Created by: RM Date: 12/5/2024
Last revision by: RM Date: 12/5/2024
Checked by: KMV Date: 1/13/2024

I:\25224077.00\Deliverables\2024 October Results Letter\Tables\[Table 1_2024 Oct_CCR GW Screening Summary_ML Kapp.xlsx]Single event

Table 2. SSIs and SSLs for Previous and Current Events
M.L. Kapp Generating Station / SCS Engineers Project #25224077.00

	Compliance Well Results	
Statistically Significant Increases (SSIs): Appendix III Parameters	**April 2024**	**October 2024**
Boron	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306
Chloride	MW-301, MW-306	MW-301, MW-306
Sulfate	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306	MW-301, MW-302, MW-303, MW-304, MW-305, MW-306
Total Dissolved Solids	MW-305	--
Statistically Significant Levels (SSLs): Appendix IV Parameters	**April 2024**	**October 2024**
Lithium	--	MW-306
Molybdenum	MW-301, MW-302, MW-303, MW-304, MW-305	MW-301, MW-302, MW-303, MW-304, MW-305

Created by:	RM	Date:	7/26/2024
Last revision by:	BLR	Date:	12/17/2024
Checked by:	RM	Date:	1/9/2025

I:\25224077.00\Deliverables\2024 October Results Letter\Tables\[Table 2_2024 October - SSI SSL Summary_KAP.xlsx]SSI SSL

09/02/2025 - Classification: Internal - ECRM13574470

Attachment A

Laboratory Analytical Reports

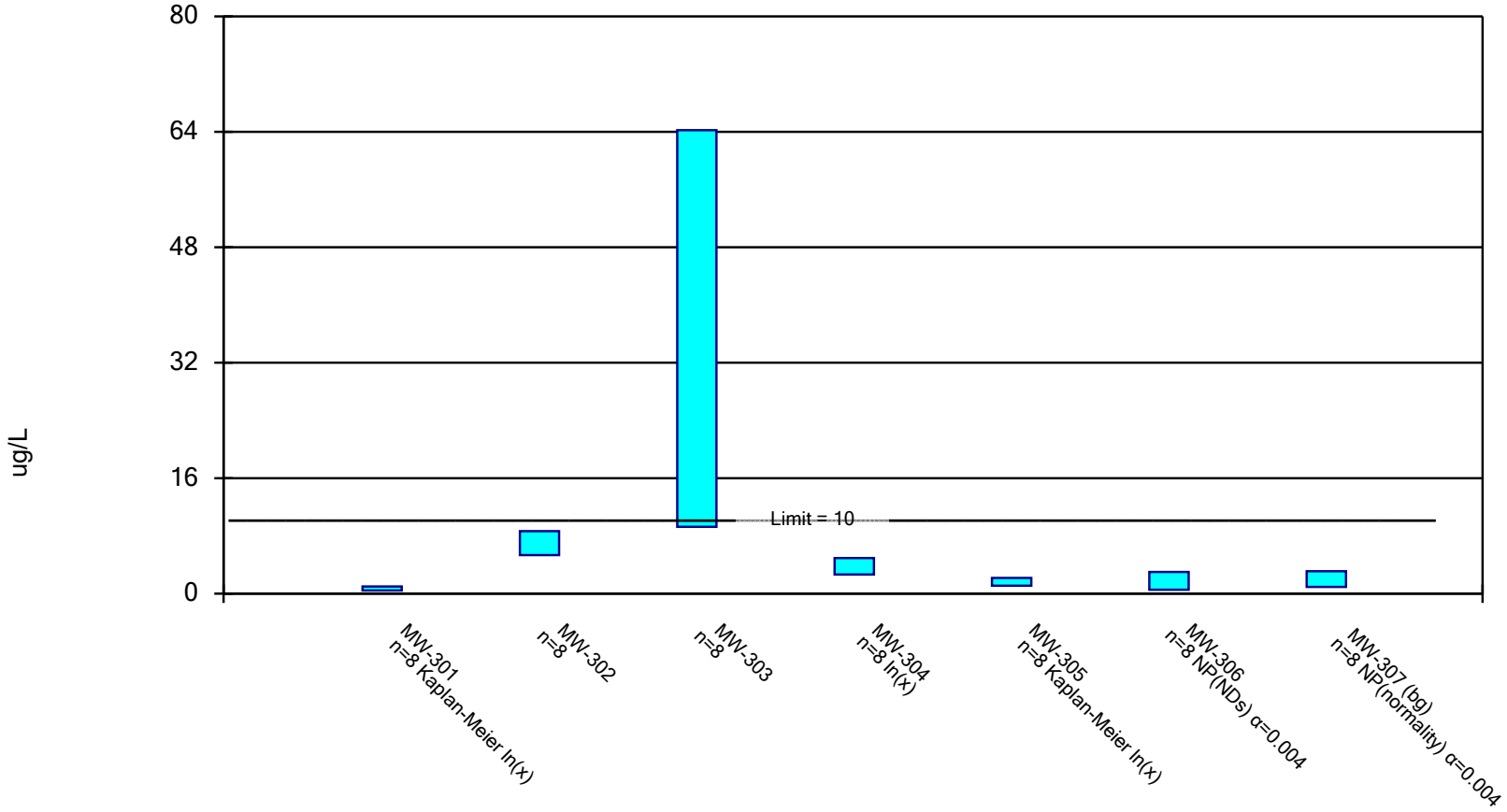
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Attachment B

Confidence Interval Analysis

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/17/2024 9:23 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Arsenic (ug/L) Analysis Run 12/17/2024 9:25 AM

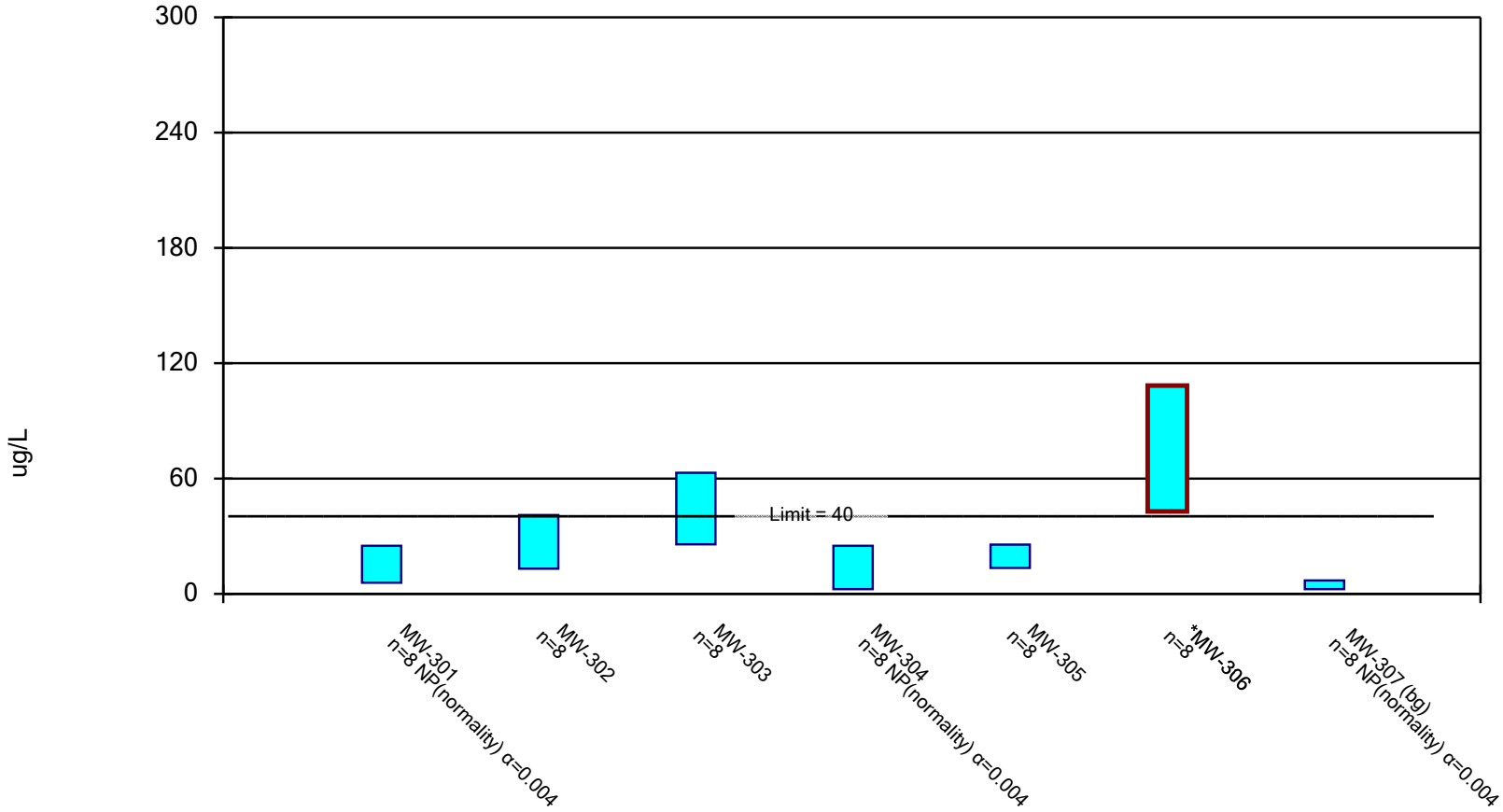
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307 (bg)
4/5/2021	<0.75 (U)	7.1	14	6.6	1.6 (J)	<0.75 (U)	
7/22/2021							0.98 (J)
10/18/2021			81	3.1	3.1	<0.75 (U)	
10/19/2021	1.7 (J)	7.5					0.99 (J)
4/18/2022	<3 (U)	6.6 (J)	34	3.3 (J)	<3 (U)		
4/19/2022						<3 (U)	1 (J)
11/1/2022		8.3	67				
11/2/2022	<0.75 (U)			3.5	1.6 (J)	<0.75 (U)	
11/3/2022							1.1 (J)
5/1/2023		5.2					
5/2/2023	<1.1 (U)		44	4.1	<1.1 (U)	<0.53 (U)	3.1
10/24/2023							0.99 (J)
10/25/2023	0.75 (J)	7.8	9.9	2.4	1.7 (J)	<0.53 (U)	
4/30/2024	0.57 (J)	9.1	15	3.9	1.8 (J)	<0.53	
5/2/2024							1 (J)
10/29/2024		4.4	29	3.2	1.2 (J)		
10/30/2024	<0.53					<0.53	0.92 (J)
Mean	1.144	7	36.74	3.763	1.888	0.9212	1.26
Std. Dev.	0.839	1.566	25.93	1.258	0.7568	0.847	0.7451
Upper Lim.	0.9833	8.66	64.22	4.927	2.175	3	3.1
Lower Lim.	0.4242	5.34	9.258	2.649	1.095	0.53	0.92

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/17/2024 9:23 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Lithium (ug/L) Analysis Run 12/17/2024 9:25 AM

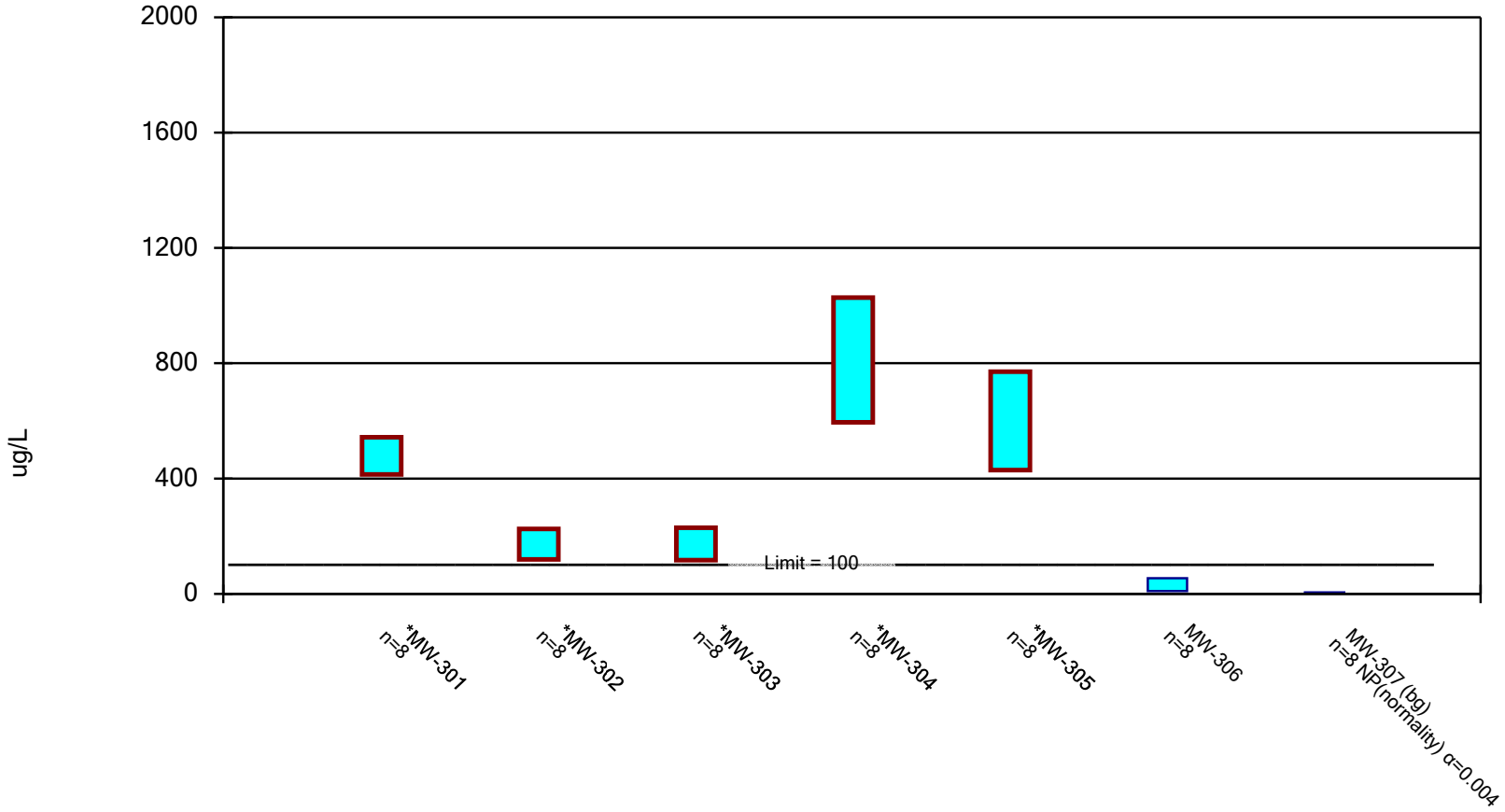
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307 (bg)
4/5/2021	6.9 (J)	18	47	3.2 (J)	23	70	
7/22/2021							<2.5 (U)
10/18/2021			14	<2.5 (U)	13	89	
10/19/2021	5.8 (J)	20					4.8 (J)
4/18/2022	<10 (U)	19 (J)	67	<10 (U)	21 (J)		
4/19/2022						51	5.3 (J)
11/1/2022		25	53				
11/2/2022	7.9 (J)			4.2 (J)	20	100	
11/3/2022							7 (J)
5/1/2023		46					
5/2/2023	<8.2 (J)		30	<5 (U)	15 (J)	26	<2.5 (U)
10/24/2023							6.5 (J)
10/25/2023	<25 (U)	<25 (U)	32 (J)	<25 (U)	<25 (U)	120	
4/30/2024	6.3 (J)	28	59	2.6 (J)	29	54	
5/2/2024							<2.5
10/29/2024		48	53	3.4 (J)	23		
10/30/2024	6.5 (J)					95	6.2 (J)
Mean	9.575	27.06	44.38	6.988	19.56	75.63	4.663
Std. Dev.	6.374	13.15	17.58	7.67	5.716	30.91	1.915
Upper Lim.	25	41.01	63.01	25	25.62	108.4	7
Lower Lim.	5.8	13.12	25.74	2.5	13.5	42.87	2.5

ND substitution: RL or RL/2 if <15% NDs. Substitution method for trace values of the form <PQL(J): PQL.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/17/2024 9:23 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Molybdenum (ug/L) Analysis Run 12/17/2024 9:25 AM

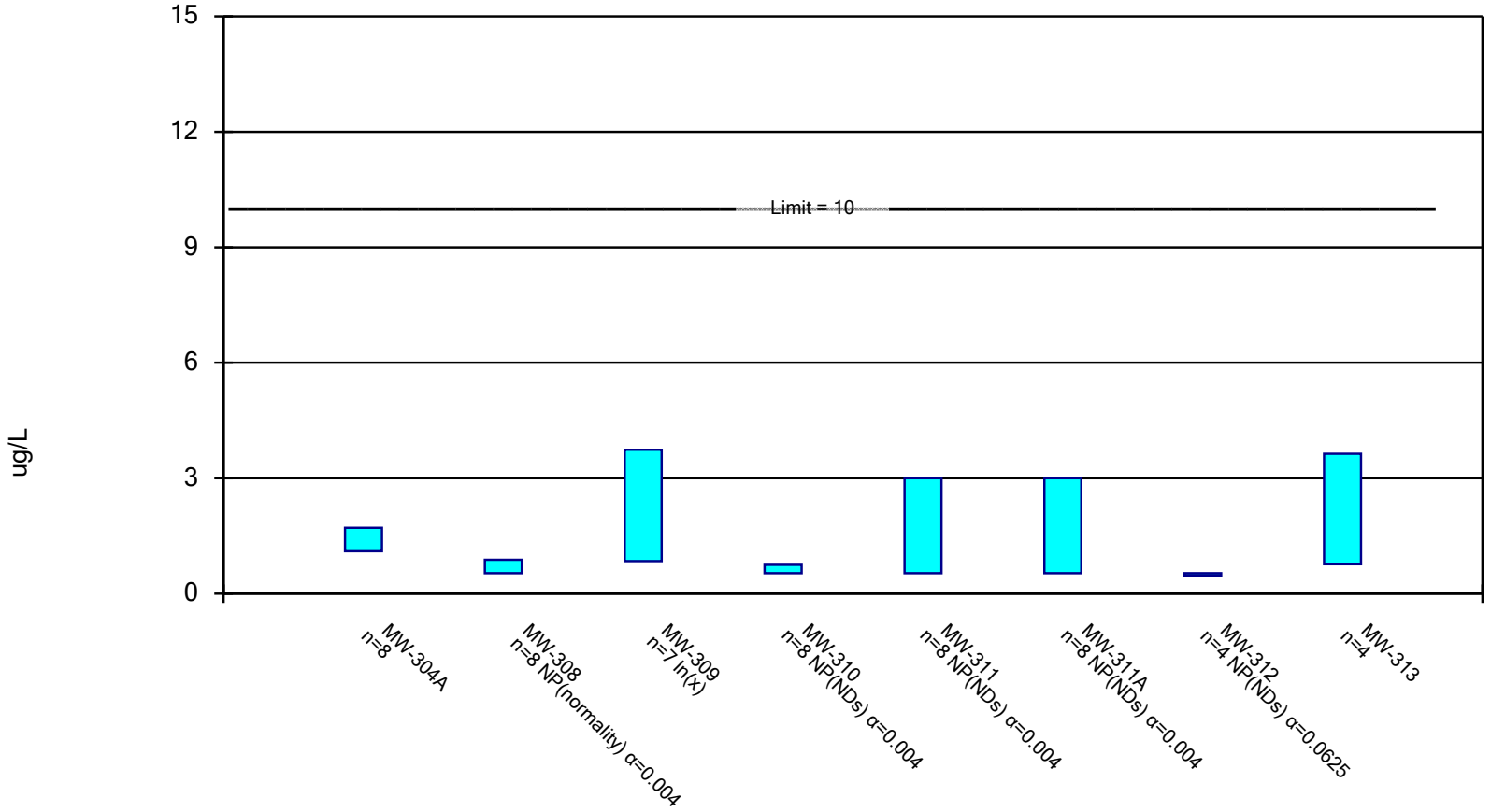
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307 (bg)
4/5/2021	430	170	150	650	650	46	
7/22/2021							<1.3 (U)
10/18/2021			190	1200	810	57	
10/19/2021	430	200					<1.3 (U)
4/18/2022	380	140	96	500	560		
4/19/2022						8.8	<1.2 (U)
11/1/2022		170	200				
11/2/2022	490			880	690	25	
11/3/2022							5.1
5/1/2023		98					
5/2/2023	480		110	740	380	27	2.2
10/24/2023							4.5
10/25/2023	550	270	250	900	790	63	
4/30/2024	530	150	170	820	490	8.6	
5/2/2024							<1.3
10/29/2024		180	220	800	430		
10/30/2024	540					20	<1.3
Mean	478.8	172.3	173.3	811.3	600	31.93	2.275
Std. Dev.	61.05	49.92	52.9	204.2	161.2	21	1.599
Upper Lim.	543.5	225.2	229.3	1028	770.8	54.18	5.1
Lower Lim.	414	119.3	117.2	594.8	429.2	9.671	1.2

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/17/2024 9:33 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Arsenic (ug/L) Analysis Run 12/17/2024 9:34 AM

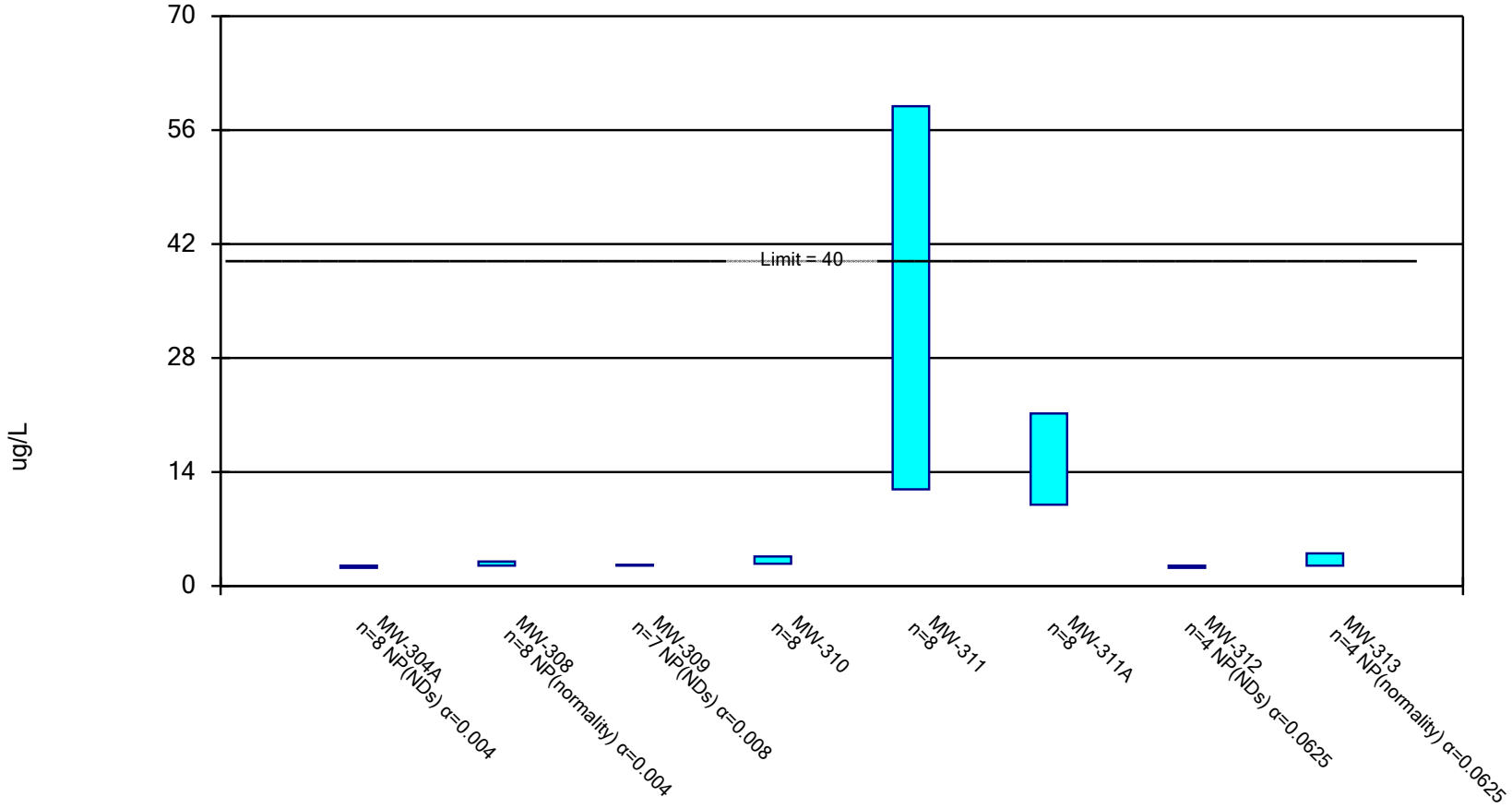
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-304A	MW-308	MW-309	MW-310	MW-311	MW-311A	MW-312	MW-313
4/5/2021	1.8 (J)							
6/17/2021		<0.75 (U)	0.84 (J)					
10/18/2021	1.7 (J)							
10/19/2021		<0.75 (U)	1.4 (J)	<0.75 (U)				
12/30/2021					<0.75 (U)	<0.75 (U)		
2/21/2022				<0.75 (U)	<0.75 (U)	<0.75 (U)		
4/18/2022	1.4 (J)							
4/19/2022		<0.75 (U)	2.3	<0.75 (U)	<3 (U)	<3 (U)		
11/2/2022	1.5 (J)	0.88 (J)	1.3 (J)					
11/3/2022				<0.75 (U)	<0.75 (U)	<0.75 (U)		
5/2/2023	1.4 (J)							
5/3/2023		<0.53 (U)	5.6		<0.53 (U)	<0.53 (U)	<0.53 (U)	2.4
5/4/2023				<0.53 (U)				
10/24/2023		0.58 (J)	2.4		<0.53 (U)	<0.53 (U)	<0.53 (U)	
10/25/2023	1.3 (J)							
10/26/2023				<0.53 (U)				3
4/30/2024	1.3 (J)							
5/1/2024		<0.53	1.2 (J)	<0.53			<0.53	1.8 (J)
5/2/2024					<0.53	<0.53		
10/28/2024		<0.53		<0.53				
10/29/2024	0.85 (J)							
10/30/2024					<0.53	<0.53		1.6 (J)
10/31/2024							<0.53	
Mean	1.406	0.6625	2.149	0.64	0.9212	0.9212	0.53	2.2
Std. Dev.	0.2884	0.1361	1.627	0.1176	0.847	0.847	0	0.6325
Upper Lim.	1.712	0.88	3.741	0.75	3	3	0.53	3.636
Lower Lim.	1.101	0.53	0.8473	0.53	0.53	0.53	0.53	0.7641

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/17/2024 9:33 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Lithium (ug/L) Analysis Run 12/17/2024 9:34 AM

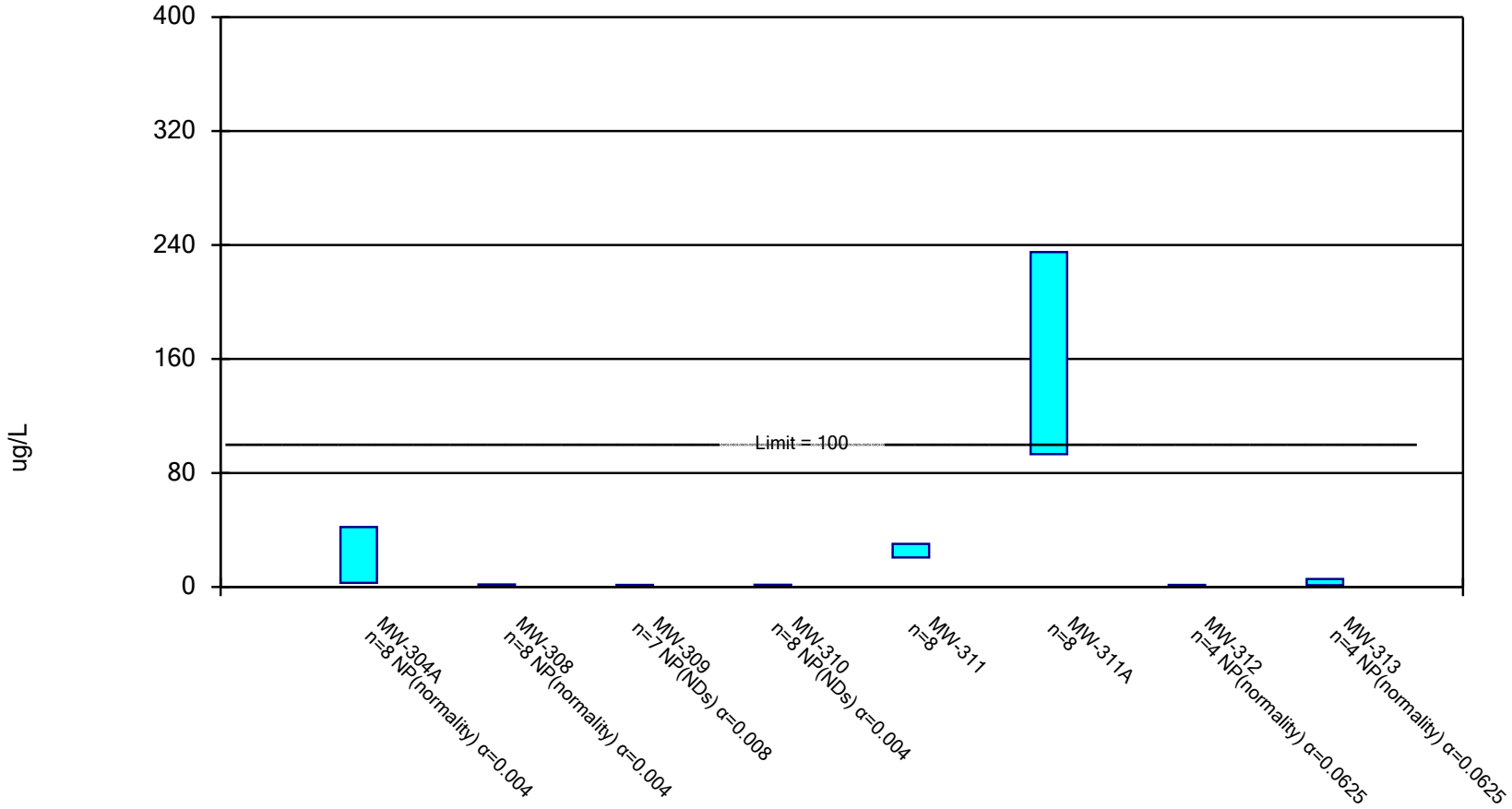
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-304A	MW-308	MW-309	MW-310	MW-311	MW-311A	MW-312	MW-313
4/5/2021	2.5 (J)							
6/17/2021		<2.5 (U)	<2.5 (U)					
10/18/2021	<2.5 (U)							
10/19/2021		<2.5 (U)	<2.5 (U)	3 (J)				
2/21/2022				2.8 (J)	34	19		
4/18/2022	<2.5 (U)							
4/19/2022		<2.5 (U)	<2.5 (U)	2.7 (J)	45	21 (J)		
8/22/2022					45	19		
11/2/2022	<2.5 (U)	3 (J)	<2.5 (U)					
11/3/2022				3.1 (J)	53	20		
5/2/2023	<2.5 (U)							
5/3/2023		<2.5 (U)	2.6 (J)		5.5 (J)	9.2 (J)	<2.5 (U)	4 (J)
5/4/2023				2.9 (J)				
10/24/2023		<2.5 (U)	<2.5 (U)		69	6.5 (J)	<2.5 (U)	
10/25/2023	<2.5 (U)							
10/26/2023				3.9 (J)				<2.5 (U)
4/30/2024	<2.5							
5/1/2024		<2.5	<2.5	3.4 (J)			<2.5	<2.5
5/2/2024					6.7 (J)	15		
10/28/2024		2.5 (J)		3.6 (J)				
10/29/2024	<2.5							
10/30/2024					25	15		<2.5
10/31/2024							<2.5	
Mean	2.5	2.563	2.514	3.175	35.4	15.59	2.5	2.875
Std. Dev.	0	0.1768	0.0378	0.42	22.2	5.293	0	0.75
Upper Lim.	2.5	3	2.6	3.62	58.93	21.2	2.5	4
Lower Lim.	2.5	2.5	2.5	2.73	11.87	9.977	2.5	2.5

ND substitution: RL or RL/2 if <15% NDs.

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/17/2024 9:33 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Confidence Interval

Constituent: Molybdenum (ug/L) Analysis Run 12/17/2024 9:34 AM

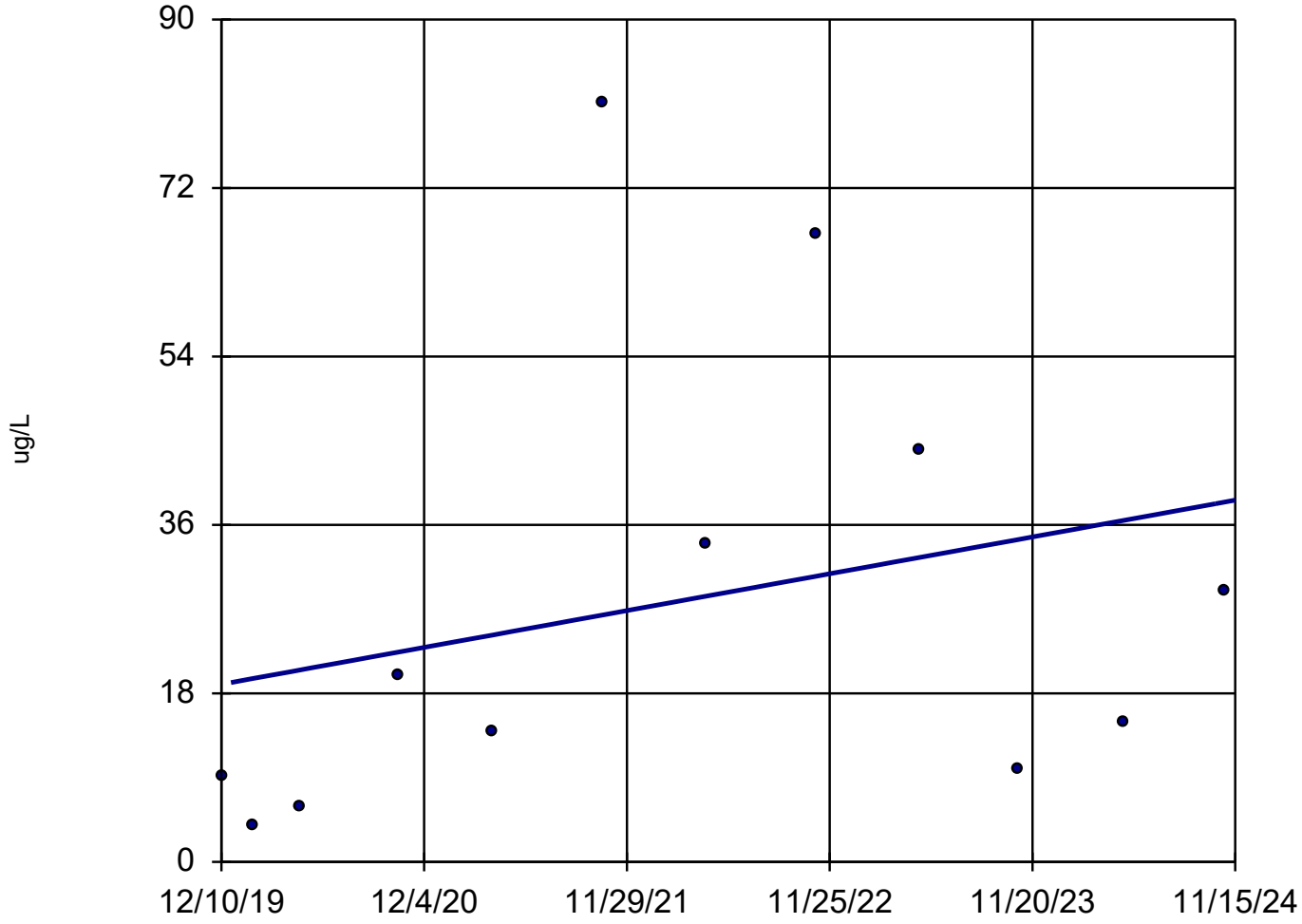
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-304A	MW-308	MW-309	MW-310	MW-311	MW-311A	MW-312	MW-313
4/5/2021	17							
6/17/2021		<1.3 (U)	<1.3 (U)					
10/18/2021	6							
10/19/2021		<1.3 (U)	<1.3 (U)	<1.3 (U)				
2/21/2022				<1.2 (U)	31	210		
4/18/2022	3.2							
4/19/2022		<1.2 (U)	<1.2 (U)	1.5 (J)	25	140		
8/22/2022					29	180		
11/2/2022	3.8	1.3 (J)	1.4 (J)					
11/3/2022				<1.2 (U)	26	140		
5/2/2023	3.4							
5/3/2023		1.7 (J)	<0.91 (U)		18	210	1.4 (J)	5.6
5/4/2023				<0.91 (U)				
10/24/2023		1.6 (J)	<0.91 (U)		30	23	1.3 (J)	
10/25/2023	42							
10/26/2023				<0.91 (U)				1.2 (J)
4/30/2024	3.5							
5/1/2024		<1.3	<1.3	<1.3			<1.3	<1.3
5/2/2024					21	240		
10/28/2024		<1.3		<1.3				
10/29/2024	2.9							
10/30/2024					24	170		<1.3
10/31/2024							<1.3	
Mean	10.23	1.375	1.189	1.203	25.5	164.1	1.325	2.35
Std. Dev.	13.68	0.1753	0.1989	0.2029	4.504	66.9	0.05	2.167
Upper Lim.	42	1.7	1.4	1.5	30.27	235	1.4	5.6
Lower Lim.	2.9	1.2	0.91	0.91	20.73	93.21	1.3	1.2

ND substitution: RL or RL/2 if <15% NDs.

Arsenic

MW-303



n = 12

Slope = 3.987
units/year.

alpha = 0.02
t = 0.8944
critical = 2.359

No significant trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.8444, critical
= 0.805.

Linear Regression Analysis Run 12/17/2024 10:57 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Linear Regression

Constituent: Arsenic (ug/L) Analysis Run 12/17/2024 10:57 AM

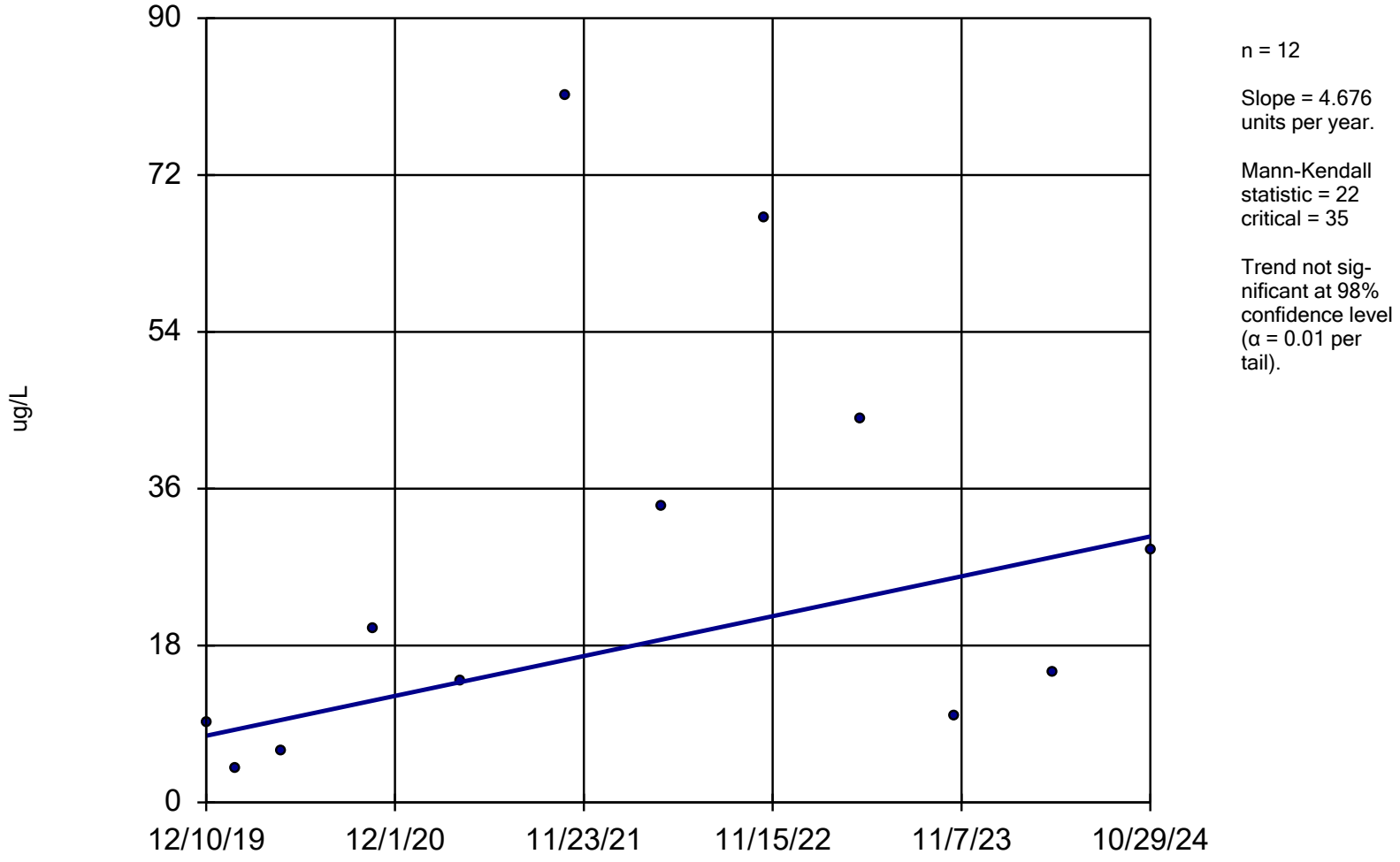
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-303
12/10/2019	9.2
2/4/2020	4
4/29/2020	5.8
10/22/2020	20
4/5/2021	14
10/18/2021	81
4/18/2022	34
11/1/2022	67
5/2/2023	44
10/25/2023	9.9
4/30/2024	15
10/29/2024	29

09/02/2025 - Classification: Internal - ECRM13574470

Arsenic

MW-303



Sen's Slope and 95% Confidence Band Analysis Run 12/17/2024 10:58 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Sen's Slope Estimator

Constituent: Arsenic (ug/L) Analysis Run 12/17/2024 10:59 AM

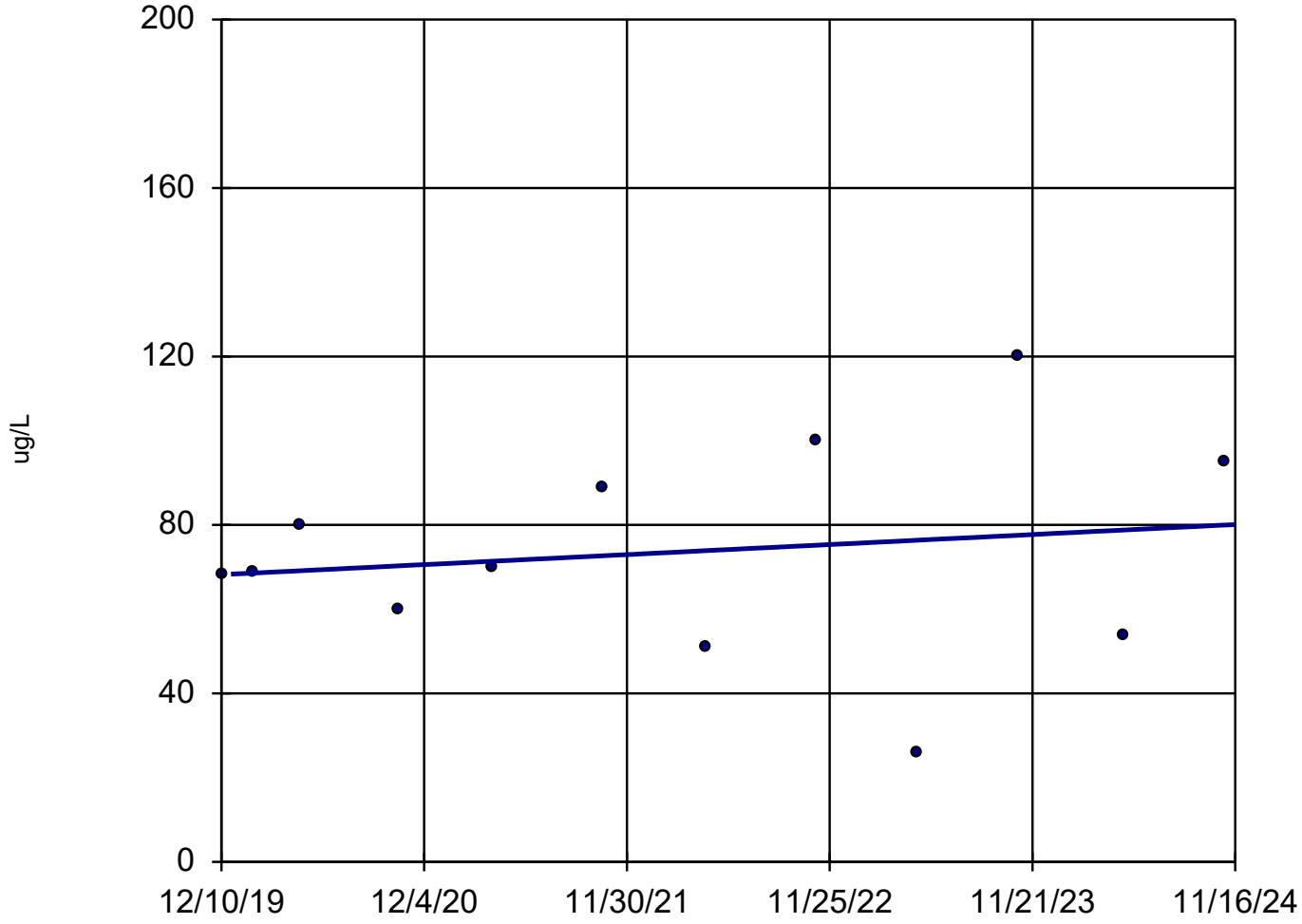
M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-303
12/10/2019	9.2
2/4/2020	4
4/29/2020	5.8
10/22/2020	20
4/5/2021	14
10/18/2021	81
4/18/2022	34
11/1/2022	67
5/2/2023	44
10/25/2023	9.9
4/30/2024	15
10/29/2024	29

09/02/2025 - Classification: Internal - ECRM13574470

Lithium

MW-306



n = 12

Slope = 2.411
units/year.

alpha = 0.02
t = 0.5205
critical = 2.359

No significant trend.

Normality test on residuals:
Shapiro Wilk @alpha
= 0.01, calculated
= 0.9794, critical
= 0.805.

Linear Regression Analysis Run 12/17/2024 11:09 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Linear Regression

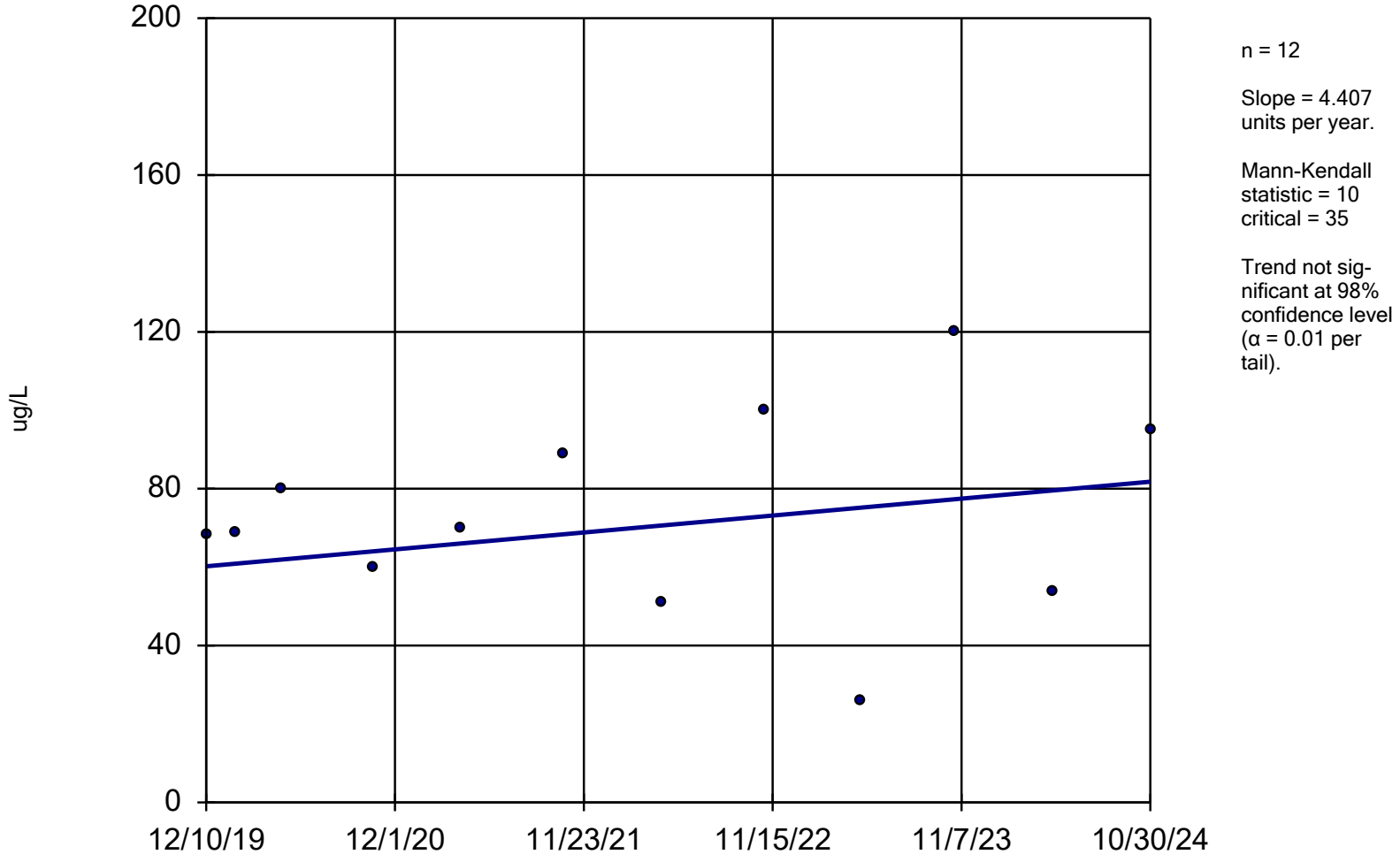
Constituent: Lithium (ug/L) Analysis Run 12/17/2024 11:10 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-306
12/10/2019	68
2/4/2020	69
4/29/2020	80
10/22/2020	60
4/5/2021	70
10/18/2021	89
4/19/2022	51
11/2/2022	100
5/2/2023	26
10/25/2023	120
4/30/2024	54
10/30/2024	95

Lithium

MW-306



Sen's Slope and 95% Confidence Band Analysis Run 12/17/2024 11:10 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

Sen's Slope Estimator

Constituent: Lithium (ug/L) Analysis Run 12/17/2024 11:11 AM

M. L. Kapp Generating Station Client: SCS Engineers Data: KAP - Chempoint- export-Dec2020

	MW-306
12/10/2019	68
2/4/2020	69
4/29/2020	80
10/22/2020	60
4/5/2021	70
10/18/2021	89
4/19/2022	51
11/2/2022	100
5/2/2023	26
10/25/2023	120
4/30/2024	54
10/30/2024	95