

West Des Moines, IA

PROJECT: Des Moines Co, FY26 Env Comp, IA 27224414.26 DATE: 2/11/2026

SUBJECT: Des Moines County Regional Sanitary Landfill - 29-SDP-01-76P - 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report TRANSMITTAL ID: 00002

PURPOSE: For your approval VIA: Info Exchange

FROM

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TO

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REMARKS: Alexis -

Please find for download the Des Moines County Regional Sanitary Landfill 2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report . Please let us know if you have any questions or comments.

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Transmittal

DATE: 2/11/2026
TRANSMITTAL ID: 00002

DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NOTES
1	2/11/2026	Des Moines County Regional Sanitary Landfill - 29-SDP-01-76P - 2025 AWQR. LCSPER. MMR 02.11.2026.pdf	

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February 11, 2026
File No. 27224414.26

Ms. Alexis Slade
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue
Des Moines, Iowa 50321

Subject: 2025 Annual Water Quality Report, 2025 Leachate Control System Performance Evaluation Report, and 2025 Landfill Gas Annual Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Dear Alexis:

SCS Engineers, on behalf of the Des Moines County (DMC) Regional Solid Waste Commission (Commission), has completed the required groundwater monitoring and statistical evaluation for the DMC Regional Sanitary Landfill (Landfill) for the year 2025. Services were performed in general accordance with applicable sections of Iowa Administrative Code (IAC) 567-113.10 and the current requirements for implementation of the Hydrologic Monitoring System Plan for the Landfill. Please find enclosed a copy of the 2025 Annual Water Quality Report.

Additionally, an evaluation of the leachate control system and gas monitoring results for the Landfill are included in accordance with IAC 567-113.7(5)"b"(14) and 113.9(2)"d," respectively. The 2025 Leachate Control System Performance Evaluation Report and the 2025 Landfill Gas Annual Report for the Landfill are included as appendices to the Annual Water Quality Report.

Please contact us if you have any questions or need additional information regarding the attached reports.

Sincerely,



Semir Omerovic
Associate Professional
SCS Engineers



Sean A. Marczewski
Senior Project Professional
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SO/SAM

Copies: Mr. Chris Ball, Des Moines County Solid Waste Commission
Mr. Eric Houtz, Des Moines County Regional Sanitary Landfill



2025 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report

Des Moines County Regional Sanitary Landfill
Solid Waste Permit No. 29-SDP-01-76P

Prepared for:

Des Moines County Regional Solid Waste Commission

SCS ENGINEERS

27224414.26 | February 11, 2026

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CERTIFICATION

Prepared by: 

Date: February 11, 2026

Typed: Semir Omerovic

Reviewed by: 

Date: February 11, 2026

Typed: Sean Marczewski

Certification page (PE or ground water scientist signature) **113.10(1)"d"**

For the purposes of this rule, a "qualified groundwater scientist" means a scientist or an engineer who has received a baccalaureate or postgraduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.

EXECUTIVE SUMMARY

Period of Report Coverage

The period of report coverage is from January – December 2025 and includes the May and November 2025 semi-annual sampling events.

Report Priority

The following summarizes report priorities associated with groundwater compliance at the Des Moines County Regional Sanitary Landfill (Landfill):

- Department review urgency: None.
- Department review impact on rules schedule: None.
- Actions or activities on hold pending Department review or comment: None.
- Actions and/or permit amendments needed: None.

Site Status and Applicable Rules

- Landfill Status: Active
- Types of waste accepted: MSW, C&D, and Special Waste
- Applicable IAC rules: 2009 567-113.10

Comments

The request by Evora Consulting to amend the corrective action groundwater monitoring plan (CAMP) submitted in the 2022 Spring Sampling Notification to install five new monitoring wells and utilize one current bracketing monitoring well as attenuation zone point of compliance (AZPOC) monitoring wells was approved by the DNR on June 8, 2023 (Doc #106948). The installation of new AZPOC wells began in October 2024 and was completed in January 2025. Two sampling events for the five new monitoring wells were completed in the reporting period.

There were seven newly identified monitoring well/constituent pairs with indicated statistically significant increases (SSI) above background that are summarized in **Table 6**. The monitoring wells are in the assessment or corrective action monitoring programs and do not require retesting; therefore, the SSIs were not confirmed.

Statistically significant levels (SSL) above the groundwater protection standards (GWPS) remain for alpha-BHC in monitoring well MW-39R, arsenic in monitoring wells MW-43 and MW-7-90R, and cobalt in monitoring wells MW-37, MW-4-90, MW-4-93, MW-7-93, and monitoring point PZ-10. SSLs are summarized in **Table 8**. The current SSL wells are now considered source wells, and the SSLs have been transferred to the associated AZPOC wells as submitted in the 2022 SSN (Doc #103436) and approved by the DNR (Doc #106948) for compliance and tracking of remedy progress.

ACRONYMS/ABBREVIATIONS

ACM = Assessment of Corrective Measures
CAMP = Corrective Action Groundwater Monitoring Program
CCV = Continuing Calibration Verification
C&D = Construction and Demolition
CL = Control Limit - Mean plus Two Standard Deviations
COC = Chain of Custody
DNR = Iowa Department of Natural Resources
DO = Dissolved Oxygen
DQR = Double Quantification Rule
GWPS = Groundwater Protection Standard
LEL = Lower Explosive Limit
LCL = Lower Confidence Limit
LCS = Laboratory Control Sample
LN = Lognormal
MCL = EPA Maximum Contaminant Level
MSW = Municipal Solid Waste
N = Normal
NC = No Change
NM = Not Measured
NP = Non-Parametric
ORP = Oxidation-Reduction Potential
P = Parametric
PL = Prediction Limit
RL = Reporting Limit
SWS = DNR Statewide Standard for a protected groundwater source
SSI = Statistically Significant Increase above background
SSL = Statistically Significant Level above groundwater protection standard
SSS = Site-Specific Standard (Site-Specific GWPS)
TSS = Total Suspended Solids
UCL = Upper Confidence Limit
VOC = Volatile Organic Compound

1.0 SITE BACKGROUND

1.1 SITE LOCATION

The portion of the property encompassing the Landfill is depicted on **Figure 1**, Approved Monitoring Network. The Landfill property is generally described as a portion of the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ and a portion of the SW $\frac{1}{4}$ of Section 15; a portion of the E $\frac{1}{2}$ of the SE $\frac{1}{4}$ and a portion of the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 21; the N $\frac{1}{2}$ of the SW $\frac{1}{4}$, the W $\frac{1}{2}$ of the NW $\frac{1}{4}$, and a portion of the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 22, all in Township 70 North, Range 3 West, Des Moines County, Iowa.

1.2 FACILITY

The Landfill consists of one contiguous unit and has been a permitted facility since 1976. The Landfill has actively been receiving waste since that time.

According to historical records, a permit to construct and operate a sanitary landfill was submitted to the Des Moines County Courthouse on March 14, 1975. The permit application indicated the proposed site was not zoned. According to Landfill staff, the Landfill property was purchased from a farmer. Available historical maps indicated the area was in its natural condition at the time of purchase.

1.3 GEOLOGY AND HYDROGEOLOGY OF THE SITE

The hydrogeologic conditions at the Landfill have been assessed extensively with borings and well installations beginning in 1981. Previous reports summarizing the hydrogeology of the Landfill include “Hydrogeological Investigation Report”, March 26, 1991, prepared by Geotechnics, Inc. (1991 HIR), “Supplemental Report, Hydrogeologic Investigation, Des Moines County Landfill,” January 31, 1992, Geotechnics, Inc. (1992 HIR), “Hydrogeological Assessment Report for the Des Moines County Regional Sanitary Landfill”, dated September 28, 1998, Barker, Lemar & Associates (1998 HAR), “Review of Hydrologic Monitoring System,” September 2004, Barker Lemar, and the hydrogeologic conditions presented in the Groundwater Quality Assessment Plan, Barker Lemar, July 2007 (2007 GWQAP).

The following is an excerpt from the 2007 GWQAP, which references the 1998 HAR. The monitoring wells referenced in the 2007 GWQAP excerpt are shown in Figure 1.

Figure 5 [Attachment B-1 of the 2007 GWQAP] indicates four general geologic layers beneath the site. These layers generally consist of glacial tills in various stages of oxidation underlain by bedrock. The glacial till layers consist of a brown silty lean clay (oxidized glacial till), underlain by a gray silty lean clay with trace of sand and gravel, underlain by sand seams that appear to overlie bedrock. Figure 5 [Attachment B-1 of the 2007 GWQAP] also indicates that the top of the bedrock was not present in the area of MW1-89 (southeast portion of the proposed horizontal expansion area) at an elevation nearly 60 feet lower than at MW6-97 (in the east central portion of the proposed horizontal expansion area). The stratigraphy depicted in Figure 4 [Attachment B-1 of the 2007 GWQAP] is similar to Figure 5 [Attachment B-1 of the 2007 GWQAP] with a noted absence of the sand seams encountered immediately above the bedrock. Figures 6 and 7 [Attachment B-1 of the 2007 GWQAP] indicate a similar stratigraphy [as] indicated in Figure 5 [Attachment B-1 of the 2007 GWQAP], with the exception that bedrock (auger refusal) was encountered at an elevation of

approximately 613 feet above MSL in MW4-98, which is the highest elevation for bedrock encountered in this field work.

The following is an excerpt from the 2007 GWQAP, which references the 1992 HIR.

Based on the present information and the present conditions of the landfill, it is clear that groundwater moves toward the natural ravines and creeks along the east side of the landfill and toward the natural ravine and excavated area of Area B [Attachment B-2 of the 2007 GWQAP] [Note: Area B corresponds to the vicinity of Cells 1, 2, and 4] with ultimate movement along the creek area to the east of Area B. There does not appear to be any influence from any underground aquifers such as sand layers beneath the landfill. The sand layers encountered in Boring 1-89 ... [are likely] sufficiently isolated [to account for the apparent lack of] ...significant influence on the groundwater contours. The existing creek areas are the dominant control for groundwater movement. The deep seated movements from beneath the landfill flow toward these creek areas with flow lines moving upward toward the creeks in the vicinity of the creek areas.

The piezometric levels in the deep piezometers have remained very stable and still indicate the possible influence of a rock aquifer in the southwest portion of the landfill though the surface contours do not slope in this direction.

Previous studies also noted that the sand layer over the bedrock and the incidence of overlying sand lenses occurred mostly in the eastern portion of the Landfill property, which appears to follow the general downgradient drainage pattern over the Landfill property as indicated by ravine topography and the occurrence of an intermittent stream along the east side of the property.

The original Landfill property topography indicates a primary ravine aligned from the southwest corner of the fill area downgradient toward the northeast bisecting the fill area. Numerous tributary ravines cover most of the permitted fill area. It can be seen on historical groundwater contour maps that the groundwater flow gradient generally follows the ravine topography. The groundwater point of convergence in the vicinity of monitoring well MW7-93 is located at the downgradient end of the primary ravine and represents a major point of groundwater convergence. Another groundwater point of convergence is located in the vicinity of monitoring well MW-43, at the downgradient end of a smaller ravine. Southwest of the fill area, a groundwater divide appears from which groundwater flows toward the northeast and the southeast.

2.0 FIGURES DISCUSSION

The following figures are attached.

2.1 FIGURE 1 – APPROVED MONITORING NETWORK

The Landfill property, hydrologic monitoring system plan (HMSP) monitoring network, and impact delineation monitoring points are depicted on **Figure 1**. **Figure 1** indicates the respective monitoring programs of the HMSP monitoring points as of the beginning of this reporting period.

2.2 FIGURE 2 – GROUNDWATER CONTOURS

A groundwater contour map based on water levels measured during the May 2025 groundwater sampling event is included in **Figure 2**. **Figure 2** indicates a generally northeasterly flow over a majority of the Landfill, a generally easterly flow in the eastern portion of the closed city/county area,

and a generally southeasterly flow in the southeastern portion of the Landfill property. Therefore, monitoring points to the south and west of the municipal solid waste landfill (MSWLF) unit are generally upgradient of the MSWLF unit.

3.0 STANDARDS HISTORY GRAPHS

Standards history graphs are included in **Appendix G**. It should be noted that monitoring points GW-Lagoon-C1W and PZ-11 are analyzed using intrawell prediction limit analysis; however, data obtained prior to 2019 or prior to the implementation of low-flow sampling, respectively, was removed from the dataset due to potentially elevated total suspended solids (TSS) concentrations likely impacting the inorganic concentrations. Standards history graphs for the following parameters are included:

Interwell – background monitoring points MW-4-89 and MW-41:

- Arsenic
- Barium
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Nickel
- Silver
- Vanadium
- Zinc

Intrawell – monitoring point PZ-11:

- Arsenic
- Barium
- Cobalt
- Copper
- Lead
- Nickel
- Selenium
- Vanadium
- Zinc

Intrawell – monitoring point GW-Lagoon-Cell 1W:

- Arsenic
- Barium
- Chromium
- Cobalt
- Copper
- Lead
- Nickel
- Vanadium

The prediction limits were below the SWS in all instances except for cobalt and lead in PZ-11 and cobalt in GW-Lagoon-Cell 1W. It should be noted that the background was updated prior to the 2nd 2021 semi-annual statistical evaluation. Data obtained prior to the implementation of low-flow sampling during the 2nd 2015 semi-annual sampling event was removed from the background dataset due to the effect that elevated TSS concentrations could have on inorganic concentrations. Previous background prediction limit values were removed as site-specific GWPSs and the historical data was removed from the standard history graphs.

4.0 QA/QC SUMMARY

The quality assurance/quality control (QA/QC) program for the Landfill follows similar protocols as included in the HMSP. Data validation procedures were performed on analytical results for laboratory quality control samples and a quality assurance assessment of the data was conducted as the data was generated. The QA review procedure provided documentation of the accuracy and precision of the analytical data and confirmed that the analyses were sufficiently sensitive to detect constituents at levels below regulatory standards when technically feasible with the laboratory method utilized. SCS then conducted QA/QC data validation of the produced data, which included review of sample handling, analytical sensitivity, and blanks, accuracy, and precision. A summary of the laboratory QA/QC and data validation can be found in **Appendices B-1**, Laboratory Data, and **B-2**, Data Validation, respectively. The QA/QC review indicated that the data was acceptable.

5.0 DATA EVALUATION AND SUMMARY

Assessment/corrective action monitoring statistical evaluation in accordance with the requirements of IAC 567-113.10(6) were conducted for the groundwater analytical data collected during the 2025 reporting period sampling events. The statistical evaluation methodology for samples collected during this reporting period are located in **Appendix D**, Statistical Method and Output, of this report.

The HMSP monitoring network at the Landfill consists of 17 monitoring points, with background wells MW-4-89, located southwest of the Landfill, and MW-41, located northeast of the Landfill. Compliance monitoring points are located on the downgradient sides of the Landfill.

5.1 DATA EVALUATION

GWPS exceedances at SSLs have occurred in monitoring wells south, southwest, west, and east of the Landfill. Site-wide maximum metals concentrations were measured in monitoring points MW-28, MW-37, MW-41, MW-45R, MW-49, MW4-93, MW7-90R, MW7-93 and PZ-10.

Site-wide maximum volatile organic compound (VOC) concentrations were measured in multiple monitoring wells to the east, west, and southwest of the Landfill. Monitoring well MW-39R had the highest number of site-wide maximum VOC concentrations during the 2025 reporting period.

Arsenic is generally defined near SSL monitoring well MW-7-90R, located in the southern portion of the Landfill property. Arsenic concentrations in monitoring well MW-7-90R are bracketed to the north and east by the Landfill and to the west and south by monitoring wells MW-39R, MW-38, and MW-6-90. It should be noted that monitoring points to the south and west of the MSWLF unit are generally upgradient of the Landfill. Monitoring well MW-43 replaced impacted monitoring well MW-9-90 in the HMSP in 2021 (Doc #99998). Since sampling in MW-43 began in 2021, the concentrations measured have been below the GWPS. The upper confidence interval fell below the GWPS during the 1st 2024 semi-annual statistical evaluation.

Cobalt is generally defined around SSL monitoring well MW-7-93. Cobalt was newly detected at an SSL in monitoring wells MW-4-90, MW-4-93, MW-37, and PZ-10 during the 2022 reporting period following an update to the site specific GWPS for cobalt. The request by Evora Consulting to amend the corrective action monitoring plan (CAMP) submitted in the 2022 Spring Sampling Notification to install four new monitoring wells and utilize one current bracketing monitoring well as attenuation zone point of compliance (AZPOC) wells was approved by the DNR on June 8, 2023 (Doc #106948). Installation of the AZPOC wells began in October 2024 and was completed in January 2025.

Alpha-BHC was first measured as an SSL during the 2nd 2021 semi-annual statistical evaluation. Alpha-BHC concentrations in monitoring well MW-39R are bracketed to the north by the Landfill, to the east by monitoring well MW-7-90R, to the west by monitoring well MW-4-90, and to the south by monitoring well MW-5-90. The alpha-BHC concentrations measured in monitoring well MW-39R have been below the prediction limit in the six most recent samples, indicating a potential improvement in groundwater quality near monitoring well MW-39R.

5.2 TRENDING IN ASSESSMENT/CORRECTIVE ACTION MONITORING WELLS

Statistically significant trend analysis was completed for monitoring well/constituent pairs by Mann-Kendall analysis during this reporting period. The trend analyses are included Attachments A and B, 1st and 2nd 2025 statistical outputs of **Appendix D**, respectively. The statistically significant trends were as follows:

Monitoring Point	Constituent	Trend
1st 2025 Semi-Annual		
MW-38	Selenium	Increasing
2nd 2025 Semi-Annual		
MW7-90R	Barium	Increasing
MW-38	Selenium	Increasing

5.3 CORRECTIVE ACTION GROUNDWATER MONITORING PROGRAM REMEDY DISCUSSION

An Assessment of Corrective Measures (ACM) Report was submitted on July 18, 2018 (Doc #92776) and approved in permit correspondence dated September 21, 2020 (Doc #98498). The selected remedy to address the groundwater impact at the Landfill was source control by leachate extraction coupled with monitored natural attenuation (MNA) as selected in correspondence dated May 23, 2019 (Doc #95270) and approved in the permit revision dated June 3, 2019 (Doc #95295). The selected remedy of leachate extraction is comprehensive to the Landfill, in that the natural flow of groundwater at the Landfill is convergent to the northeast as shown in the original ravines map included as Figure 2-2 in the ACM report (Doc #92776). Leachate extraction pumps are distributed throughout the unlined portions of the MSWLF unit, including one pump in the City/County area. The City/County area also includes a toe drain along the outside perimeter that collects leachate. Cell 1W on the west side of the MSWLF unit is a clay-lined C&D cell with a leachate collection system installed on the abutment and base of the cell. The groundwater underdrain beneath Cell 1W was shutoff based on a risk analysis previously approved by the DNR. Cells 1 and 2 are Subtitle D equivalent cells lined with clay and include a leachate collection system. The groundwater underdrain system for Cell 1 is connected to the leachate collection system of Cell 2. The

groundwater underdrain for Cell 2 was shutoff as part of the Cell 5 construction as the Cell 5 groundwater underdrain was designed and approved by the DNR to intercept groundwater from Cell 2. Cells 3 through 5 are Subtitle D, FML-lined cells with groundwater underdrains. The underdrains below Cells 3 and 4 are treated with the leachate. In addition, toe drains in the unlined area and upgradient from Cells 3 and 4 intercept leachate.

As described in the 2022 SSN (Doc #103436), the current remedy in place is applicable for the five ongoing SSLs for cobalt in monitoring wells MW-37, MW-4-90, MW-4-93, MW-7-and PZ-10. The request to amend the CAMP to include the proposed AZPOC wells as submitted in the 2022 SSN was approved by the DNR on June 8, 2023 (Doc #106948). AZPOC well installation began in October 2024 and was completed in January 2025.

6.0 RECOMMENDATIONS

6.1 SITE IMPACT ON GROUNDWATER

- Groundwater impact for arsenic is present around corrective action monitoring well MW-7-90R. Monitoring well MW-49 was installed as an AZPOC monitoring well northeast of monitoring well MW-7-90R.
- Groundwater impact for cobalt is present around corrective action monitoring wells MW-37, MW-4-90, MW-4-93, MW-7-93, and PZ-10. Monitoring wells MW-45R, MW-46R, MW-47, and MW-48 were installed as AZPOC monitoring wells for compliance monitoring for these locations.
- Groundwater impact for alpha-BHC is present around corrective action monitoring well MW-39R. Current bracketing monitoring well MW-5-90, located south of MW-39R, is utilized as an AZPOC monitoring well.

6.2 PROPOSED MONITORING

Anticipated groundwater sampling for the 2026 reporting period is shown in **Table 2**.

6.3 PROPOSED MONITORING WELL CHANGES

No changes to the monitoring wells are recommended at this time.

Tables

Table 1
Monitoring Program Summary
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Monitoring Well	Formation ⁽¹⁾	Current Monitoring Program	Change for Next Sampling Event	SSIs	SSLs	Total Number of Samples in Each Monitoring Program		
						Detection Inorganic/Organic	Assessment Inorganic/Organic	Corrective Action Inorganic/Organic
MW-4-89	sandy clay	Background	No Change	Not Applicable	Not Applicable			
MW-1-99	sandy clayey silt	Assessment	No Change	Cobalt	None	21/38	21/39	
MW-2-93	silty sandy clay	Assessment	No Change	Arsenic, Nickel, 1,4-Dichlorobenzene, Chlorobenzene	None		14/31	
MW-43 ⁽²⁾	silty clay, sandy clay	Corrective Action	No Change	Arsenic, Barium, Cobalt	Arsenic ⁽²⁾			10/10
MW-38	sandy clay, silty clay, sandy silty clay, sand	Assessment	No Change	Barium	None		15/30	
MW-40R	sandy clay	Detection	No Change	None	Not Applicable	20/21		
MW-41	silty clay, sand	Background, Supplemental	No Change	Not Applicable	Not Applicable	3/10		
PZ-11	sandy silty clay, sand	Detection, Supplemental	No Change	None	Not Applicable	9/22		
GW-Lagoon-00	NA	Detection	No Change	None	Not Applicable	7/7		
GW-Lagoon-Cell 1W	NA	Detection	No Change	None	Not Applicable	11/17		
GU-2	NA	Detection	No Change	None	Not Applicable	0/0		
MW-5-90	silty clay	Corrective Action (AZPOC)	No Change	None	Alpha-BHC			1/1
MW-45R	lean clay with sand, trace gravel	Corrective Action (AZPOC)	No Change	None	Cobalt			2/2
MW-46R	glacial till	Corrective Action (AZPOC)	No Change	None	Cobalt			2/2
MW-47	sandy lean to fat clay, trace gravel	Corrective Action (AZPOC)	No Change	None	Cobalt			2/2
MW-48	sandy lean clay, trace gravel	Corrective Action (AZPOC)	No Change	None	Cobalt			2/2
MW-49	sandy lean clay, trace gravel, trace silt	Corrective Action (AZPOC)	No Change	None	Arsenic			2/2
Source Wells								
MW-4-90	silty clay	Corrective Action	No Change	Arsenic, Barium, Cobalt, Chloroethane	Transferred to AZPOC Well MW-47			15/30
MW-4-93	silty sandy clay	Corrective Action	No Change	Arsenic, Cobalt, Nickel, Vanadium, 1,1-Dichloroethane, 1,4-Dichlorobenzene, Chlorobenzene	Transferred to AZPOC Well MW-46R			21/40
MW-7-90R	silty clay	Corrective Action	No Change	Arsenic, Barium	Transferred to AZPOC Well MW-49			15/29
MW-7-93	silty sand	Corrective Action	No Change	Cobalt, Nickel	Transferred to AZPOC Well MW-45R			21/39
MW-37	silty clay	Corrective Action	No Change	Arsenic, Cobalt, Lead, Nickel, 1,1-Dichloroethane, 1,1-Dichloroethene, Benzene, Chlorobenzene, Chloroethane, cis-1,2-Dichloroethene	Transferred to AZPOC Well MW-45R		21/36	
MW-39R	silty clay, sandy clay	Corrective Action	No Change	Barium, Cobalt, Nickel, 1,1-Dichloroethane, Benzene, cis-1,2-Dichloroethene, Dichlorodifluoromethane, Tetrachloroethene, Trichloroethene, Vinyl Chloride	Transferred to AZPOC Well MW-5-90			21/21
PZ-10	NA	Corrective Action	No Change	Arsenic, Barium, Cobalt, Nickel, 1,4-Dichlorobenzene, Benzene, Chlorobenzene	Transferred to AZPOC Well MW-48			18/30
Other Monitoring Points								
MW3-98	sandy silty clay, clay, bedrock	Supplemental						
MW6-90	sandy silty clay	CAMP						
MW6-93	NA	CAMP						
MW8-90R	sandy clayey silt, silty sand, silty sandy clay	Supplemental						
MW-44	silty clay	CAMP						

Notes:

⁽¹⁾ Obtained from screened interval in boring logs and/or cross-sections.

⁽²⁾ Monitoring well MW-43 replaced corrective action monitoring well MW-9-90 in the HMSP as approved in permit correspondence dated March 18, 2021 (Doc #99998).

AZPOC - Attenuation Zone Point of Compliance.

CAMP - Corrective Action Monitoring Plan.

IG - Inward Gradient.

NA - Not Available.

SSI - Statistically Significant Increase above background.

SSL - Statistically Significant Level above a groundwater protection standard.

Table 2
Monitoring Program Implementation Schedule
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Monitoring Well	Recent Sampling Dates and Constituents		Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
	May 2025	November 2025	1 st 2026 Semi-Annual	2 nd 2026 Semi-Annual	Previously Collected	Next Event
MW-4-89	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	NA	NA
MW-1-99	Metals List A, Appendix I VOCs, TSS	7/2011, 8/2012, 8/2017, and 8/2022	2027			
MW-2-93*	-	Metals List C, Appendix I VOCs, TSS	-	Metals List C, Appendix I VOCs, TSS	8/2009, 10/2010, 10/2011, 3/2017, 3/2022, and 11/2023	2028
MW-43	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	8/2009, 10/2010, 10/2011, 3/2017, and 3/2022	2027
MW-38*	-	Metals List C, Appendix I VOCs, TSS	-	Metals List C, Appendix I VOCs, TSS	8/2009, 10/2010, 10/2011, 3/2017, and 3/2022	2028
MW-40R	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	Metals List A, Appendix I VOCs, Alpha-BHC, TSS	NA	NA
MW-41	No Sample (IG)	Metals List A, Appendix I VOCs, TSS	Metals List A, Appendix I VOCs, TSS	Metals List A, Appendix I VOCs, TSS	NA	NA
PZ-11	No Sample (IG)	Metals List A, Appendix I VOCs, TSS	Metals List A, Appendix I VOCs, TSS	Metals List A, Appendix I VOCs, TSS	NA	NA
GW-Lagoon-00	No Sample (Not Located)	No Sample (Dry)	Metals List A, Appendix I VOCs, TSS	Metals List A, Appendix I VOCs, TSS	NA	NA
GW-Lagoon-Cell 1W	Metals List A, Appendix I VOCs, TSS	No Sample (Dry)	Metals List A, Appendix I VOCs, TSS	Metals List A, Appendix I VOCs, TSS	NA	NA
GU-2	Not Sampled	No Sample (Dry)	Appendix I, TSS	Appendix I, TSS	NA	NA
MW-5-90	Appendix I, Alpha-BHC, TSS	No Sample (Dry)	Appendix I, Alpha-BHC, TSS	Appendix I, Alpha-BHC, TSS	NA	NA
MW-45R	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	NA	NA
MW-46R	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	NA	NA
MW-47	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	NA	NA
MW-48	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	NA	NA
MW-49	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	NA	NA
Source Wells						
MW-4-90*	-	Appendix I, Alpha-BHC, Endosulfan Sulfate, TSS	-	Appendix I, Endosulfan Sulfate, Alpha-BHC, TSS	4/2010, 10/2011, 9/2016, and 4/2021	NA
MW-4-93	Metals List A, Appendix I VOCs, 2,4-D [2C], 3/4-Methylphenol, Endrin Aldehyde, 4,4'-DDT, Methoxychlor, Phenol, Sulfide, TSS	Metals List A, Appendix I VOCs, 2,4-D [2C], 3/4-Methylphenol, Endrin Aldehyde, 4,4'-DDT, Methoxychlor, Phenol, Sulfide, TSS	Metals List A, Appendix I VOCs, 2,4-D [2C], 3/4-Methylphenol, Endrin Aldehyde, 4,4'-DDT, Methoxychlor, Phenol, Sulfide, TSS	Metals List A, Appendix I VOCs, 2,4-D [2C], 3/4-Methylphenol, Endrin Aldehyde, 4,4'-DDT, Methoxychlor, Phenol, Sulfide, TSS	8/2009, 10/2010, 10/2011, 9/2016, and 7/2021	NA
MW-7-90R*	-	Metals List C, Appendix I VOCs, TSS	-	Metals List C, Appendix I VOCs, TSS	7/2011, 8/2012, 8/2017, 3/2022, and 11/2023	NA
MW-7-93	Metals List A, Appendix I VOCs, TSS	8/2009, 12/2010, 10/2011, 9/2016, and 7/2021	NA			
MW-37	Metals List A, Appendix I VOCs, TSS	3/2011, 4/2012, 8/2017, and 8/2022	NA			
MW-39R	Metals List A, Appendix I VOCs, 2,4,5-TP[Silvex][2C], Alpha-BHC, Dichlorodifluoromethane, TSS	Metals List A, Appendix I VOCs, 2,4,5-TP[Silvex][2C], Alpha-BHC, Dichlorodifluoromethane, TSS	Metals List A, Appendix I VOCs, 2,4,5-TP[Silvex][2C], Alpha-BHC, Dichlorodifluoromethane, TSS	Metals List A, Appendix I VOCs, 2,4,5-TP[Silvex][2C], Alpha-BHC, Dichlorodifluoromethane, TSS	5/2017, 5/2018, and 11/2023	NA
PZ-10	Metals List A, Appendix I VOCs, TSS	8/2012, 10/2013, 9/2018, 6/2024	NA			
CAMP Monitoring Points						
MW-6-90	-	Not Sampled	-	Arsenic, TSS	NA	NA
MW-6-93	-	Not Sampled	-	Arsenic, TSS	NA	NA
MW-44	-	Arsenic, TSS	-	Arsenic, TSS	NA	NA

Notes:

Metals List A: arsenic, barium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc.

Metals List B: arsenic, barium, cobalt, nickel, and zinc.

Metals List C: arsenic, barium, nickel, and zinc.

* - Monitoring well is sampled annually in accordance with the Groundwater Monitoring Optimization Report approved on September 21, 2020 (Doc #98499).

NA - Not Applicable.

TSS - Total Suspended Solids.

IG - Inward Gradient.

Table 3
Monitoring Well Maintenance and Performance Re-Evaluation Schedule
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Compliance with:	2023	2024	2025	2026
567 IAC 113.10(2)"f"(1) high and low water levels	Completed	Completed	Included ⁽²⁾	Scheduled
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths	Completed	Completed	Included ⁽¹⁾	Scheduled
567 IAC 113.10(2)"f"(3) well depths	Completed	Completed	Included ⁽²⁾	Scheduled
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry		Completed		Scheduled
Waste separation from ground water 113.6(2)"l"	Completed	Completed	Included ⁽²⁾	Scheduled

Notes:

⁽¹⁾ See Section 2.2 of this report.

⁽²⁾ See Table 4.

Comments:

None.

Table 4
Monitoring Well Maintenance and Performance Summary
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Well	Top of Casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)
					5/19/2025	11/10/2025	
MW-4-89	702.25	686.35	26.1	Groundwater Level (ft)	5.43	11.70	-0.5
				Groundwater Elevation (Ft MSL)	696.82	690.55	
				Measured Well Depth (ft)	26.5	26.6	
				Submerged screen	Y	Y	
MW-1-99	641.29	630.89	20.4	Groundwater Level (ft)	10.15	12.91	0.0
				Groundwater Elevation (Ft MSL)	631.14	628.38	
				Measured Well Depth (ft)	20.4	20.4	
				Submerged screen	Y	N	
MW-2-93	690.54	671.04	29.5	Groundwater Level (ft)	13.64	22.97	-0.9
				Groundwater Elevation (Ft MSL)	676.90	667.57	
				Measured Well Depth (ft)	30.3	30.4	
				Submerged screen	Y	N	
MW-4-90	700.15	692.35	17.8	Groundwater Level (ft)	7.29	14.32	-0.7
				Groundwater Elevation (Ft MSL)	692.86	685.83	
				Measured Well Depth (ft)	18.5	18.5	
				Submerged screen	Y	N	
MW-4-93	660.88	629.98	40.9	Groundwater Level (ft)	26.89	27.85	1.9
				Groundwater Elevation (Ft MSL)	633.99	633.03	
				Measured Well Depth (ft)	39.0	39.0	
				Submerged screen	Y	Y	
MW-7-90R	699.41	694.91	14.5	Groundwater Level (ft)	4.71	7.00	0.2
				Groundwater Elevation (Ft MSL)	694.70	692.41	
				Measured Well Depth (ft)	14.3	14.4	
				Submerged screen	N	N	
MW-7-93	618.33	608.93	19.4	Groundwater Level (ft)	3.82	7.00	-0.5
				Groundwater Elevation (Ft MSL)	614.51	611.33	
				Measured Well Depth (ft)	19.9	19.9	
				Submerged screen	Y	Y	
MW-37	627.15	614.35	32.8	Groundwater Level (ft)	11.18	11.55	0.6
				Groundwater Elevation (Ft MSL)	615.97	615.60	
				Measured Well Depth (ft)	32.2	32.9	
				Submerged screen	Y	Y	
MW-38	700.48	677.68	37.8	Groundwater Level (ft)	7.88	10.16	-1.9
				Groundwater Elevation (Ft MSL)	692.60	690.32	
				Measured Well Depth (ft)	38.6	39.7	
				Submerged screen	Y	Y	
MW-39R	700.24	684.93	25.3	Groundwater Level (ft)	3.77	8.68	-0.8
				Groundwater Elevation (Ft MSL)	696.47	691.56	
				Measured Well Depth (ft)	26.1	26.1	
				Submerged screen	Y	Y	
MW-40R	700.42	692.6	17.8	Groundwater Level (ft)	3.54	9.34	-0.2
				Groundwater Elevation (Ft MSL)	696.88	691.08	
				Measured Well Depth (ft)	18.0	18.0	
				Submerged screen	Y	N	
MW-43	606.67	599.07	17.6	Groundwater Level (ft)	5.02	5.40	-0.3
				Groundwater Elevation (Ft MSL)	601.65	601.27	
				Measured Well Depth (ft)	17.9	17.9	
				Submerged screen	Y	Y	
PZ-10	700.06	689.36	20.7	Groundwater Level (ft)	11.65	15.29	2.9
				Groundwater Elevation (Ft MSL)	688.41	684.77	
				Measured Well Depth (ft)	17.8	18.0	
				Submerged screen	N	N	
MW-41	620.72	608.02	27.7	Groundwater Level (ft)	6.62	10.71	-0.3
				Groundwater Elevation (Ft MSL)	614.10	610.01	
				Measured Well Depth (ft)	28.0	28.0	
				Submerged screen	Y	Y	
PZ-11	701.03	688.03	23.0	Groundwater Level (ft)	11.95	18.02	-0.3
				Groundwater Elevation (Ft MSL)	689.08	683.01	
				Measured Well Depth (ft)	23.1	23.3	
				Submerged screen	Y	N	

Comments:

- 1) Measured well depths were within 2.0 feet of the installed depth with the following exception:
PZ-10: PZ-10 has historically measured 1.0-3.0 feet shallower than installation depth since 2010; therefore, it does not appear that siltation is adversely impacting the ability of the monitoring well to consistently produce samples.

Groundwater Underdrain Piezometer

Well		Date of Measurements	
		5/19/2025	11/10/2025
GWP-1	Bottom of waste (feet MSL)	608.72	
	Groundwater Elevation (feet MSL)	603.69	603.19
	Separation distance (feet)	5.03	5.53

Comments:

None.

Table 5
Background and GWPS Summary
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Interwell Background/GWPS (MW-4-89 and MW-41)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	11	0	0.0005 (1/2 RL)	0.0015 (1/2 RL)	0.00059	< 0.003	DQR	0.006	MCL
Arsenic (As)	mg/L	24	4	0.000662*	0.00210	0.00103	0.0021	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	24	24	0.0134	0.1970	0.08037	0.197	PL (NP)	2	MCL
Beryllium (Be)	mg/L	11	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.004	MCL
Cadmium (Cd)	mg/L	11	5	0.000065*	0.000433*	0.00021	0.000433	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	24	3	0.0012*	0.0145	0.00301	0.0145	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	22	6	0.000106*	0.000761	0.00030	0.000761	PL (NP)	0.004646	SSS
Copper (Cu)	mg/L	24	2	0.001 (1/2 RL)	0.0025 (1/2 RL)	0.00232	0.0025	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	24	4	0.000097*	0.000415*	0.00025	0.000415	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	24	6	0.000706*	0.00423*	0.00246	0.00423	PL (NP)	0.1	SWS
Selenium (Se)	mg/L	24	0	0.00125 (1/2 RL)	0.0025 (1/2 RL)	0.00245	< 0.005	DQR	0.05	MCL
Silver (Ag)	mg/L	11	2	0.000089*	0.0005 (1/2 RL)	0.00043	0.0005	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	11	0	0.0005 (1/2 RL)	0.001 (1/2 RL)	0.00055	< 0.002	DQR	0.002	MCL
Vanadium (V)	mg/L	24	1	0.000323*	0.0025 (1/2 RL)	0.00241	0.0025	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	24	3	0.005 (1/2 RL)	0.0635	0.01158	0.0635	PL (NP)	2	SWS

Intrawell Background/GWPS (GW-Lagoon-Cell 1W)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background level	Statistical Test	GWPS	Source
Inorganics										
Arsenic (As)	mg/L	8	5	0.00078*	0.00463	0.00181	0.007849	PL (P)	0.01	MCL
Barium (Ba)	mg/L	8	8	0.1	0.1910	0.13338	0.2418	PL (P)	2	MCL
Chromium (Cr)	mg/L	8	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.00250	< 0.005	DQR	0.1	MCL
Cobalt (Co)	mg/L	6	6	0.000286*	0.002100	0.00141	0.004924	PL (P)	0.004924	SSS
Copper (Cu)	mg/L	8	2	0.00221*	0.343	0.04503	0.343	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	8	1	0.00025 (1/2 RL)	0.0887	0.01131	0.0887	PL (NP)	0.0887	SSS
Nickel (Ni)	mg/L	8	8	0.00349*	0.00954	0.00561	0.01287	PL (P)	0.1	SWS
Selenium (Se)	mg/L	8	4	0.00123*	0.00271*	0.00221	0.003798	PL (P)	0.05	MCL
Vanadium (V)	mg/L	8	2	0.000882*	0.00344*	0.00242	0.00344	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	8	1	0.01 (1/2 RL)	0.834	0.11300	0.834	PL (NP)	2	SWS

Intrawell Background/GWPS (PZ-11)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background level	Statistical Test	GWPS	Source
Inorganics										
Arsenic (As)	mg/L	8	7	0.001 (1/2 RL)	0.00503	0.00289	0.008174	PL (P)	0.01	MCL
Barium (Ba)	mg/L	8	8	0.074	0.1860	0.12074	0.2634	PL (P)	2	MCL
Chromium (Cr)	mg/L	8	1	0.0025 (1/2 RL)	0.00376*	0.00266	0.00376	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	7	7	0.000504	0.003480	0.00237	0.007221	PL (P)	0.007221	SSS
Copper (Cu)	mg/L	8	1	0.00177*	0.0025 (1/2 RL)	0.00241	0.0025	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	8	6	0.00025 (1/2 RL)	0.00126	0.00056	0.001619	PL (P)	0.015	MCL
Nickel (Ni)	mg/L	8	7	0.0025 (1/2 RL)	0.00495	0.00355	0.00624	PL (P)	0.1	SWS
Selenium (Se)	mg/L	8	0	0.00125 (1/2 RL)	0.0025 (1/2 RL)	0.00234	< 0.005	DQR	0.05	MCL
Vanadium (V)	mg/L	8	2	0.00114*	0.00363*	0.00247	0.00363	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	8	0	0.01 (1/2 RL)	0.01 (1/2 RL)	0.01000	< 0.02	DQR	2	SWS

Notes:

- Background levels based on calculated prediction limits or reporting limit, as applicable.
 - A site-specific GWPS of 0.004646 mg/L for cobalt was calculated using only samples collected using low-flow sampling methods. The updated site-specific GWPS determination was included with the 2022 spring sampling notification (SSN) submitted June 16, 2022 (Doc #103436).
- * - J flag - Concentration is below the reporting limit but above the method detection limit. The concentration is estimated.

Acronyms/Abbreviations:

RL = Reporting Limit	PL = Prediction Limit
GWPS = Groundwater Protection Standard	MCL = EPA Maximum Contaminant Level
DQR = Double Quantification Rule	NP = Non-Parametric
SSS = Site-Specific GWPS	P = Parametric
SWS = Statewide Standard	

Comments:

- Water quality results and effectiveness of the statistical data evaluation criteria:** Statistical analyses consist of prediction limits and confidence intervals/confidence bands, as appropriate, and do not use data from the background wells for development of the confidence interval.
- Changes to the previous statistical method during reporting period:** There were no changes to the statistical method during the 2025 reporting period.
- Re-sampling strategy:** Retesting is performed on a 1-of-2 retesting scheme.
- Justification for data exclusion:** Inorganic data obtained prior to the June 2018 event in GW-Lagoon-Cell 1W and prior to the implementation of low-flow sampling in all other HMSP monitoring wells (July 2015) is considered unrepresentative due to the affect that elevated TSS concentrations may have had; this data was removed from statistical consideration.

Table 6
Summary of Well/Detected Constituent Pairs With No Previous SSIs
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Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Well	Constituent	Units	Most Recent Result	Background Standard
MW-2-93	Arsenic	mg/L	0.00324	0.0021
	Nickel	mg/L	0.0309	0.00423
	1,4-Dichlorobenzene	µg/L	2.02	< 1
	Chlorobenzene	µg/L	19.2	< 1
MW-4-90	Barium	mg/L	0.224	0.197
	Chloroethane	µg/L	7.96	< 4
MW-37	Lead	mg/L	0.00097	0.000415

Notes:

- 1) Criteria for inclusion in this table is a well/constituent pair with a statistically significant increase above background (SSI) during this current reporting period and no SSI in the immediately preceding reporting period.
 - 2) A single exceedance in an assessment monitoring well is recorded above as an SSI. Retesting is not performed as these monitoring wells are not in the detection monitoring program.
 - 3) A single detection of a VOC in the most recent semi-annual sampling event, and not in the immediately preceding reporting period, is recorded above as an SSI. In detection monitoring wells a retest will occur prior to the next regularly scheduled semi-annual sampling event to confirm and/or not confirm the indicated SSI.
- *- J Flag - concentration is less than the reporting limit but greater than the method detection limit. The concentration is estimated.

Comments:

- 1) **Problems with the current detection network:** None.
- 2) **Schedule to implement remedies:** Not applicable.
- 3) **Alternative constituent or sample frequency changes:** An alternative constituent and sample frequency change was requested in the Groundwater Monitoring Optimization Report submitted on May 16, 2018 (Doc #98501) and approved in DNR correspondence dated September 21, 2020 (Doc #98499).
- 4) **Significant changes to calculated prediction limits:** None.
- 5) **Resampling strategy:** Retesting is performed on a 1-of-2 retesting scheme.

Table 7
Summary of Ongoing and Newly Identified SSIs
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Well	Constituent	Units	Most Recent Result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5th background sample
MW-1-99	Cobalt	mg/L	0.00141	0.000761	0.000084	0.004646	11/14/2023	NA	8/7/2017
MW-2-93	Arsenic	mg/L	0.00324	0.0021	0.001154	0.01	11/11/2025	NA	5/21/2018
	Nickel	mg/L	0.0309	0.00423	0	0.1	11/11/2025	NA	5/21/2018
	1,4-Dichlorobenzene	µg/L	2.02	< 1	0.5	75	11/11/2025	NA	12/11/2008
	Chlorobenzene	µg/L	19.2	< 1	0.5	100	11/11/2025	NA	12/11/2008
MW-4-90	Arsenic	mg/L	0.00497	0.0021	0.0008218	0.01	11/14/2023	NA	8/7/2017
	Barium	mg/L	0.224	0.197	0.1071	2	11/11/2025	NA	8/7/2017
	Cobalt	mg/L	0.00236	0.000761	0.003388	0.004646	11/14/2023	NA	8/7/2017
	Chloroethane	µg/L	7.96	< 4	0.7221	2800	11/11/2025	NA	10/13/2010
MW-4-93	Arsenic	mg/L	0.00128*	0.0021	0.0002767	0.01	6/11/2024	NA	8/7/2017
	Cobalt	mg/L	0.0113	0.000761	0.00852	0.004646	5/25/2023	NA	8/7/2017
	Nickel	mg/L	0.0502	0.00423	0.0386	0.1	5/25/2023	NA	8/7/2017
	Vanadium	mg/L	0.00325*	0.0025	0.00116	0.035	6/11/2024	NA	8/7/2017
	1,1-Dichloroethane	µg/L	1.44	< 1	1.1	140	4/29/2008	NA	12/11/2008
	1,4-Dichlorobenzene	µg/L	1.13	< 1	1.277	75	12/11/2008	NA	12/11/2008
	Chlorobenzene	µg/L	14.2	< 1	16.8	100	2/8/2008	NA	12/11/2008
MW-7-90R	Arsenic	mg/L	0.00269	0.0021	0.002677	0.01	11/14/2023	NA	8/7/2017
	Barium	mg/L	0.739	0.197	TS	2	11/14/2023	NA	8/7/2017
MW-7-93	Cobalt	mg/L	0.0133	0.000761	0.007187	0.004646	5/25/2023	NA	8/7/2017
	Nickel	mg/L	0.0617	0.00423	0.05881	0.1	5/25/2023	NA	8/7/2017
MW-43+**	Arsenic	mg/L	0.008005	0.0021	0.004137	0.01	6/11/2024	NA	3/1/2022
	Barium	mg/L	0.6135	0.197	0.5364	2	6/11/2024	NA	3/1/2022
	Cobalt	mg/L	0.001635	0.000761	0.001292	0.004646	6/11/2024	NA	3/1/2022
MW-37	Arsenic	mg/L	0.00887	0.0021	0.001174	0.01	5/25/2023	NA	8/7/2017
	Cobalt	mg/L	0.012	0.000761	0.004561	0.004646	5/25/2023	NA	5/21/2018
	Lead	mg/L	0.00097	0.000415	0.00025	0.015	11/11/2025	NA	8/7/2017
	Nickel	mg/L	0.0488	0.00423	0.04196	0.1	5/25/2023	NA	8/7/2017
	1,1-Dichloroethane	µg/L	34.8	< 1	39.65	140	12/29/2009	NA	10/13/2010
	1,1-Dichloroethene	µg/L	2	< 2	2.193	7	12/29/2009	NA	10/13/2010
	Benzene	µg/L	0.455*	< 0.5	0.4787	5	12/29/2009	NA	10/13/2010
	Chlorobenzene	µg/L	3.42	< 1	2.253	100	12/29/2009	NA	10/13/2010
	Chloroethane	µg/L	19.9	< 4	14.24	2800	12/29/2009	NA	10/13/2010
	cis-1,2-Dichloroethene	µg/L	2.5	< 1	2.625	70	12/29/2009	NA	10/13/2010

Table 7
Summary of Ongoing and Newly Identified SSIs
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Well	Constituent	Units	Most Recent Result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5th background sample
MW-38	Barium	mg/L	0.603	0.197	0.3592	2	11/14/2023	NA	8/7/2027
MW-39R	Barium	mg/L	0.189	0.197	0.1889	2	5/25/2023	NA	8/7/2017
	Cobalt	mg/L	0.00128	0.000761	0.004561	0.004646	5/25/2023	NA	8/7/2017
	Nickel	mg/L	0.0208	0.00423	0.04196	0.1	5/25/2023	NA	8/7/2017
	1,1-Dichloroethane	µg/L	41.7	< 1	37.82	140	1/31/2017	NA	11/28/2017
	Benzene	µg/L	0.652	< 0.5	0.386	5	1/31/2017	NA	11/28/2017
	cis-1,2-Dichloroethene	µg/L	18.2	< 1	16.58	70	1/31/2017	NA	11/28/2017
	Tetrachloroethene	µg/L	1.1	< 1	0.604	5	1/31/2017	NA	11/28/2017
	Trichloroethene	µg/L	3.42	< 1	3.453	5	1/31/2017	NA	11/28/2017
	Vinyl Chloride	µg/L	1.29	< 1	0.9338	2	8/7/2017	NA	11/28/2017
Dichlorodifluoromethane	µg/L	19.9	< 3	18.69	1000	5/24/2017	NA	9/25/2018	
MW-40R	None								
MW-41	Not Applicable								
PZ-10	Arsenic	mg/L	0.00539	0.0021	0.0005282	0.01	5/25/2023	NA	8/7/2017
	Barium	mg/L	0.293	0.197	0.2745	2	5/25/2023	NA	8/7/2017
	Cobalt	mg/L	0.0109	0.000761	0.01162	0.004646	5/25/2023	NA	8/7/2017
	Nickel	mg/L	0.0124	0.00423	0.01145	0.1	5/25/2023	NA	8/7/2017
	1,4-Dichlorobenzene	µg/L	5.89	< 1	5.694	75	8/28/2012	NA	3/15/2011
	Benzene	µg/L	1.06	0.5	1.522	5	8/28/2012	NA	3/5/2011
	Chlorobenzene	µg/L	11.4	< 1	9.827	100	8/28/2012	NA	3/15/2011
PZ-11	None								

- Notes:
- 1) Ongoing SSI is defined as an indicated SSI for a monitoring well/constituent pair in both the previous and current reporting periods.
 - * - Indicates J Flag; concentration is estimated.
 - ** - Duplicate sample monitoring well during this reporting period, the most recent result concentrations shown are an average of both samples obtained from the monitoring well.
 - † - Monitoring well MW-43 replaced monitoring well MW-9-90 in the HMSP beginning with the 2021 reporting period as approved in permit correspondence dated March 18, 2021 (Doc #99998) and historical SSIs and SSLs in MW-9-90 apply to MW-43.
 - NA - Not Applicable; Monitoring well is in assessment or corrective action monitoring and does not require a resample.
 - TS - Thiel Sen. Due to a statistically significant trend, a lower confidence interval was not calculated.

- Comments:
- 1) **Problems with the current assessment network:** None.
 - 2) **Proposed remedies:** None.
 - 3) **Alternative constituent or sample frequency changes:** An alternative constituent and sample frequency change was requested in the Groundwater Monitoring Optimization Report submitted on May 16, 2018 (Doc #98501) and approved in DNR correspondence dated September 21, 2020 (Doc #98499).
 - 4) **Plume delineation strategies:** Completed.
 - 5) **Property owner notifications:** Not applicable.

Table 8
Summary of Ongoing and Newly Identified SSLs
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Well (AZPOC Well)	Constituent	Units	Most Recent Result	Upper Confidence Limit	GWPS	Initial Exceedance	Upper Confidence Limit Below GWPS					
							1 st Year		2 nd Year		3 rd Year	
MW-37 (MW-45R)*	Cobalt	mg/L	0.001235	NM	0.004646	2022	NA	NA	NA	NA	NA	NA
MW-43†*	Arsenic	mg/L	0.00801	0.007871	0.01	2009	6/24	11/24	5/25	11/25	NA	NA
MW-4-90 (MW-47)	Cobalt	mg/L	0.000745	NM	0.004646	2022	NA	NA	NA	NA	NA	NA
MW-4-93 (MW-46R)	Cobalt	mg/L	0.00162	NM	0.004646	2022	NA	NA	NA	NA	NA	NA
MW-7-90R (MW-49)	Arsenic	mg/L	0.00169**	NM	0.01	2011	NA	NA	NA	NA	NA	NA
MW-7-93 (MW-45R)*	Cobalt	mg/L	0.00124	NM	0.004646	2009	NA	NA	NA	NA	NA	NA
MW-39R (MW-5-90)	Alpha-BHC	µg/L	< 0.0895	NM	0.028	2021	NA	NA	NA	NA	NA	NA
PZ-10 (MW-48)	Cobalt	mg/L	< 0.0005	NM	0.004646	2022	NA	NA	NA	NA	NA	NA

Notes:

- 1) The current SSL wells are now considered source wells and the SSLs have been transferred to the associated AZPOC wells as summarized in Section 5.3.
- † - Monitoring well MW-43 replaced monitoring well MW-9-90 in the HMSP beginning with the 2021 reporting period as approved in permit correspondence dated March 18, 2021 (Doc #99998). Historical SSIs and SSLs in MW-9-90 apply to MW-43.
- *- Duplicate sample monitoring well during this reporting period, the most recent result concentrations shown are an average of both samples obtained from the monitoring well.
- ** - Indicates J Flag; concentration is estimated.
- NA - Indicates that the constituent-monitoring point dataset has not satisfied the statistical requirements of IAC 567-113.10(9)"e"(2), which is identified by the entire confidence interval or confidence band, as appropriate, being below the GWPS.
- NM - Not Measured; statistical analyses will be performed for monitoring wells MW-45R, MW-47, MW-46R, MW-48, MW-49, and MW-5-90 once a sufficient dataset has been obtained.

Table 9
Analytical Data Summary
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

The Summary of Groundwater Chemistry is located in Appendix C.

Analytical data prior to 2025 is available in the 2024 Annual Water Quality Report dated February 28, 2025 (Doc #112388).

Table 10
Historical SSI and SSL
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Key

	SSI
	SSL

Well	Constituent	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025
MW-9-90	Arsenic			AB	AB								
MW-43	Arsenic							NS	NS				
	Barium							NS	NS				
	Cobalt							NS	NS				
	Nickel							NS	NS				
	Acetone							NS	NS				
PZ-10	Arsenic								NS		NS		
	Barium								NS		NS		
	Cobalt								NS		NS		
	Copper								NS		NS		
	Lead								NS		NS		
	Nickel								NS		NS		
	Vanadium								NS		NS		
	1,1-Dichloroethane								NS		NS		
	1,4-Dichlorobenzene								NS		NS		
	Benzene								NS		NS		
	Chlorobenzene								NS		NS		
	Chloroethane								NS		NS		
	cis-1,2-Dichloroethene								NS		NS		
PZ-11	Arsenic							NS	NS	NS		NS	
	Cobalt							NS	NS	NS		NS	
	Lead							NS	NS	NS		NS	
	Acetone							NS	NS	NS		NS	
	Carbon Disulfide							NS	NS	NS		NS	

Notes:

AB: Abandoned; monitoring well MW-9-90 was replaced by monitoring well MW-43 beginning with the 2021 reporting period.

NS: Not Sampled. See Table 2.

* - Monitoring well is sampled annually in accordance with the Groundwater Monitoring Optimization Report approved on September 21, 2020 (Doc #98499).

Comments:

Retesting is not performed in assessment and corrective action monitoring wells as these monitoring wells are not in the detection monitoring program.

Table 11
Corrective Action Trend Analysis
2025 Annual Water Quality Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

Well	Current SSL	Trend	Calculated S	Critical S	N	Projected Year to Completion*
MW-37 (MW-45R)	Cobalt	NM	NM	NM	8	NA
MW-43	Arsenic	Increasing	18	21	8	NA
MW-4-90 (MW-47)	Cobalt	NM	NM	NM	8	NA
MW-4-93 (MW-46R)	Cobalt	NM	NM	NM	8	NA
MW-7-90R (MW-49)	Arsenic	NM	NM	NM	8	NA
MW-7-93 (MW-45R)	Cobalt	NM	NM	NM	8	NA
MW-39R (MW-5-90)	Alpha-BHC	NM	NM	NM	8	NA
PZ-10 (MW-48)	Cobalt	NM	NM	NM	8	NA

Notes:

N - Number of Samples.

S - Mann-Kendall Statistic.

NA - Not Available; projected year to completion unable to be calculated due to increasing or stable trend.

* - To satisfy IAC 113.10(9)"e"; Projected Year to Completion was based on utilizing the Sen's slope calculation to determine when the concentration would be below the GWPS for eight sampling events and remain there for three consecutive years.

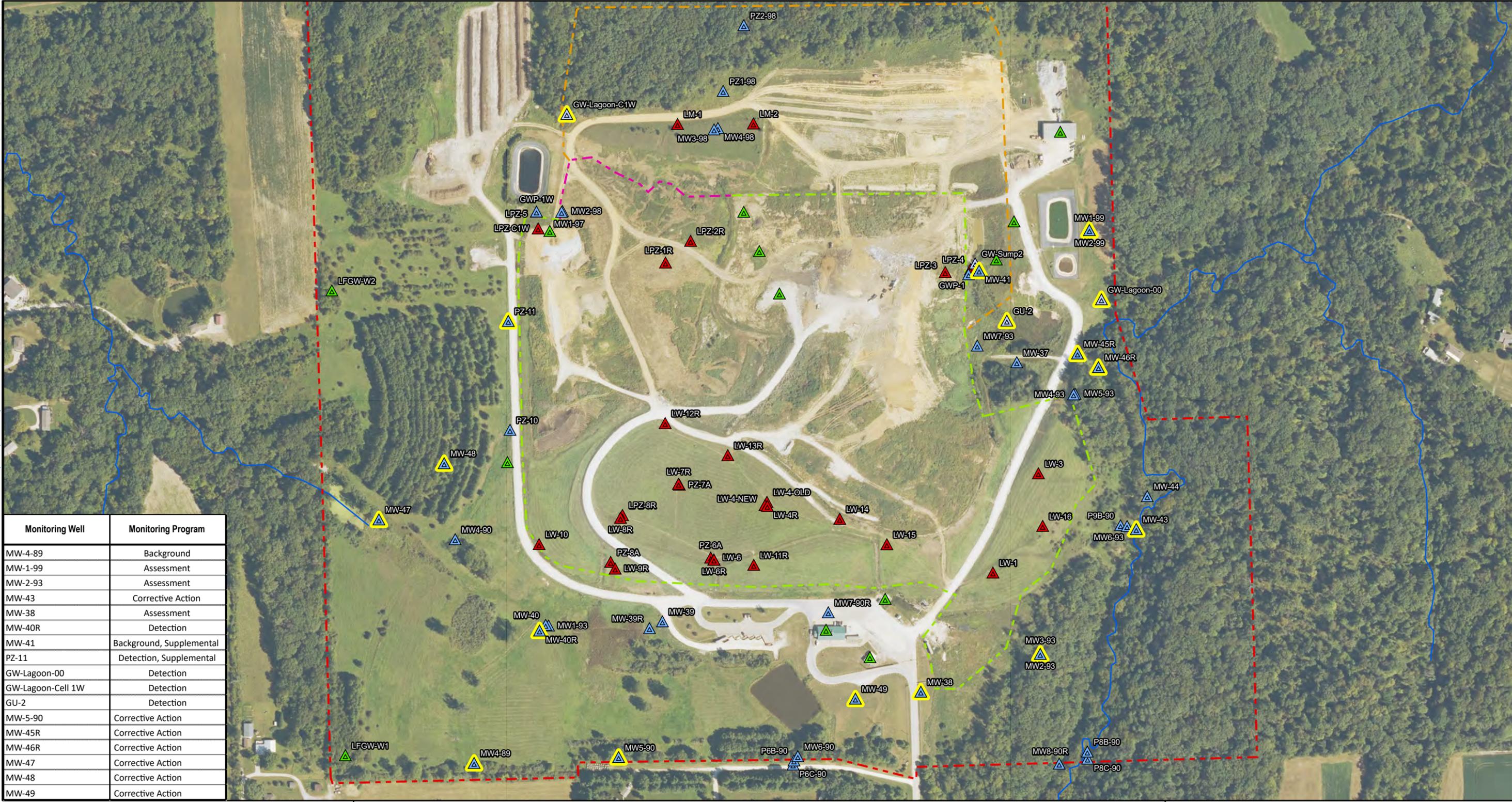
NM - Not Measured; statistical analyses will be performed for monitoring wells MW-45R, MW-47, MW-46R, MW-48, MW-49, and MW-5-90 once a sufficient dataset has been obtained.

Comments:

- 1) An Assessment of Corrective Measures Report was submitted on July 13, 2018 (Doc #92776) and approved in permit revision dated March 5, 2019 (Doc #94510).

Figures

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Monitoring Well	Monitoring Program
MW-4-89	Background
MW-1-99	Assessment
MW-2-93	Assessment
MW-43	Corrective Action
MW-38	Assessment
MW-40R	Detection
MW-41	Background, Supplemental
PZ-11	Detection, Supplemental
GW-Lagoon-00	Detection
GW-Lagoon-Cell 1W	Detection
GU-2	Detection
MW-5-90	Corrective Action
MW-45R	Corrective Action
MW-46R	Corrective Action
MW-47	Corrective Action
MW-48	Corrective Action
MW-49	Corrective Action

Approved Monitoring Network

Legend		
HMSP Monitoring Well	Groundwater Underdrain	Approximate Waste Boundary
HMSP Groundwater Underdrain	Leachate Monitoring Point	Located Waste Boundary
Monitoring Well	Landfill Gas Well	Approximate Property Boundary
	Future Waste Boundary	Stream

Des Moines County Regional
 Sanitary Landfill
 West Burlington, Iowa
 Project No: 27224414.26
 Drawing Date: January 2026

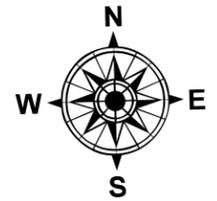
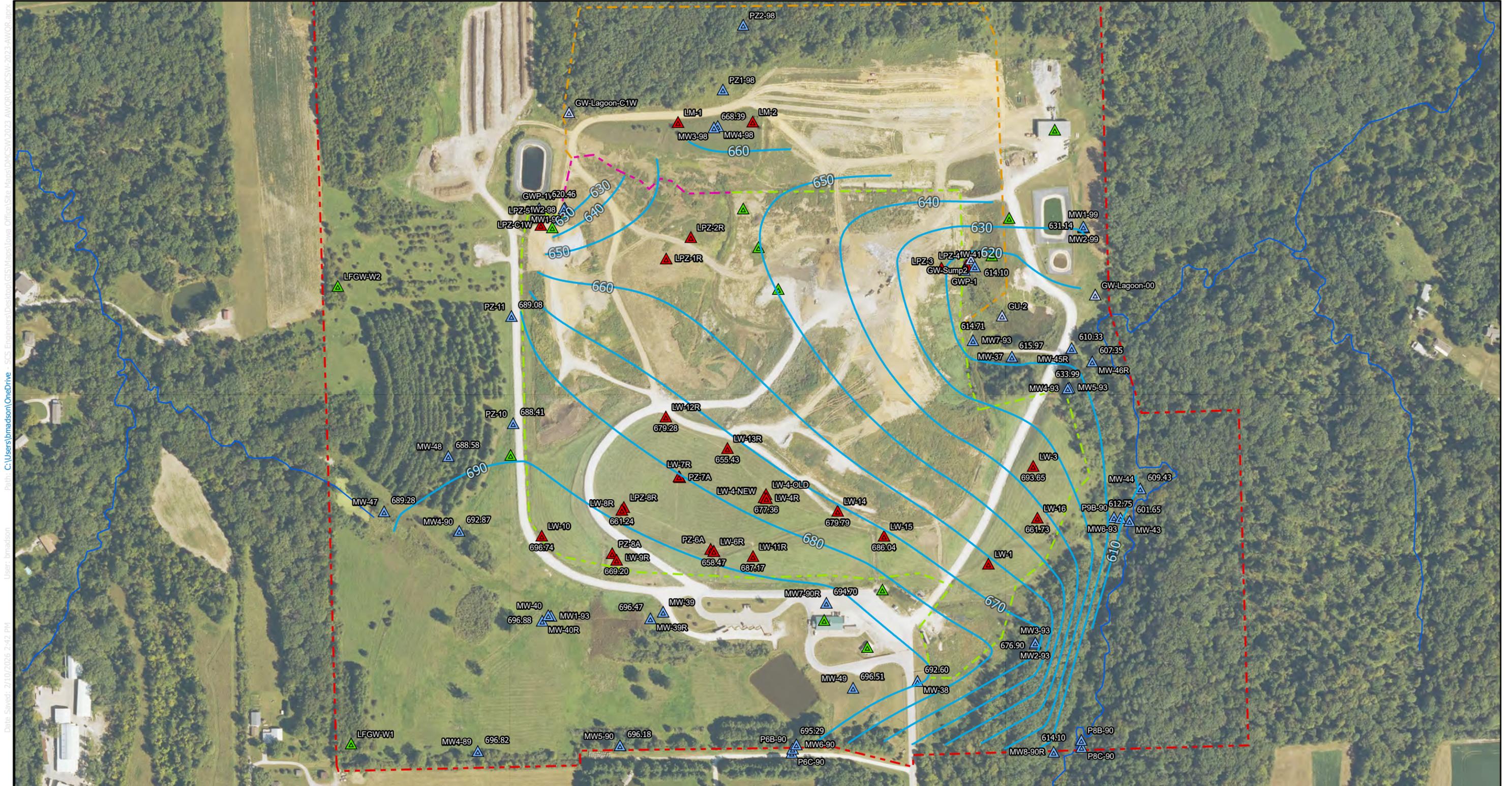


Figure 1



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Groundwater Contours

Legend		
<p>— Approximate Groundwater Contour Based on Field Measurements Taken May 19-21, 2025</p> <p>▲ Monitoring Well</p>	<p>▲ Groundwater Underdrain</p> <p>▲ Leachate Monitoring Point</p> <p>▲ Landfill Gas Well</p> <p>▲ Future Waste Boundary</p>	<p>— Approximate Waste Boundary</p> <p>— Located Waste Boundary</p> <p>— Approximate Property Boundary</p> <p>— Stream</p>

Des Moines County Regional Sanitary Landfill
 West Burlington, Iowa
 Project No: 27224414.26
 Drawing Date: January 2026

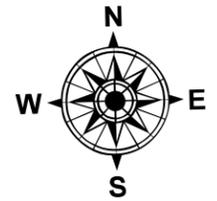


Figure 2

Sources: Data from Field Measurements, EPA's ArcSWAT, Esri's ArcView, and the GIS User Community. Data: CGIA, USGS, USDA NRCS, Iowa State University GIS Facility.



Appendix A
Field Sampling Forms

FORM FOR SURFACE WATER SAMPLING

Site Name Des Moines County Sanitary Landfill Permit No. 29-SDP-01-76P
 Surface Monitoring Point No. GW-Lagoon-00 Date 5/21/25
 (Pipe below manhole, outlets near culverts)

Name of Person Sampling Michael Morgan

A. TYPE OF MOINITORING POINT

Stream	<input type="checkbox"/>	Open Tile	<input type="checkbox"/>
Road Ditch	<input type="checkbox"/>	Tile with Riser	<input type="checkbox"/>
Drainage Ditch	<input type="checkbox"/>	Other	<input type="checkbox"/>

B. PURPOSE OF MONITORING POINT

Upstream	<input type="checkbox"/>	Downstream	<input type="checkbox"/>
Within Landfill	<input type="checkbox"/>	Other	<input type="checkbox"/>

C. MONITORING POINT CONDITIONS/LOCATION

Was monitoring point dry?	<input type="checkbox"/>	Too little water to sample?	<input type="checkbox"/>
Was water flowing?	<input type="checkbox"/>	If yes, estimate quantity (cfs)	<input type="checkbox"/>
Standing Water?	<input type="checkbox"/>	If yes, estimate depth (inches)	<input type="checkbox"/>
		If yes, estimate width (inches)	<input type="checkbox"/>
Was water discolored?	<input type="checkbox"/>		
Does water have odor?	<input type="checkbox"/>		
Was ground discolored?	<input type="checkbox"/>		
Litter present?	<input type="checkbox"/>		

D. FIELD MEASUREMENTS

Weather Conditions: 54°F, cloudy, wind W ~ 25 mph ^{15 mph to}

Time: 8:45

Field Measurements:

Temperature	<input type="checkbox"/>	Units	<u>Celsius</u>
Equipment Used	<input type="checkbox"/>		
pH	<input type="checkbox"/>	Units	<u>Standard units</u>
Equipment Used	<input type="checkbox"/>		
Spec. Conductance	<input type="checkbox"/>	Units	<u>uS/cm</u>
Equipment Used	<input type="checkbox"/>		

COMMENTS Unable to locate pipe, culvert flowing

FORM FOR SURFACE WATER SAMPLING

Site Name Des Moines County Sanitary Landfill Permit No. 29-SDP-01-76P
Surface Monitoring Point No. GW-Lagoon-Cell 1W - 3" pipe with no cap Date
Pipe at the bottom of slope ~10ft below other pipes

Name of Person Sampling

A. TYPE OF MOINITORING POINT

Stream, Road Ditch, Drainage Ditch, Open Tile, Tile with Riser, Other

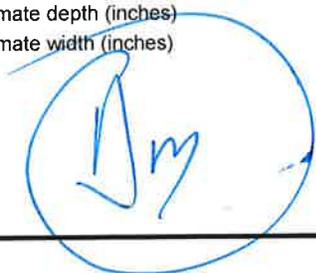
B. PURPOSE OF MONITORING POINT

Upstream, Within Landfill, Downstream, Other

C. MONITORING POINT CONDITIONS/LOCATION

Blank lines for monitoring point conditions and location notes.

Was monitoring point dry? Too little water to sample?
Was water flowing? If yes, estimate quantity (cfs)
Standing Water? If yes, estimate depth (inches)
If yes, estimate width (inches)
Was water discolored?
Does water have odor?
Was ground discolored?
Litter present?



D. FIELD MEASUREMENTS

Weather Conditions:

Time:

Field Measurements:

Temperature, Equipment Used, Units Celsius

pH, Equipment Used, Units Standard units

Spec. Conductance, Equipment Used, Units uS/cm

COMMENTS

Blank lines for comments.

FORM FOR SURFACE WATER SAMPLING

Site Name Des Moines County Sanitary Landfill Permit No. 29-SDP-01-76P
Surface Monitoring Point No. GU-2 Date
Discharge pipe to sedimentation basin.

Name of Person Sampling

A. TYPE OF MONITORING POINT

Stream, Road Ditch, Drainage Ditch, Open Tile, Tile with Riser, Other

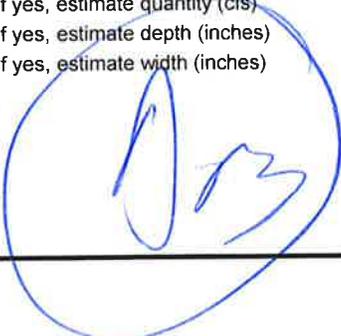
B. PURPOSE OF MONITORING POINT

Upstream, Within Landfill, Downstream, Other

C. MONITORING POINT CONDITIONS/LOCATION

Blank lines for monitoring point conditions and location notes.

Was monitoring point dry? Too little water to sample?
Was water flowing? If yes, estimate quantity (cfs)
Standing Water? If yes, estimate depth (inches)
If yes, estimate width (inches)
Was water discolored?
Does water have odor?
Was ground discolored?
Litter present?



D. FIELD MEASUREMENTS

Weather Conditions:

Time:

Field Measurements:

Temperature, Equipment Used, Units Celsius

pH, Equipment Used, Units Standard units

Spec. Conductance, Equipment Used, Units uS/cm

COMMENTS

Blank lines for comments.



Appendix B-1
Laboratory Analytical Data Sheets

ANALYTICAL REPORT

PREPARED FOR

Attn: Mark Mayhew
SCS Engineers
1690 All State Court
Suite 100
West Des Moines, Iowa 50265

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JOB DESCRIPTION

1st 2025 Semi-Annual Groundwater Sampling
Des Moines County Sanitary Landfill (Bracketing)

JOB NUMBER

310-307083-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)595-2008



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Case Narrative

Client: SCS Engineers
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1

Job ID: 310-307083-1

Eurofins Cedar Falls

Job Narrative 310-307083-1

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

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

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

Receipt

The samples were received on 5/22/2025 6:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

GC/MS VOA

Method 8260D: The method blank for analytical batch 310-455656 contained cis-1,2-Dichloroethene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-455656 recovered above the upper control limit for 1,1-Dichloroethene (20.8%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-455656/3).

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

Pesticides

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers

Job ID: 310-307083-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (Bracketing)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-307083-1	MW-5-90	Water	05/20/25 08:51	05/22/25 06:10
310-307083-2	Trip Blank	Water	05/20/25 00:00	05/22/25 06:10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Detection Summary

Client: SCS Engineers

Job ID: 310-307083-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (Bracketing)

Client Sample ID: MW-5-90

Lab Sample ID: 310-307083-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000802	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.103		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.88		1.88	1.31	mg/L	1		I-3765-85	Total/NA

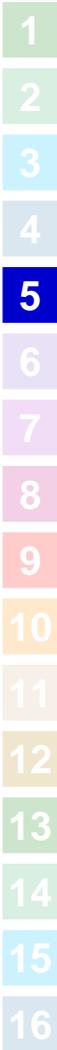
Client Sample ID: Trip Blank

Lab Sample ID: 310-307083-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	0.584	J	1.00	0.390	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.236	J B	1.00	0.210	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls



Quantitation Limit Exceptions Summary

Client: SCS Engineers

Job ID: 310-307083-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (Bracketing)

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
8260D	1,2-Dibromo-3-Chloropropane	Water	Total/NA	ug/L	1.20	5
8260D	1,2-Dibromoethane (EDB)	Water	Total/NA	ug/L	0.340	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Client Sample ID: MW-5-90

Lab Sample ID: 310-307083-1

Date Collected: 05/20/25 08:51

Matrix: Water

Date Received: 05/22/25 06:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 08:02	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 08:02	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 08:02	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 08:02	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 08:02	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 08:02	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 08:02	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 08:02	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 08:02	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 08:02	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 08:02	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 08:02	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 08:02	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 08:02	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 08:02	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 08:02	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 08:02	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 08:02	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 08:02	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 08:02	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 08:02	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 08:02	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 08:02	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 08:02	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 08:02	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 08:02	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 08:02	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 08:02	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 08:02	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 08:02	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 08:02	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 08:02	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 08:02	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 08:02	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 08:02	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 08:02	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 08:02	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 08:02	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 08:02	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 08:02	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 08:02	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 08:02	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 08:02	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 08:02	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 08:02	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 08:02	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 08:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 08:02	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Client Sample ID: MW-5-90

Lab Sample ID: 310-307083-1

Date Collected: 05/20/25 08:51

Matrix: Water

Date Received: 05/22/25 06:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/24/25 08:02	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 08:02	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0895		0.0895	0.00895	ug/L		05/23/25 09:56	05/23/25 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	75		10 - 150	05/23/25 09:56	05/23/25 12:34	1
Tetrachloro-m-xylene (Surr)	60		17 - 150	05/23/25 09:56	05/23/25 12:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/27/25 09:00	05/30/25 15:22	1
Arsenic	0.000802	J	0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:34	1
Barium	0.103		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/27/25 09:00	05/29/25 14:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/27/25 09:00	05/29/25 14:34	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:34	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:34	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:34	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:34	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 15:22	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:34	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		05/27/25 09:00	05/29/25 14:34	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/27/25 09:00	05/29/25 14:34	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:34	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	1.88		1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Client Sample ID: Trip Blank

Lab Sample ID: 310-307083-2

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 06:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 03:28	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 03:28	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 03:28	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 03:28	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 03:28	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 03:28	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 03:28	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 03:28	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 03:28	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 03:28	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 03:28	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 03:28	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 03:28	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 03:28	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 03:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 03:28	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 03:28	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 03:28	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 03:28	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 03:28	1
Bromodichloromethane	0.584	J	1.00	0.390	ug/L			05/24/25 03:28	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 03:28	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 03:28	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 03:28	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 03:28	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 03:28	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 03:28	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 03:28	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 03:28	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 03:28	1
cis-1,2-Dichloroethene	0.236	J B	1.00	0.210	ug/L			05/24/25 03:28	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 03:28	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 03:28	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 03:28	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 03:28	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 03:28	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 03:28	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 03:28	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 03:28	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 03:28	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 03:28	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 03:28	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 03:28	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 03:28	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 03:28	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 03:28	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 03:28	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
SDG: Des Moines County Sanitary Landfill (Bracketing)

Client Sample ID: Trip Blank

Lab Sample ID: 310-307083-2

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 06:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		05/24/25 03:28	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120		05/24/25 03:28	1

Definitions/Glossary

Client: SCS Engineers

Job ID: 310-307083-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (Bracketing)

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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

Surrogate Summary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
SDG: Des Moines County Sanitary Landfill (Bracketing)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBFM	TOL	BFB
		(76-130)	(80-120)	(80-120)
310-307083-1	MW-5-90	109	98	98
310-307083-2	Trip Blank	109	97	98
LCS 310-455656/6	Lab Control Sample	103	101	98
LCS 310-455656/7	Lab Control Sample	109	97	99
MB 310-455656/5	Method Blank	110	97	99

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1	TCX1
		(10-150)	(17-150)
310-307083-1	MW-5-90	75	60
310-307083-1 MS	MW-5-90	65	59
310-307083-1 MSD	MW-5-90	71	60
LCS 310-455585/2-A	Lab Control Sample	59	66
MB 310-455585/1-A	Method Blank	53	56

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-455656/5
Matrix: Water
Analysis Batch: 455656

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 01:57	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 01:57	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 01:57	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 01:57	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 01:57	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 01:57	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 01:57	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 01:57	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 01:57	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 01:57	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 01:57	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 01:57	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 01:57	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 01:57	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 01:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 01:57	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 01:57	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 01:57	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 01:57	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 01:57	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 01:57	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 01:57	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 01:57	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 01:57	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 01:57	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 01:57	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 01:57	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 01:57	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 01:57	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 01:57	1
cis-1,2-Dichloroethene	0.3052	J	1.00	0.210	ug/L			05/24/25 01:57	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 01:57	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 01:57	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 01:57	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 01:57	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 01:57	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 01:57	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 01:57	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 01:57	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 01:57	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 01:57	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 01:57	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 01:57	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 01:57	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 01:57	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 01:57	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 01:57	1

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-455656/5
Matrix: Water
Analysis Batch: 455656

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 01:57	1
Toluene-d8 (Surr)	97		80 - 120		05/24/25 01:57	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 01:57	1

Lab Sample ID: LCS 310-455656/6
Matrix: Water
Analysis Batch: 455656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	21.54		ug/L		108	70 - 121
1,1,1-Trichloroethane	20.0	22.39		ug/L		112	69 - 130
1,1,2,2-Tetrachloroethane	20.0	22.22		ug/L		111	70 - 122
1,1,2-Trichloroethane	20.0	21.52		ug/L		108	75 - 121
1,1-Dichloroethane	20.0	23.31		ug/L		117	69 - 127
1,1-Dichloroethane	20.0	24.69		ug/L		123	64 - 134
1,2,3-Trichloropropane	20.0	22.04		ug/L		110	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	20.64		ug/L		103	62 - 132
1,2-Dibromoethane (EDB)	20.0	22.29		ug/L		111	74 - 122
1,2-Dichlorobenzene	20.0	22.23		ug/L		111	74 - 120
1,2-Dichloroethane	20.0	22.85		ug/L		114	68 - 125
1,2-Dichloropropane	20.0	22.77		ug/L		114	72 - 128
1,4-Dichlorobenzene	20.0	22.18		ug/L		111	72 - 120
2-Butanone (MEK)	40.0	41.72		ug/L		104	60 - 134
2-Hexanone	40.0	42.62		ug/L		107	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	43.49		ug/L		109	62 - 136
Acetone	40.0	43.75		ug/L		109	59 - 136
Acrylonitrile	200	227.5		ug/L		114	50 - 150
Benzene	20.0	23.02		ug/L		115	71 - 125
Bromochloromethane	20.0	23.67		ug/L		118	69 - 131
Bromodichloromethane	20.0	21.26		ug/L		106	70 - 122
Bromoform	20.0	21.83		ug/L		109	62 - 122
Carbon disulfide	20.0	23.82		ug/L		119	58 - 137
Carbon tetrachloride	20.0	23.06		ug/L		115	63 - 136
Chlorobenzene	20.0	22.37		ug/L		112	74 - 120
Chlorodibromomethane	20.0	22.22		ug/L		111	69 - 121
Chloroform	20.0	22.49		ug/L		112	72 - 122
cis-1,2-Dichloroethene	20.0	23.14		ug/L		116	72 - 123
cis-1,3-Dichloropropene	20.0	21.95		ug/L		110	72 - 123
Dibromomethane	20.0	23.10		ug/L		116	72 - 122
Ethylbenzene	20.0	22.79		ug/L		114	75 - 120
Iodomethane	20.0	25.33		ug/L		127	18 - 150
Methylene Chloride	20.0	21.61		ug/L		108	72 - 128
Styrene	20.0	23.46		ug/L		117	74 - 122
Tetrachloroethene	20.0	23.58		ug/L		118	70 - 128
Toluene	20.0	22.96		ug/L		115	74 - 120
trans-1,2-Dichloroethene	20.0	23.74		ug/L		119	67 - 127
trans-1,3-Dichloropropene	20.0	21.84		ug/L		109	67 - 123
trans-1,4-Dichloro-2-butene	20.0	21.38		ug/L		107	50 - 150

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-455656/6
Matrix: Water
Analysis Batch: 455656

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Trichloroethene	20.0	22.10		ug/L		110	70 - 128
Vinyl acetate	40.0	55.87		ug/L		140	50 - 150
Xylenes, Total	40.0	45.39		ug/L		113	74 - 121

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	103		76 - 130
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Lab Sample ID: LCS 310-455656/7
Matrix: Water
Analysis Batch: 455656

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	18.02		ug/L		90	33 - 138
Chloroethane	20.0	19.99		ug/L		100	59 - 139
Chloromethane	20.0	20.27		ug/L		101	52 - 146
Trichlorofluoromethane	20.0	21.20		ug/L		106	55 - 150
Vinyl chloride	20.0	20.44		ug/L		102	60 - 142

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	109		76 - 130
Toluene-d8 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-455585/1-A
Matrix: Water
Analysis Batch: 455576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455585

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
alpha-BHC	<0.0978		0.0978	0.00978	ug/L		05/23/25 09:56	05/23/25 11:42	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	53		10 - 150	05/23/25 09:56	05/23/25 11:42	1
Tetrachloro-m-xylene (Surr)	56		17 - 150	05/23/25 09:56	05/23/25 11:42	1

Lab Sample ID: LCS 310-455585/2-A
Matrix: Water
Analysis Batch: 455576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455585

Surrogate	LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	59		10 - 150
Tetrachloro-m-xylene (Surr)	66		17 - 150

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 310-307083-1 MS
Matrix: Water
Analysis Batch: 455576

Client Sample ID: MW-5-90
Prep Type: Total/NA
Prep Batch: 455585

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	65		10 - 150
Tetrachloro-m-xylene (Surr)	59		17 - 150

Lab Sample ID: 310-307083-1 MSD
Matrix: Water
Analysis Batch: 455576

Client Sample ID: MW-5-90
Prep Type: Total/NA
Prep Batch: 455585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	<0.0895		2.59	2.044		ug/L		79	33 - 150	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	71		10 - 150
Tetrachloro-m-xylene (Surr)	60		17 - 150

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-455681/1-A
Matrix: Water
Analysis Batch: 456147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455681

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:05	1
Barium	<0.00200		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:05	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/27/25 09:00	05/29/25 14:05	1
Cadmium	0.0001560	J	0.000200	0.000100	mg/L		05/27/25 09:00	05/29/25 14:05	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:05	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:05	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:05	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:05	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:05	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/27/25 09:00	05/29/25 14:05	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/27/25 09:00	05/29/25 14:05	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:05	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:05	1

Lab Sample ID: MB 310-455681/1-A
Matrix: Water
Analysis Batch: 456239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455681

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/27/25 09:00	05/30/25 14:49	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 14:49	1

Lab Sample ID: LCS 310-455681/2-A
Matrix: Water
Analysis Batch: 456147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2124		mg/L		106	80 - 120

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

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

Lab Sample ID: LCS 310-455681/2-A
Matrix: Water
Analysis Batch: 456147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455681

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Barium	0.100	0.1052		mg/L		105	80 - 120
Beryllium	0.100	0.09692		mg/L		97	80 - 120
Cadmium	0.100	0.1002		mg/L		100	80 - 120
Chromium	0.100	0.1017		mg/L		102	80 - 120
Cobalt	0.100	0.1008		mg/L		101	80 - 120
Copper	0.200	0.2096		mg/L		105	80 - 120
Lead	0.200	0.2021		mg/L		101	80 - 120
Selenium	0.400	0.3930		mg/L		98	80 - 120
Silver	0.100	0.1093		mg/L		109	80 - 120
Thallium	0.100	0.09141		mg/L		91	80 - 120
Vanadium	0.100	0.1008		mg/L		101	80 - 120
Zinc	0.200	0.1941		mg/L		97	80 - 120

Lab Sample ID: LCS 310-455681/2-A
Matrix: Water
Analysis Batch: 456239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455681

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	0.200	0.2210		mg/L		110	80 - 120
Nickel	0.200	0.2057		mg/L		103	80 - 120

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-455571/1
Matrix: Water
Analysis Batch: 455571

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.00		5.00	3.50	mg/L			05/23/25 09:16	1

Lab Sample ID: LCS 310-455571/2
Matrix: Water
Analysis Batch: 455571

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Total Suspended Solids	100	114.0		mg/L		114	81 - 116

QC Association Summary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
SDG: Des Moines County Sanitary Landfill (Bracketing)

GC/MS VOA

Analysis Batch: 455656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	8260D	
310-307083-2	Trip Blank	Total/NA	Water	8260D	
MB 310-455656/5	Method Blank	Total/NA	Water	8260D	
LCS 310-455656/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-455656/7	Lab Control Sample	Total/NA	Water	8260D	

GC Semi VOA

Analysis Batch: 455576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	8081B	455585
MB 310-455585/1-A	Method Blank	Total/NA	Water	8081B	455585
LCS 310-455585/2-A	Lab Control Sample	Total/NA	Water	8081B	455585
310-307083-1 MS	MW-5-90	Total/NA	Water	8081B	455585
310-307083-1 MSD	MW-5-90	Total/NA	Water	8081B	455585

Prep Batch: 455585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	3511	
MB 310-455585/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-455585/2-A	Lab Control Sample	Total/NA	Water	3511	
310-307083-1 MS	MW-5-90	Total/NA	Water	3511	
310-307083-1 MSD	MW-5-90	Total/NA	Water	3511	

Metals

Prep Batch: 455681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	3005A	
MB 310-455681/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-455681/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 456147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	6020B	455681
MB 310-455681/1-A	Method Blank	Total/NA	Water	6020B	455681
LCS 310-455681/2-A	Lab Control Sample	Total/NA	Water	6020B	455681

Analysis Batch: 456239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	6020B	455681
MB 310-455681/1-A	Method Blank	Total/NA	Water	6020B	455681
LCS 310-455681/2-A	Lab Control Sample	Total/NA	Water	6020B	455681

General Chemistry

Analysis Batch: 455571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307083-1	MW-5-90	Total/NA	Water	I-3765-85	
MB 310-455571/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-455571/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Eurofins Cedar Falls

Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307083-1
 SDG: Des Moines County Sanitary Landfill (Bracketing)

Client Sample ID: MW-5-90

Lab Sample ID: 310-307083-1

Date Collected: 05/20/25 08:51

Matrix: Water

Date Received: 05/22/25 06:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 08:02
Total/NA	Prep	3511			455585	BW2O	EET CF	05/23/25 09:56
Total/NA	Analysis	8081B		1	455576	BW2O	EET CF	05/23/25 12:34
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456147	NFT2	EET CF	05/29/25 14:34
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456239	ZRI4	EET CF	05/30/25 15:22
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: Trip Blank

Lab Sample ID: 310-307083-2

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 06:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 03:28

Laboratory References:

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

Accreditation/Certification Summary

Client: SCS Engineers

Job ID: 310-307083-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (Bracketing)

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Method Summary

Client: SCS Engineers

Job ID: 310-307083-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (Bracketing)

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

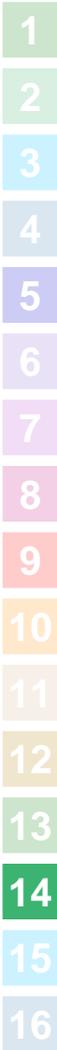
Protocol References:

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

USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

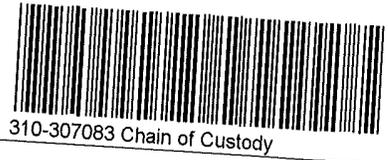
Laboratory References:

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





Environment Testing
America



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <i>SCS Engineers</i>			
City/State	CITY <i>West Des Moines</i>	STATE <i>IA</i>	Project:
Receipt Information			
Date/Time Received	DATE <i>5-22-25</i>	TIME <i>16:10</i>	Received By <i>EH</i>
Delivery Type <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID</i>			
Multiple Coolers? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler # ____ of ____</i>			
Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>			
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>			
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Which VOA samples are in cooler? ↓</i>			
<i>HCl + Unpreserved</i>			
<i>ALL</i>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <i>2</i>		Correction Factor (°C): <i>0</i>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <i>2EH 2.6</i>		Corrected Temp (°C): <i>0EH 2.6</i>	
• Sample Container Temperature			
Container(s) used	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) <i>If yes:</i> Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE. If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			

Chain of Custody Record



TestAmerica Laboratories, Inc. d/b/a Eurofins

Regulatory Program: DW NPDES RCRA Other

Client Contact SCS Engineers 1690 All-State Court, Suite 100 West Des Moines, IA 50265 515-631-6160		Project Manager: Ben Madson Email: bmadson@scsengineers.com Cell: 515-776-9255		Site Contact: Ben Madson Lab Contact: Samuel Miller		Date: _____ Carrier: _____ COC No. _____ of _____ Sampler: _____ For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____ Job / SDG No: _____					
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS Other: _____ <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Sample Date 5/20/25		Sample Time 8:51		Sample Type (C=Comp, G=Grab) G		Matrix GW		# of Cont. _____	
Sample Identification MW-5-90 Trip Blank		Perform MS/MSD (Y/N)		Alpha-BHC		TSS		Trip Blank		Sample Specific	
MW-5-90		X		X		X		X		_____	
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Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-307083-1

SDG Number: Des Moines County Sanitary Landfill (Bracketing)

Login Number: 307083

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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	



ANALYTICAL REPORT

PREPARED FOR

Attn: Mark Mayhew
SCS Engineers
1690 All State Court
Suite 100
West Des Moines, Iowa 50265

Generated 6/6/2025 2:39:15 PM

JOB DESCRIPTION

1st 2025 Semi-Annual Groundwater Sampling
Des Moines County Sanitary Landfill (HMSP)
HMSP

JOB NUMBER

310-307094-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)595-2008

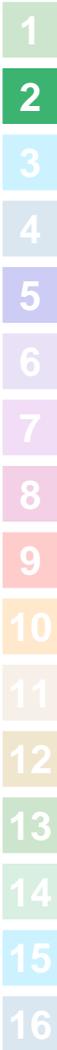


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Case Narrative

Client: SCS Engineers
Project: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1

Job ID: 310-307094-1

Eurofins Cedar Falls

Job Narrative 310-307094-1

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

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

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

Receipt

The samples were received on 5/22/2025 4:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were -0.3°C, 0.5°C, 1.5°C and 5.8°C.

GC/MS VOA

Method 8260D: The method blank for analytical batch 310-455656 contained cis-1,2-Dichloroethene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-455656 recovered above the upper control limit for 1,1-Dichloroethene (20.8%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-455656/3).

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

GC/MS Semi VOA

Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-455764. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: Surrogate recovery for the following sample was outside of acceptance limits: (MB 310-455764/1-A). There was insufficient sample and holding-time to perform a re-extraction; therefore, the data have been reported.

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

Herbicides

Method 8151A: Surrogate recovery for the following sample was outside the upper control limit: MW-4-93 (310-307094-3). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

Pesticides

Method 8081B: The following sample(s) was analyzed outside of analytical holding time.

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-307094-1	MW-4-89	Groundwater	05/20/25 07:59	05/22/25 16:10
310-307094-2	MW-1-99	Groundwater	05/20/25 09:55	05/22/25 16:10
310-307094-3	MW-4-93	Groundwater	05/21/25 14:40	05/22/25 16:10
310-307094-4	MW-7-93	Groundwater	05/20/25 10:41	05/22/25 16:10
310-307094-5	MW-37	Groundwater	05/20/25 11:29	05/22/25 16:10
310-307094-6	MW-39R	Groundwater	05/20/25 15:20	05/22/25 16:10
310-307094-7	MW-40R	Groundwater	05/20/25 13:11	05/22/25 16:10
310-307094-8	Trip Blank 1	Trip Blank	05/20/25 00:00	05/22/25 16:10
310-307094-9	MW-43	Water	05/19/25 15:18	05/22/25 16:10
310-307094-10	MW-45R	Water	05/19/25 17:14	05/22/25 16:10
310-307094-11	MW-46R	Water	05/19/25 16:36	05/22/25 16:10
310-307094-12	MW-47	Water	05/21/25 11:54	05/22/25 16:10
310-307094-13	MW-48	Water	05/21/25 11:10	05/22/25 16:10
310-307094-14	MW-49	Water	05/19/25 18:16	05/22/25 16:10
310-307094-15	PZ-10	Water	05/20/25 14:12	05/22/25 16:10
310-307094-16	GW-Lagoon-Cell 1W	Water	05/21/25 13:25	05/22/25 16:10
310-307094-17	MW-D	Water	05/20/25 11:53	05/22/25 16:10
310-307094-18	Trip Blank 2	Water	05/20/25 00:00	05/22/25 16:10
310-307094-19	Trip Blank 3	Water	05/20/25 00:00	05/22/25 16:10
310-307094-20	Trip Blank 4	Water	05/20/25 00:00	05/22/25 16:10



Detection Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-4-89

Lab Sample ID: 310-307094-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.101		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.75	J	1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-1-99

Lab Sample ID: 310-307094-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0279		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000197	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00396	J	0.00500	0.00320	mg/L	1		6020B	Total/NA
Selenium	0.00316	J	0.00500	0.00140	mg/L	1		6020B	Total/NA

Client Sample ID: MW-4-93

Lab Sample ID: 310-307094-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.61		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.537	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	2.10		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.301	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	23.5		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.671	J B	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.00266		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0264		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0128		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000489	J	0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.0586		0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00856		0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.00		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-7-93

Lab Sample ID: 310-307094-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000674	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0868		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0109		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00394	J	0.00500	0.00320	mg/L	1		6020B	Total/NA
Nickel	0.0632		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.88		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-37

Lab Sample ID: 310-307094-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	45.2		1.00	0.220	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	2.74		2.00	0.560	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.297	J	1.00	0.270	ug/L	1		8260D	Total/NA
Benzene	0.628		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	4.29		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	19.5		4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.23	B	1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.293	J	1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	0.492	J	1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	0.866	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.00264		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0186		0.00200	0.000660	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-37 (Continued)

Lab Sample ID: 310-307094-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0138		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0475		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	17.5		7.50	5.25	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-39R

Lab Sample ID: 310-307094-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	45.5		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.458	J	1.00	0.270	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.467	J	1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.434	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chloroethane	2.12	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	18.0	B	1.00	0.210	ug/L	1		8260D	Total/NA
Dichlorodifluoromethane	20.9		3.00	0.250	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.909	J	1.00	0.480	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.359	J	1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	3.48		1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	1.23		1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.000989	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.207		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00152		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0169		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.50		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-40R

Lab Sample ID: 310-307094-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0861		0.00200	0.000660	mg/L	1		6020B	Total/NA

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-307094-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	0.582	J	1.00	0.390	ug/L	1		8260D	Total/NA
Methylene Chloride	1.82	J	5.00	1.70	ug/L	1		8260D	Total/NA

Client Sample ID: MW-43

Lab Sample ID: 310-307094-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.91	J	10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.00797		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.606		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00133		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00476	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00187	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	66.0		30.0	21.0	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-45R

Lab Sample ID: 310-307094-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00122	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0419		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00178		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000400	J	0.000500	0.000330	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-45R (Continued)

Lab Sample ID: 310-307094-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.00460	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Zinc	0.0149	J	0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	36.0		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-46R

Lab Sample ID: 310-307094-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.43	J	10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.000965	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0293		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00701		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000332	J	0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.0168		0.00500	0.00230	mg/L	1		6020B	Total/NA
Zinc	0.0150	J	0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	31.3		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-47

Lab Sample ID: 310-307094-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.54		1.00	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.268	J	1.00	0.210	ug/L	1		8260D	Total/NA
Barium	0.118		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.00184	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Cobalt	0.000717		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000630		0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.00245	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	41.0		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-48

Lab Sample ID: 310-307094-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	52.8		1.00	0.220	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.560	J	2.00	0.560	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.328	J	1.00	0.270	ug/L	1		8260D	Total/NA
Chloroethane	11.2		4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.05		1.00	0.210	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.51		1.00	0.480	ug/L	1		8260D	Total/NA
Trichloroethene	0.871	J	1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	0.449	J	1.00	0.180	ug/L	1		8260D	Total/NA
Barium	0.162		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000434	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	18.0		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-49

Lab Sample ID: 310-307094-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000683	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0621		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000109	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.00440	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Cobalt	0.000314	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000357	J	0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.00378	J	0.00500	0.00230	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-49 (Continued)

Lab Sample ID: 310-307094-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0251		0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	6.38		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: PZ-10

Lab Sample ID: 310-307094-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.974	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.402	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	5.90		1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	2.26		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	11.3		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	3.07	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.388	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.00692		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.299		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0179		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0123		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.8		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: GW-Lagoon-Cell 1W

Lab Sample ID: 310-307094-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000863	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.137		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000810		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00394	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.75		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D

Lab Sample ID: 310-307094-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	44.5		1.00	0.220	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	2.79		2.00	0.560	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.313	J	1.00	0.270	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.278	J	1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.661		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	4.27		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	19.1		4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.12		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.310	J	1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	0.499	J	1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	0.834	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.00260		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0192		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0142		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0489		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	13.8		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-307094-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	0.593	J	1.00	0.390	ug/L	1		8260D	Total/NA
Methylene Chloride	1.72	J	5.00	1.70	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-307094-19

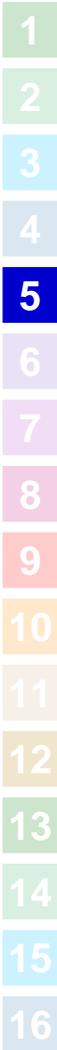
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	0.626	J	1.00	0.390	ug/L	1		8260D	Total/NA

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-307094-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromodichloromethane	0.506	J	1.00	0.390	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.



Quantitation Limit Exceptions Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
8260D	1,2-Dibromo-3-Chloropropane	Groundwater	Total/NA	ug/L	1.20	5
8260D	1,2-Dibromo-3-Chloropropane	Trip Blank	Total/NA	ug/L	1.20	5
8260D	1,2-Dibromo-3-Chloropropane	Water	Total/NA	ug/L	1.20	5
8260D	1,2-Dibromoethane (EDB)	Groundwater	Total/NA	ug/L	0.340	1
8260D	1,2-Dibromoethane (EDB)	Trip Blank	Total/NA	ug/L	0.340	1
8260D	1,2-Dibromoethane (EDB)	Water	Total/NA	ug/L	0.340	1



Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-4-89

Lab Sample ID: 310-307094-1

Date Collected: 05/20/25 07:59

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 08:25	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 08:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 08:25	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 08:25	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 08:25	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 08:25	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 08:25	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 08:25	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 08:25	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 08:25	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 08:25	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 08:25	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 08:25	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 08:25	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 08:25	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 08:25	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 08:25	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 08:25	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 08:25	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 08:25	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 08:25	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 08:25	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 08:25	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 08:25	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 08:25	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 08:25	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 08:25	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 08:25	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 08:25	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 08:25	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 08:25	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 08:25	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 08:25	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 08:25	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 08:25	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 08:25	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 08:25	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 08:25	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 08:25	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 08:25	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 08:25	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 08:25	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 08:25	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 08:25	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 08:25	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 08:25	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 08:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 08:25	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-4-89

Lab Sample ID: 310-307094-1

Date Collected: 05/20/25 07:59

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/24/25 08:25	1
4-Bromofluorobenzene (Surr)	97		80 - 120		05/24/25 08:25	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0902	H	0.0902	0.00902	ug/L		05/28/25 12:23	05/29/25 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	88		10 - 150	05/28/25 12:23	05/29/25 20:48	1
Tetrachloro-m-xylene (Surr)	54		17 - 150	05/28/25 12:23	05/29/25 20:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:24	1
Barium	0.101		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:24	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:24	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:24	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:24	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:24	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 15:10	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:24	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:24	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	1.75	J	1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-1-99

Lab Sample ID: 310-307094-2

Date Collected: 05/20/25 09:55

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 08:48	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 08:48	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 08:48	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 08:48	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 08:48	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 08:48	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 08:48	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 08:48	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 08:48	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 08:48	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 08:48	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 08:48	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 08:48	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 08:48	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 08:48	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 08:48	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 08:48	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 08:48	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 08:48	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 08:48	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 08:48	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 08:48	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 08:48	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 08:48	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 08:48	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 08:48	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 08:48	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 08:48	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 08:48	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 08:48	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 08:48	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 08:48	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 08:48	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 08:48	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 08:48	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 08:48	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 08:48	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 08:48	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 08:48	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 08:48	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 08:48	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 08:48	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 08:48	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 08:48	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 08:48	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 08:48	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 08:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 08:48	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-1-99

Lab Sample ID: 310-307094-2

Date Collected: 05/20/25 09:55

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		05/24/25 08:48	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 08:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:26	1
Barium	0.0279		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:26	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:26	1
Cobalt	0.000197	J	0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:26	1
Copper	0.00396	J	0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:26	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:26	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 15:13	1
Selenium	0.00316	J	0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:26	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:26	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-4-93

Lab Sample ID: 310-307094-3

Date Collected: 05/21/25 14:40

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 09:11	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 09:11	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 09:11	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 09:11	1
1,1-Dichloroethane	1.61		1.00	0.220	ug/L			05/24/25 09:11	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 09:11	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 09:11	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 09:11	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 09:11	1
1,2-Dichlorobenzene	0.537	J	1.00	0.370	ug/L			05/24/25 09:11	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 09:11	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 09:11	1
1,4-Dichlorobenzene	2.10		1.00	0.230	ug/L			05/24/25 09:11	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 09:11	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 09:11	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 09:11	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 09:11	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 09:11	1
Benzene	0.301	J	0.500	0.220	ug/L			05/24/25 09:11	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 09:11	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 09:11	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 09:11	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 09:11	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 09:11	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 09:11	1
Chlorobenzene	23.5		1.00	0.400	ug/L			05/24/25 09:11	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 09:11	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 09:11	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 09:11	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 09:11	1
cis-1,2-Dichloroethene	0.671	J B	1.00	0.210	ug/L			05/24/25 09:11	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 09:11	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 09:11	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 09:11	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 09:11	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 09:11	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 09:11	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 09:11	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 09:11	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 09:11	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 09:11	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 09:11	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 09:11	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 09:11	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 09:11	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 09:11	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 09:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 09:11	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-4-93

Lab Sample ID: 310-307094-3

Date Collected: 05/21/25 14:40

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/24/25 09:11	1
4-Bromofluorobenzene (Surr)	97		80 - 120		05/24/25 09:11	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		05/27/25 11:33	06/05/25 06:15	1
Phenol	<10.0		10.0	1.10	ug/L		05/27/25 11:33	06/05/25 06:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	40		21 - 110	05/27/25 11:33	06/05/25 06:15	1
Phenol-d5 (Surr)	35		21 - 110	05/27/25 11:33	06/05/25 06:15	1
2,4,6-Tribromophenol (Surr)	45		20 - 144	05/27/25 11:33	06/05/25 06:15	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0893		0.0893	0.0179	ug/L		05/23/25 09:56	05/23/25 12:47	1
Endrin aldehyde	<0.0893		0.0893	0.0241	ug/L		05/23/25 09:56	05/23/25 12:47	1
Methoxychlor	<0.0893		0.0893	0.0286	ug/L		05/23/25 09:56	05/23/25 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	66		10 - 150	05/23/25 09:56	05/23/25 12:47	1
Tetrachloro-m-xylene (Surr)	51		17 - 150	05/23/25 09:56	05/23/25 12:47	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<1.00		1.00	0.126	ug/L		05/27/25 07:27	05/27/25 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	132	S1+	25 - 130	05/27/25 07:27	05/27/25 22:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00266		0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:29	1
Barium	0.0264		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:29	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:29	1
Cobalt	0.0128		0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:29	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:29	1
Lead	0.000489	J	0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:29	1
Nickel	0.0586		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 15:16	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:29	1
Vanadium	0.00856		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:29	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		05/26/25 18:37	05/27/25 05:22	1
Total Suspended Solids (USGS I-3765-85)	5.00		1.88	1.31	mg/L			05/23/25 11:39	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-7-93

Lab Sample ID: 310-307094-4

Date Collected: 05/20/25 10:41

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 09:33	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 09:33	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 09:33	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 09:33	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 09:33	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 09:33	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 09:33	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 09:33	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 09:33	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 09:33	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 09:33	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 09:33	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 09:33	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 09:33	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 09:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 09:33	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 09:33	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 09:33	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 09:33	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 09:33	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 09:33	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 09:33	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 09:33	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 09:33	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 09:33	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 09:33	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 09:33	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 09:33	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 09:33	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 09:33	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 09:33	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 09:33	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 09:33	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 09:33	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 09:33	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 09:33	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 09:33	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 09:33	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 09:33	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 09:33	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 09:33	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 09:33	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 09:33	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 09:33	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 09:33	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 09:33	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 09:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	108		76 - 130		05/24/25 09:33	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-7-93

Lab Sample ID: 310-307094-4

Date Collected: 05/20/25 10:41

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/24/25 09:33	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 09:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000674	J	0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:31	1
Barium	0.0868		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:31	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:31	1
Cobalt	0.0109		0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:31	1
Copper	0.00394	J	0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:31	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:31	1
Nickel	0.0632		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 15:19	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:31	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:31	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	2.88		1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-37
 Date Collected: 05/20/25 11:29
 Date Received: 05/22/25 16:10

Lab Sample ID: 310-307094-5
 Matrix: Groundwater

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 09:56	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 09:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 09:56	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 09:56	1
1,1-Dichloroethane	45.2		1.00	0.220	ug/L			05/24/25 09:56	1
1,1-Dichloroethene	2.74		2.00	0.560	ug/L			05/24/25 09:56	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 09:56	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 09:56	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 09:56	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 09:56	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 09:56	1
1,2-Dichloropropane	0.297 J		1.00	0.270	ug/L			05/24/25 09:56	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 09:56	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 09:56	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 09:56	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 09:56	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 09:56	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 09:56	1
Benzene	0.628		0.500	0.220	ug/L			05/24/25 09:56	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 09:56	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 09:56	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 09:56	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 09:56	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 09:56	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 09:56	1
Chlorobenzene	4.29		1.00	0.400	ug/L			05/24/25 09:56	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 09:56	1
Chloroethane	19.5		4.00	0.790	ug/L			05/24/25 09:56	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 09:56	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 09:56	1
cis-1,2-Dichloroethene	3.23 B		1.00	0.210	ug/L			05/24/25 09:56	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 09:56	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 09:56	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 09:56	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 09:56	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 09:56	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 09:56	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 09:56	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 09:56	1
trans-1,2-Dichloroethene	0.293 J		1.00	0.270	ug/L			05/24/25 09:56	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 09:56	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 09:56	1
Trichloroethene	0.492 J		1.00	0.430	ug/L			05/24/25 09:56	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 09:56	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 09:56	1
Vinyl chloride	0.866 J		1.00	0.180	ug/L			05/24/25 09:56	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 09:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	112		76 - 130		05/24/25 09:56	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-37

Lab Sample ID: 310-307094-5

Date Collected: 05/20/25 11:29

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/24/25 09:56	1
4-Bromofluorobenzene (Surr)	100		80 - 120		05/24/25 09:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00264		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 15:40	1
Barium	0.0186		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 15:40	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 15:40	1
Cobalt	0.0138		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 15:40	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 15:40	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 15:40	1
Nickel	0.0475		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 15:40	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 15:40	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 15:40	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 15:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	17.5		7.50	5.25	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-39R

Lab Sample ID: 310-307094-6

Date Collected: 05/20/25 15:20

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 10:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 10:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 10:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 10:19	1
1,1-Dichloroethane	45.5		1.00	0.220	ug/L			05/24/25 10:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 10:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 10:19	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 10:19	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 10:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 10:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 10:19	1
1,2-Dichloropropane	0.458	J	1.00	0.270	ug/L			05/24/25 10:19	1
1,4-Dichlorobenzene	0.467	J	1.00	0.230	ug/L			05/24/25 10:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 10:19	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 10:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 10:19	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 10:19	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 10:19	1
Benzene	0.434	J	0.500	0.220	ug/L			05/24/25 10:19	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 10:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 10:19	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 10:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 10:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 10:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 10:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 10:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 10:19	1
Chloroethane	2.12	J	4.00	0.790	ug/L			05/24/25 10:19	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 10:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 10:19	1
cis-1,2-Dichloroethene	18.0	B	1.00	0.210	ug/L			05/24/25 10:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 10:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 10:19	1
Dichlorodifluoromethane	20.9		3.00	0.250	ug/L			05/24/25 10:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 10:19	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 10:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 10:19	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 10:19	1
Tetrachloroethene	0.909	J	1.00	0.480	ug/L			05/24/25 10:19	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 10:19	1
trans-1,2-Dichloroethene	0.359	J	1.00	0.270	ug/L			05/24/25 10:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 10:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 10:19	1
Trichloroethene	3.48		1.00	0.430	ug/L			05/24/25 10:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 10:19	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 10:19	1
Vinyl chloride	1.23		1.00	0.180	ug/L			05/24/25 10:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 10:19	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-39R

Lab Sample ID: 310-307094-6

Date Collected: 05/20/25 15:20

Matrix: Groundwater

Date Received: 05/22/25 16:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	113		76 - 130		05/24/25 10:19	1
Toluene-d8 (Surr)	97		80 - 120		05/24/25 10:19	1
4-Bromofluorobenzene (Surr)	96		80 - 120		05/24/25 10:19	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0900		0.0900	0.00900	ug/L		05/23/25 09:56	05/23/25 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	71		10 - 150	05/23/25 09:56	05/23/25 13:00	1
Tetrachloro-m-xylene (Surr)	57		17 - 150	05/23/25 09:56	05/23/25 13:00	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	<1.00		1.00	0.105	ug/L		05/27/25 07:27	05/27/25 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	78		25 - 130	05/27/25 07:27	05/27/25 22:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000989	J	0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 15:58	1
Barium	0.207		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 15:58	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 15:58	1
Cobalt	0.00152		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 15:58	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 15:58	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 15:58	1
Nickel	0.0169		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 15:58	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 15:58	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 15:58	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 15:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	3.50		1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-40R

Lab Sample ID: 310-307094-7

Date Collected: 05/20/25 13:11

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 15:15	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 15:15	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 15:15	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 15:15	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 15:15	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 15:15	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 15:15	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 15:15	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 15:15	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 15:15	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 15:15	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 15:15	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 15:15	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 15:15	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 15:15	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 15:15	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 15:15	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 15:15	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 15:15	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 15:15	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 15:15	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 15:15	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 15:15	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 15:15	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 15:15	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 15:15	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 15:15	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 15:15	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 15:15	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 15:15	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 15:15	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 15:15	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 15:15	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 15:15	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 15:15	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 15:15	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 15:15	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 15:15	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 15:15	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 15:15	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 15:15	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 15:15	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 15:15	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 15:15	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 15:15	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 15:15	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 15:15	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-40R

Lab Sample ID: 310-307094-7

Date Collected: 05/20/25 13:11

Matrix: Groundwater

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 15:15	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 15:15	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0895	H	0.0895	0.00895	ug/L		05/28/25 12:23	05/29/25 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	80		10 - 150	05/28/25 12:23	05/29/25 21:01	1
Tetrachloro-m-xylene (Surr)	47		17 - 150	05/28/25 12:23	05/29/25 21:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:01	1
Barium	0.0861		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:01	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:01	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:01	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:01	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:01	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:01	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:01	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:01	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-307094-8

Date Collected: 05/20/25 00:00

Matrix: Trip Blank

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 03:51	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 03:51	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 03:51	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 03:51	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 03:51	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 03:51	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 03:51	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 03:51	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 03:51	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 03:51	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 03:51	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 03:51	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 03:51	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 03:51	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 03:51	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 03:51	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 03:51	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 03:51	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 03:51	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 03:51	1
Bromodichloromethane	0.582	J	1.00	0.390	ug/L			05/24/25 03:51	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 03:51	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 03:51	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 03:51	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 03:51	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 03:51	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 03:51	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 03:51	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 03:51	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 03:51	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 03:51	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 03:51	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 03:51	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 03:51	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 03:51	1
Methylene Chloride	1.82	J	5.00	1.70	ug/L			05/24/25 03:51	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 03:51	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 03:51	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 03:51	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 03:51	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 03:51	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 03:51	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 03:51	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 03:51	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 03:51	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 03:51	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 03:51	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-307094-8

Date Collected: 05/20/25 00:00

Matrix: Trip Blank

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Toluene-d8 (Surr)	97		80 - 120		05/24/25 03:51	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 03:51	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-43

Lab Sample ID: 310-307094-9

Date Collected: 05/19/25 15:18

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 15:38	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 15:38	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 15:38	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 15:38	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 15:38	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 15:38	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 15:38	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 15:38	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 15:38	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 15:38	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 15:38	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 15:38	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 15:38	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 15:38	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 15:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 15:38	1
Acetone	4.91	J	10.0	3.10	ug/L			05/24/25 15:38	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 15:38	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 15:38	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 15:38	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 15:38	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 15:38	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 15:38	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 15:38	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 15:38	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 15:38	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 15:38	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 15:38	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 15:38	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 15:38	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 15:38	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 15:38	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 15:38	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 15:38	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 15:38	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 15:38	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 15:38	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 15:38	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 15:38	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 15:38	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 15:38	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 15:38	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 15:38	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 15:38	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 15:38	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 15:38	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 15:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130					05/24/25 15:38	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-43

Lab Sample ID: 310-307094-9

Date Collected: 05/19/25 15:18

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 15:38	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:04	1
Arsenic	0.00797		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:04	1
Barium	0.606		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:04	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:04	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:04	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:04	1
Cobalt	0.00133		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:04	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:04	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:04	1
Nickel	0.00476	J	0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:04	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:04	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:04	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:04	1
Vanadium	0.00187	J	0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:04	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	66.0		30.0	21.0	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-45R

Lab Sample ID: 310-307094-10

Date Collected: 05/19/25 17:14

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 16:01	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 16:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 16:01	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 16:01	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 16:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 16:01	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 16:01	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 16:01	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 16:01	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 16:01	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 16:01	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 16:01	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 16:01	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 16:01	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 16:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 16:01	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 16:01	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 16:01	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 16:01	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 16:01	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 16:01	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 16:01	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 16:01	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 16:01	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 16:01	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 16:01	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 16:01	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 16:01	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 16:01	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 16:01	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 16:01	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 16:01	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 16:01	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 16:01	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 16:01	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 16:01	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 16:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 16:01	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 16:01	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 16:01	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 16:01	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 16:01	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 16:01	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 16:01	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 16:01	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 16:01	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 16:01	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-45R

Lab Sample ID: 310-307094-10

Date Collected: 05/19/25 17:14

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 16:01	1
4-Bromofluorobenzene (Surr)	100		80 - 120		05/24/25 16:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:07	1
Arsenic	0.00122	J	0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:07	1
Barium	0.0419		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:07	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:07	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:07	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:07	1
Cobalt	0.00178		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:07	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:07	1
Lead	0.000400	J	0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:07	1
Nickel	0.00460	J	0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:07	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:07	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:07	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:07	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:07	1
Zinc	0.0149	J	0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	36.0		3.75	2.63	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-46R

Lab Sample ID: 310-307094-11

Date Collected: 05/19/25 16:36

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 16:24	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 16:24	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 16:24	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 16:24	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 16:24	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 16:24	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 16:24	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 16:24	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 16:24	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 16:24	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 16:24	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 16:24	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 16:24	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 16:24	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 16:24	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 16:24	1
Acetone	4.43	J	10.0	3.10	ug/L			05/24/25 16:24	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 16:24	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 16:24	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 16:24	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 16:24	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 16:24	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 16:24	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 16:24	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 16:24	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 16:24	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 16:24	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 16:24	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 16:24	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 16:24	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 16:24	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 16:24	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 16:24	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 16:24	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 16:24	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 16:24	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 16:24	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 16:24	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 16:24	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 16:24	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 16:24	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 16:24	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 16:24	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 16:24	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 16:24	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 16:24	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 16:24	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-46R

Lab Sample ID: 310-307094-11

Date Collected: 05/19/25 16:36

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 16:24	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 16:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:10	1
Arsenic	0.000965	J	0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:10	1
Barium	0.0293		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:10	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:10	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:10	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:10	1
Cobalt	0.00701		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:10	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:10	1
Lead	0.000332	J	0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:10	1
Nickel	0.0168		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:10	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:10	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:10	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:10	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:10	1
Zinc	0.0150	J	0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	31.3		3.75	2.63	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-47

Lab Sample ID: 310-307094-12

Date Collected: 05/21/25 11:54

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 16:47	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 16:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 16:47	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 16:47	1
1,1-Dichloroethane	2.54		1.00	0.220	ug/L			05/24/25 16:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 16:47	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 16:47	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 16:47	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 16:47	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 16:47	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 16:47	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 16:47	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 16:47	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 16:47	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 16:47	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 16:47	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 16:47	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 16:47	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 16:47	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 16:47	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 16:47	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 16:47	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 16:47	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 16:47	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 16:47	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 16:47	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 16:47	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 16:47	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 16:47	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 16:47	1
cis-1,2-Dichloroethene	0.268 J		1.00	0.210	ug/L			05/24/25 16:47	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 16:47	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 16:47	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 16:47	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 16:47	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 16:47	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 16:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 16:47	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 16:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 16:47	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 16:47	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 16:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 16:47	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 16:47	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 16:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 16:47	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 16:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 16:47	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-47

Lab Sample ID: 310-307094-12

Date Collected: 05/21/25 11:54

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 16:47	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:13	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:13	1
Barium	0.118		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:13	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:13	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:13	1
Chromium	0.00184	J	0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:13	1
Cobalt	0.000717		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:13	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:13	1
Lead	0.000630		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:13	1
Nickel	0.00245	J	0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:13	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:13	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:13	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:13	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:13	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	41.0		3.75	2.63	mg/L			05/23/25 11:39	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-48

Lab Sample ID: 310-307094-13

Date Collected: 05/21/25 11:10

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 17:10	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 17:10	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 17:10	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 17:10	1
1,1-Dichloroethane	52.8		1.00	0.220	ug/L			05/24/25 17:10	1
1,1-Dichloroethene	0.560	J	2.00	0.560	ug/L			05/24/25 17:10	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 17:10	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 17:10	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 17:10	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 17:10	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 17:10	1
1,2-Dichloropropane	0.328	J	1.00	0.270	ug/L			05/24/25 17:10	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 17:10	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 17:10	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 17:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 17:10	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 17:10	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 17:10	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 17:10	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 17:10	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 17:10	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 17:10	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 17:10	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 17:10	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 17:10	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 17:10	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 17:10	1
Chloroethane	11.2		4.00	0.790	ug/L			05/24/25 17:10	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 17:10	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 17:10	1
cis-1,2-Dichloroethene	3.05		1.00	0.210	ug/L			05/24/25 17:10	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 17:10	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 17:10	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 17:10	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 17:10	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 17:10	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 17:10	1
Tetrachloroethene	1.51		1.00	0.480	ug/L			05/24/25 17:10	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 17:10	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 17:10	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 17:10	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 17:10	1
Trichloroethene	0.871	J	1.00	0.430	ug/L			05/24/25 17:10	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 17:10	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 17:10	1
Vinyl chloride	0.449	J	1.00	0.180	ug/L			05/24/25 17:10	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 17:10	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-48

Lab Sample ID: 310-307094-13

Date Collected: 05/21/25 11:10

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 17:10	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 17:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:16	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:16	1
Barium	0.162		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:16	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:16	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:16	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:16	1
Cobalt	0.000434	J	0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:16	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:16	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:16	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:16	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:16	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:16	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:16	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:16	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	18.0		1.88	1.31	mg/L			05/23/25 11:39	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-49

Lab Sample ID: 310-307094-14

Date Collected: 05/19/25 18:16

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 17:33	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 17:33	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 17:33	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 17:33	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 17:33	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 17:33	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 17:33	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 17:33	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 17:33	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 17:33	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 17:33	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 17:33	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 17:33	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 17:33	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 17:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 17:33	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 17:33	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 17:33	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 17:33	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 17:33	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 17:33	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 17:33	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 17:33	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 17:33	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 17:33	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 17:33	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 17:33	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 17:33	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 17:33	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 17:33	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 17:33	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 17:33	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 17:33	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 17:33	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 17:33	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 17:33	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 17:33	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 17:33	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 17:33	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 17:33	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 17:33	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 17:33	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 17:33	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 17:33	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 17:33	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 17:33	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 17:33	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-49

Lab Sample ID: 310-307094-14

Date Collected: 05/19/25 18:16

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		05/24/25 17:33	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 17:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:19	1
Arsenic	0.000683	J	0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:19	1
Barium	0.0621		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:19	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:19	1
Cadmium	0.000109	J	0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:19	1
Chromium	0.00440	J	0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:19	1
Cobalt	0.000314	J	0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:19	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:19	1
Lead	0.000357	J	0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:19	1
Nickel	0.00378	J	0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:19	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:19	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:19	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:19	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:19	1
Zinc	0.0251		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	6.38		1.88	1.31	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: PZ-10
 Date Collected: 05/20/25 14:12
 Date Received: 05/22/25 16:10

Lab Sample ID: 310-307094-15
 Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 17:56	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 17:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 17:56	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 17:56	1
1,1-Dichloroethane	0.974	J	1.00	0.220	ug/L			05/24/25 17:56	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 17:56	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 17:56	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 17:56	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 17:56	1
1,2-Dichlorobenzene	0.402	J	1.00	0.370	ug/L			05/24/25 17:56	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 17:56	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 17:56	1
1,4-Dichlorobenzene	5.90		1.00	0.230	ug/L			05/24/25 17:56	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 17:56	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 17:56	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 17:56	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 17:56	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 17:56	1
Benzene	2.26		0.500	0.220	ug/L			05/24/25 17:56	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 17:56	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 17:56	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 17:56	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 17:56	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 17:56	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 17:56	1
Chlorobenzene	11.3		1.00	0.400	ug/L			05/24/25 17:56	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 17:56	1
Chloroethane	3.07	J	4.00	0.790	ug/L			05/24/25 17:56	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 17:56	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 17:56	1
cis-1,2-Dichloroethene	0.388	J	1.00	0.210	ug/L			05/24/25 17:56	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 17:56	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 17:56	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 17:56	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 17:56	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 17:56	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 17:56	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 17:56	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 17:56	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 17:56	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 17:56	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 17:56	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 17:56	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 17:56	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 17:56	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 17:56	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		76 - 130		05/24/25 17:56	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: PZ-10

Lab Sample ID: 310-307094-15

Date Collected: 05/20/25 14:12

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 17:56	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00692		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:22	1
Barium	0.299		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:22	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:22	1
Cobalt	0.0179		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:22	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:22	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:22	1
Nickel	0.0123		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:22	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:22	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:22	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	11.8		3.75	2.63	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: GW-Lagoon-Cell 1W

Lab Sample ID: 310-307094-16

Date Collected: 05/21/25 13:25

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 18:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 18:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 18:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 18:19	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 18:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 18:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 18:19	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 18:19	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 18:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 18:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 18:19	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 18:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 18:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 18:19	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 18:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 18:19	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 18:19	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 18:19	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 18:19	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 18:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 18:19	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 18:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 18:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 18:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 18:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 18:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 18:19	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 18:19	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 18:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 18:19	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 18:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 18:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 18:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 18:19	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 18:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 18:19	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 18:19	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 18:19	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 18:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 18:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 18:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 18:19	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 18:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 18:19	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 18:19	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 18:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 18:19	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: GW-Lagoon-Cell 1W

Lab Sample ID: 310-307094-16

Date Collected: 05/21/25 13:25

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 18:19	1
4-Bromofluorobenzene (Surr)	98		80 - 120		05/24/25 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000863	J	0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:25	1
Barium	0.137		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:25	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:25	1
Cobalt	0.000810		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:25	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:25	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:25	1
Nickel	0.00394	J	0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:25	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:25	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:25	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	2.75		1.88	1.31	mg/L			05/23/25 11:39	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-D

Lab Sample ID: 310-307094-17

Date Collected: 05/20/25 11:53

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 18:41	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 18:41	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 18:41	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 18:41	1
1,1-Dichloroethane	44.5		1.00	0.220	ug/L			05/24/25 18:41	1
1,1-Dichloroethene	2.79		2.00	0.560	ug/L			05/24/25 18:41	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 18:41	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 18:41	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 18:41	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 18:41	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 18:41	1
1,2-Dichloropropane	0.313	J	1.00	0.270	ug/L			05/24/25 18:41	1
1,4-Dichlorobenzene	0.278	J	1.00	0.230	ug/L			05/24/25 18:41	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 18:41	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 18:41	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 18:41	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 18:41	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 18:41	1
Benzene	0.661		0.500	0.220	ug/L			05/24/25 18:41	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 18:41	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 18:41	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 18:41	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 18:41	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 18:41	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 18:41	1
Chlorobenzene	4.27		1.00	0.400	ug/L			05/24/25 18:41	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 18:41	1
Chloroethane	19.1		4.00	0.790	ug/L			05/24/25 18:41	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 18:41	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 18:41	1
cis-1,2-Dichloroethene	3.12		1.00	0.210	ug/L			05/24/25 18:41	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 18:41	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 18:41	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 18:41	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 18:41	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 18:41	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 18:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 18:41	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 18:41	1
trans-1,2-Dichloroethene	0.310	J	1.00	0.270	ug/L			05/24/25 18:41	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 18:41	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 18:41	1
Trichloroethene	0.499	J	1.00	0.430	ug/L			05/24/25 18:41	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 18:41	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 18:41	1
Vinyl chloride	0.834	J	1.00	0.180	ug/L			05/24/25 18:41	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 18:41	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-D

Lab Sample ID: 310-307094-17

Date Collected: 05/20/25 11:53

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		05/24/25 18:41	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 16:37	1
Arsenic	0.00260		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 16:37	1
Barium	0.0192		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 16:37	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 16:37	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 16:37	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 16:37	1
Cobalt	0.0142		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 16:37	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 16:37	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 16:37	1
Nickel	0.0489		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 16:37	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 16:37	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 16:37	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 16:37	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 16:37	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	13.8		3.75	2.63	mg/L			05/23/25 09:16	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-307094-18

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 14:07	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 14:07	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 14:07	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 14:07	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 14:07	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 14:07	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 14:07	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 14:07	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 14:07	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 14:07	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 14:07	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 14:07	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 14:07	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 14:07	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 14:07	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 14:07	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 14:07	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 14:07	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 14:07	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 14:07	1
Bromodichloromethane	0.593	J	1.00	0.390	ug/L			05/24/25 14:07	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 14:07	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 14:07	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 14:07	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 14:07	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 14:07	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 14:07	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 14:07	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 14:07	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 14:07	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 14:07	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 14:07	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 14:07	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 14:07	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 14:07	1
Methylene Chloride	1.72	J	5.00	1.70	ug/L			05/24/25 14:07	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 14:07	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 14:07	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 14:07	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 14:07	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 14:07	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 14:07	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 14:07	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 14:07	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 14:07	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 14:07	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		76 - 130		05/24/25 14:07	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-307094-18

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		05/24/25 14:07	1
<i>4-Bromofluorobenzene (Surr)</i>	101		80 - 120		05/24/25 14:07	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-307094-19

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 14:30	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 14:30	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 14:30	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 14:30	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 14:30	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 14:30	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 14:30	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 14:30	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 14:30	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 14:30	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 14:30	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 14:30	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 14:30	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 14:30	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 14:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 14:30	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 14:30	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 14:30	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 14:30	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 14:30	1
Bromodichloromethane	0.626	J	1.00	0.390	ug/L			05/24/25 14:30	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 14:30	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 14:30	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 14:30	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 14:30	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 14:30	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 14:30	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 14:30	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 14:30	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 14:30	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 14:30	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 14:30	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 14:30	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 14:30	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 14:30	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 14:30	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 14:30	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 14:30	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 14:30	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 14:30	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 14:30	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 14:30	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 14:30	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 14:30	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 14:30	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 14:30	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		76 - 130		05/24/25 14:30	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-307094-19

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		80 - 120		05/24/25 14:30	1
<i>4-Bromofluorobenzene (Surr)</i>	98		80 - 120		05/24/25 14:30	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-307094-20

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 14:53	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 14:53	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 14:53	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 14:53	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 14:53	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 14:53	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 14:53	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 14:53	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 14:53	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 14:53	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 14:53	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 14:53	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 14:53	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 14:53	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 14:53	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 14:53	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 14:53	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 14:53	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 14:53	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 14:53	1
Bromodichloromethane	0.506	J	1.00	0.390	ug/L			05/24/25 14:53	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 14:53	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 14:53	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 14:53	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 14:53	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 14:53	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 14:53	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 14:53	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 14:53	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 14:53	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 14:53	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 14:53	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 14:53	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 14:53	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 14:53	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 14:53	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 14:53	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 14:53	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 14:53	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 14:53	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 14:53	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 14:53	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 14:53	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 14:53	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 14:53	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 14:53	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 14:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 14:53	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-307094-20

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120		05/24/25 14:53	1
<i>4-Bromofluorobenzene (Surr)</i>	100		80 - 120		05/24/25 14:53	1

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Definitions/Glossary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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
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)

Definitions/Glossary

Client: SCS Engineers

Job ID: 310-307094-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (HMSP)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Surrogate Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-307094-1	MW-4-89	109	98	97
310-307094-2	MW-1-99	109	99	98
310-307094-3	MW-4-93	109	98	97
310-307094-4	MW-7-93	108	98	98
310-307094-5	MW-37	112	98	100
310-307094-6	MW-39R	113	97	96
310-307094-7	MW-40R	109	97	99

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Trip Blank

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-307094-8	Trip Blank 1	109	97	99

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-307094-9	MW-43	110	97	99
310-307094-10	MW-45R	109	97	100
310-307094-11	MW-46R	110	97	98
310-307094-12	MW-47	110	97	98
310-307094-13	MW-48	110	97	99
310-307094-14	MW-49	109	98	99
310-307094-15	PZ-10	111	97	98
310-307094-16	GW-Lagoon-Cell 1W	109	97	98
310-307094-17	MW-D	110	97	99
310-307094-18	Trip Blank 2	111	97	101
310-307094-19	Trip Blank 3	109	97	98
310-307094-20	Trip Blank 4	110	98	100
LCS 310-455656/6	Lab Control Sample	103	101	98
LCS 310-455656/7	Lab Control Sample	109	97	99
LCS 310-455658/6	Lab Control Sample	101	101	100
LCS 310-455658/7	Lab Control Sample	112	96	99
MB 310-455656/5	Method Blank	110	97	99
MB 310-455658/5	Method Blank	110	98	99

Surrogate Legend

Eurofins Cedar Falls

Surrogate Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling
 DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Groundwater

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2FP (21-110)	PHL (21-110)	TBP (20-144)
310-307094-3	MW-4-93	40	35	45

Surrogate Legend

2FP = 2-Fluorophenol (Surr)
 PHL = Phenol-d5 (Surr)
 TBP = 2,4,6-Tribromophenol (Surr)

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2FP (21-110)	PHL (21-110)	TBP (20-144)
LCS 310-455764/2-A	Lab Control Sample	66	60	97
LCSD 310-455764/3-A	Lab Control Sample Dup	57	53	85
MB 310-455764/1-A	Method Blank	14 S1-	36	24

Surrogate Legend

2FP = 2-Fluorophenol (Surr)
 PHL = Phenol-d5 (Surr)
 TBP = 2,4,6-Tribromophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Groundwater

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-150)	TCX1 (17-150)
310-307094-1	MW-4-89	88	54
310-307094-3	MW-4-93	66	51
310-307094-6	MW-39R	71	57
310-307094-7	MW-40R	80	47

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
 TCX = Tetrachloro-m-xylene (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-150)	TCX1 (17-150)
LB 310-455749/1-D	Method Blank	72	53
LCS 310-455585/2-A	Lab Control Sample	59	66
LCS 310-455939/3-A	Lab Control Sample	82	65
MB 310-455585/1-A	Method Blank	53	56
MB 310-455939/1-A	Method Blank	67	66

Surrogate Legend

Eurofins Cedar Falls

Surrogate Summary

Client: SCS Engineers

Job ID: 310-307094-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (HMSP)

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

Method: 8151A - Herbicides (GC)

Matrix: Groundwater

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA1 (25-130)
310-307094-3	MW-4-93	132 S1+
310-307094-6	MW-39R	78

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA1 (25-130)
LCS 500-819008/2-A	Lab Control Sample	90
LCSD 500-819008/3-A	Lab Control Sample Dup	85
MB 500-819008/1-A	Method Blank	70

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-455656/5
Matrix: Water
Analysis Batch: 455656

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 01:57	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 01:57	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 01:57	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 01:57	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 01:57	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 01:57	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 01:57	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 01:57	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 01:57	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 01:57	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 01:57	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 01:57	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 01:57	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 01:57	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 01:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 01:57	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 01:57	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 01:57	1
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 01:57	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 01:57	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 01:57	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 01:57	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 01:57	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 01:57	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 01:57	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 01:57	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 01:57	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 01:57	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 01:57	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 01:57	1
cis-1,2-Dichloroethene	0.3052	J	1.00	0.210	ug/L			05/24/25 01:57	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 01:57	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 01:57	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			05/24/25 01:57	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 01:57	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 01:57	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 01:57	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 01:57	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 01:57	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 01:57	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 01:57	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 01:57	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 01:57	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 01:57	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 01:57	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 01:57	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 01:57	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 01:57	1

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-455656/5
Matrix: Water
Analysis Batch: 455656

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 01:57	1
Toluene-d8 (Surr)	97		80 - 120		05/24/25 01:57	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 01:57	1

Lab Sample ID: LCS 310-455656/6
Matrix: Water
Analysis Batch: 455656

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	21.54		ug/L		108	70 - 121
1,1,1,1-Trichloroethane	20.0	22.39		ug/L		112	69 - 130
1,1,1,2,2-Tetrachloroethane	20.0	22.22		ug/L		111	70 - 122
1,1,2-Trichloroethane	20.0	21.52		ug/L		108	75 - 121
1,1-Dichloroethane	20.0	23.31		ug/L		117	69 - 127
1,1-Dichloroethane	20.0	24.69		ug/L		123	64 - 134
1,2,3-Trichloropropane	20.0	22.04		ug/L		110	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	20.64		ug/L		103	62 - 132
1,2-Dibromoethane (EDB)	20.0	22.29		ug/L		111	74 - 122
1,2-Dichlorobenzene	20.0	22.23		ug/L		111	74 - 120
1,2-Dichloroethane	20.0	22.85		ug/L		114	68 - 125
1,2-Dichloropropane	20.0	22.77		ug/L		114	72 - 128
1,4-Dichlorobenzene	20.0	22.18		ug/L		111	72 - 120
2-Butanone (MEK)	40.0	41.72		ug/L		104	60 - 134
2-Hexanone	40.0	42.62		ug/L		107	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	43.49		ug/L		109	62 - 136
Acetone	40.0	43.75		ug/L		109	59 - 136
Acrylonitrile	200	227.5		ug/L		114	50 - 150
Benzene	20.0	23.02		ug/L		115	71 - 125
Bromochloromethane	20.0	23.67		ug/L		118	69 - 131
Bromodichloromethane	20.0	21.26		ug/L		106	70 - 122
Bromoform	20.0	21.83		ug/L		109	62 - 122
Carbon disulfide	20.0	23.82		ug/L		119	58 - 137
Carbon tetrachloride	20.0	23.06		ug/L		115	63 - 136
Chlorobenzene	20.0	22.37		ug/L		112	74 - 120
Chlorodibromomethane	20.0	22.22		ug/L		111	69 - 121
Chloroform	20.0	22.49		ug/L		112	72 - 122
cis-1,2-Dichloroethene	20.0	23.14		ug/L		116	72 - 123
cis-1,3-Dichloropropene	20.0	21.95		ug/L		110	72 - 123
Dibromomethane	20.0	23.10		ug/L		116	72 - 122
Ethylbenzene	20.0	22.79		ug/L		114	75 - 120
Iodomethane	20.0	25.33		ug/L		127	18 - 150
Methylene Chloride	20.0	21.61		ug/L		108	72 - 128
Styrene	20.0	23.46		ug/L		117	74 - 122
Tetrachloroethene	20.0	23.58		ug/L		118	70 - 128
Toluene	20.0	22.96		ug/L		115	74 - 120
trans-1,2-Dichloroethene	20.0	23.74		ug/L		119	67 - 127
trans-1,3-Dichloropropene	20.0	21.84		ug/L		109	67 - 123
trans-1,4-Dichloro-2-butene	20.0	21.38		ug/L		107	50 - 150

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-455656/6
Matrix: Water
Analysis Batch: 455656

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Trichloroethene	20.0	22.10		ug/L		110	70 - 128
Vinyl acetate	40.0	55.87		ug/L		140	50 - 150
Xylenes, Total	40.0	45.39		ug/L		113	74 - 121

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	103		76 - 130
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Lab Sample ID: LCS 310-455656/7
Matrix: Water
Analysis Batch: 455656

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	18.02		ug/L		90	33 - 138
Chloroethane	20.0	19.99		ug/L		100	59 - 139
Chloromethane	20.0	20.27		ug/L		101	52 - 146
Trichlorofluoromethane	20.0	21.20		ug/L		106	55 - 150
Vinyl chloride	20.0	20.44		ug/L		102	60 - 142

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	109		76 - 130
Toluene-d8 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120

Lab Sample ID: MB 310-455658/5
Matrix: Water
Analysis Batch: 455658

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/24/25 12:58	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/24/25 12:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/24/25 12:58	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/24/25 12:58	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/24/25 12:58	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/24/25 12:58	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/24/25 12:58	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/24/25 12:58	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/24/25 12:58	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/24/25 12:58	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/24/25 12:58	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/24/25 12:58	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/24/25 12:58	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/24/25 12:58	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/24/25 12:58	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/24/25 12:58	1
Acetone	<10.0		10.0	3.10	ug/L			05/24/25 12:58	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/24/25 12:58	1

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-455658/5
Matrix: Water
Analysis Batch: 455658

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.220	ug/L			05/24/25 12:58	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/24/25 12:58	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/24/25 12:58	1
Bromoform	<5.00		5.00	0.780	ug/L			05/24/25 12:58	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/24/25 12:58	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/24/25 12:58	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/24/25 12:58	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/24/25 12:58	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/24/25 12:58	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/24/25 12:58	1
Chloroform	<3.00		3.00	1.30	ug/L			05/24/25 12:58	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/24/25 12:58	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/24/25 12:58	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/24/25 12:58	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/24/25 12:58	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/24/25 12:58	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/24/25 12:58	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/24/25 12:58	1
Styrene	<1.00		1.00	0.370	ug/L			05/24/25 12:58	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/24/25 12:58	1
Toluene	<1.00		1.00	0.430	ug/L			05/24/25 12:58	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/24/25 12:58	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/24/25 12:58	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/24/25 12:58	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/24/25 12:58	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/24/25 12:58	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/24/25 12:58	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/24/25 12:58	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/24/25 12:58	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	110		76 - 130		05/24/25 12:58	1
Toluene-d8 (Surr)	98		80 - 120		05/24/25 12:58	1
4-Bromofluorobenzene (Surr)	99		80 - 120		05/24/25 12:58	1

Lab Sample ID: LCS 310-455658/6
Matrix: Water
Analysis Batch: 455658

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	21.55		ug/L		108	69 - 130
1,1,2,2-Tetrachloroethane	20.0	21.33		ug/L		107	70 - 122
1,1,2-Trichloroethane	20.0	20.99		ug/L		105	75 - 121
1,1-Dichloroethane	20.0	22.30		ug/L		111	69 - 127
1,1-Dichloroethene	20.0	24.13		ug/L		121	64 - 134
1,2,3-Trichloropropane	20.0	21.31		ug/L		107	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	19.64		ug/L		98	62 - 132

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-455658/6

Matrix: Water

Analysis Batch: 455658

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	20.0	21.91		ug/L		110	74 - 122
1,2-Dichlorobenzene	20.0	21.29		ug/L		106	74 - 120
1,2-Dichloroethane	20.0	22.10		ug/L		110	68 - 125
1,2-Dichloropropane	20.0	21.93		ug/L		110	72 - 128
1,4-Dichlorobenzene	20.0	21.22		ug/L		106	72 - 120
2-Butanone (MEK)	40.0	40.76		ug/L		102	60 - 134
2-Hexanone	40.0	42.50		ug/L		106	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	42.44		ug/L		106	62 - 136
Acetone	40.0	41.50		ug/L		104	59 - 136
Acrylonitrile	200	220.9		ug/L		110	50 - 150
Benzene	20.0	22.01		ug/L		110	71 - 125
Bromochloromethane	20.0	22.93		ug/L		115	69 - 131
Bromodichloromethane	20.0	20.80		ug/L		104	70 - 122
Bromoform	20.0	21.11		ug/L		106	62 - 122
Carbon disulfide	20.0	22.47		ug/L		112	58 - 137
Carbon tetrachloride	20.0	22.12		ug/L		111	63 - 136
Chlorobenzene	20.0	21.57		ug/L		108	74 - 120
Chlorodibromomethane	20.0	21.64		ug/L		108	69 - 121
Chloroform	20.0	21.54		ug/L		108	72 - 122
cis-1,2-Dichloroethene	20.0	22.00		ug/L		110	72 - 123
cis-1,3-Dichloropropene	20.0	20.84		ug/L		104	72 - 123
Dibromomethane	20.0	21.74		ug/L		109	72 - 122
Ethylbenzene	20.0	22.14		ug/L		111	75 - 120
Iodomethane	20.0	23.43		ug/L		117	18 - 150
Methylene Chloride	20.0	20.61		ug/L		103	72 - 128
Styrene	20.0	22.58		ug/L		113	74 - 122
Tetrachloroethene	20.0	22.97		ug/L		115	70 - 128
Toluene	20.0	22.18		ug/L		111	74 - 120
trans-1,2-Dichloroethene	20.0	22.69		ug/L		113	67 - 127
trans-1,3-Dichloropropene	20.0	20.26		ug/L		101	67 - 123
trans-1,4-Dichloro-2-butene	20.0	19.61		ug/L		98	50 - 150
Trichloroethene	20.0	21.17		ug/L		106	70 - 128
Vinyl acetate	40.0	48.53		ug/L		121	50 - 150
Xylenes, Total	40.0	44.02		ug/L		110	74 - 121

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	101		76 - 130
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120

Lab Sample ID: LCS 310-455658/7

Matrix: Water

Analysis Batch: 455658

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	18.16		ug/L		91	33 - 138
Chloroethane	20.0	20.18		ug/L		101	59 - 139
Chloromethane	20.0	20.74		ug/L		104	52 - 146

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-455658/7
Matrix: Water
Analysis Batch: 455658

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Trichlorofluoromethane	20.0	21.23		ug/L		106	55 - 150	
Vinyl chloride	20.0	20.33		ug/L		102	60 - 142	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	112		76 - 130
Toluene-d8 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-455764/1-A
Matrix: Water
Analysis Batch: 456619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<10.0		10.0	1.10	ug/L		05/27/25 11:33	06/05/25 00:07	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol (Surr)	14	S1-	21 - 110	05/27/25 11:33	06/05/25 00:07	1
Phenol-d5 (Surr)	36		21 - 110	05/27/25 11:33	06/05/25 00:07	1
2,4,6-Tribromophenol (Surr)	24		20 - 144	05/27/25 11:33	06/05/25 00:07	1

Lab Sample ID: LCS 310-455764/2-A
Matrix: Water
Analysis Batch: 456619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
4-Methylphenol (and/or 3-Methylphenol) Phenol	100	78.61		ug/L		79	45 - 114	
Phenol	100	56.69		ug/L		57	29 - 110	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol (Surr)	66		21 - 110
Phenol-d5 (Surr)	60		21 - 110
2,4,6-Tribromophenol (Surr)	97		20 - 144

Lab Sample ID: LCSD 310-455764/3-A
Matrix: Water
Analysis Batch: 456619

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 455764

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
4-Methylphenol (and/or 3-Methylphenol) Phenol	100	74.38		ug/L		74	45 - 114	6	35
Phenol	100	53.48		ug/L		53	29 - 110	6	35

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-455764/3-A
Matrix: Water
Analysis Batch: 456619

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 455764

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2-Fluorophenol (Surr)	57		21 - 110
Phenol-d5 (Surr)	53		21 - 110
2,4,6-Tribromophenol (Surr)	85		20 - 144

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-455585/1-A
Matrix: Water
Analysis Batch: 455576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455585

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4,4'-DDT	<0.0978		0.0978	0.0196	ug/L		05/23/25 09:56	05/23/25 11:42	1
alpha-BHC	<0.0978		0.0978	0.00978	ug/L		05/23/25 09:56	05/23/25 11:42	1
Endrin aldehyde	<0.0978		0.0978	0.0264	ug/L		05/23/25 09:56	05/23/25 11:42	1
Methoxychlor	<0.0978		0.0978	0.0313	ug/L		05/23/25 09:56	05/23/25 11:42	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	53		10 - 150	05/23/25 09:56	05/23/25 11:42	1
Tetrachloro-m-xylene (Surr)	56		17 - 150	05/23/25 09:56	05/23/25 11:42	1

Lab Sample ID: LCS 310-455585/2-A
Matrix: Water
Analysis Batch: 455576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455585

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Methoxychlor	2.79	2.193		ug/L		79	16 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	59		10 - 150
Tetrachloro-m-xylene (Surr)	66		17 - 150

Lab Sample ID: LB 310-455749/1-D
Matrix: Water
Analysis Batch: 456115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455939

Analyte	LB LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
alpha-BHC	<0.0928		0.0928	0.00928	ug/L		05/28/25 12:23	05/29/25 19:43	1

Surrogate	LB LB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	72		10 - 150	05/28/25 12:23	05/29/25 19:43	1
Tetrachloro-m-xylene (Surr)	53		17 - 150	05/28/25 12:23	05/29/25 19:43	1

Lab Sample ID: MB 310-455939/1-A
Matrix: Water
Analysis Batch: 456115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455939

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
alpha-BHC	<0.0983		0.0983	0.00983	ug/L		05/28/25 12:23	05/29/25 19:30	1

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	67		10 - 150	05/28/25 12:23	05/29/25 19:30	1
Tetrachloro-m-xylene (Surr)	66		17 - 150	05/28/25 12:23	05/29/25 19:30	1

Lab Sample ID: LCS 310-455939/3-A
 Matrix: Water
 Analysis Batch: 456115

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 455939

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	2.78	2.831		ug/L		102	57 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	82		10 - 150
Tetrachloro-m-xylene (Surr)	65		17 - 150

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-819008/1-A
 Matrix: Water
 Analysis Batch: 819169

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 819008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	<1.00		1.00	0.105	ug/L		05/27/25 07:27	05/27/25 18:44	1
2,4-D	<1.00		1.00	0.126	ug/L		05/27/25 07:27	05/27/25 18:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	70		25 - 130	05/27/25 07:27	05/27/25 18:44	1

Lab Sample ID: LCS 500-819008/2-A
 Matrix: Water
 Analysis Batch: 819169

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 819008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-T	2.53	2.733		ug/L		108	30 - 115
Silvex (2,4,5-TP)	2.50	2.628		ug/L		105	32 - 115
2,4-D	10.0	10.14		ug/L		101	30 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid (Surr)	90		25 - 130

Lab Sample ID: LCSD 500-819008/3-A
 Matrix: Water
 Analysis Batch: 819169

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 819008

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
2,4,5-T	2.53	2.520		ug/L		100	30 - 115	8	20
Silvex (2,4,5-TP)	2.50	2.569		ug/L		103	32 - 115	2	20
2,4-D	10.0	9.493		ug/L		95	30 - 115	7	20

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 500-819008/3-A
Matrix: Water
Analysis Batch: 819169

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 819008

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid (Surr)	85		25 - 130

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-455681/1-A
Matrix: Water
Analysis Batch: 456147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455681

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/27/25 09:00	05/29/25 14:05	1
Barium	<0.00200		0.00200	0.000660	mg/L		05/27/25 09:00	05/29/25 14:05	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/27/25 09:00	05/29/25 14:05	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/27/25 09:00	05/29/25 14:05	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/27/25 09:00	05/29/25 14:05	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/27/25 09:00	05/29/25 14:05	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/27/25 09:00	05/29/25 14:05	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/27/25 09:00	05/29/25 14:05	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/27/25 09:00	05/29/25 14:05	1

Lab Sample ID: MB 310-455681/1-A
Matrix: Water
Analysis Batch: 456239

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455681

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.00500		0.00500	0.00230	mg/L		05/27/25 09:00	05/30/25 14:49	1

Lab Sample ID: LCS 310-455681/2-A
Matrix: Water
Analysis Batch: 456147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2124		mg/L		106	80 - 120
Barium	0.100	0.1052		mg/L		105	80 - 120
Chromium	0.100	0.1017		mg/L		102	80 - 120
Cobalt	0.100	0.1008		mg/L		101	80 - 120
Copper	0.200	0.2096		mg/L		105	80 - 120
Lead	0.200	0.2021		mg/L		101	80 - 120
Selenium	0.400	0.3930		mg/L		98	80 - 120
Vanadium	0.100	0.1008		mg/L		101	80 - 120
Zinc	0.200	0.1941		mg/L		97	80 - 120

Lab Sample ID: LCS 310-455681/2-A
Matrix: Water
Analysis Batch: 456239

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	0.200	0.2057		mg/L		103	80 - 120

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

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

Lab Sample ID: MB 310-455834/1-A
Matrix: Water
Analysis Batch: 456144

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 455834

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/28/25 09:20	05/29/25 15:34	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/28/25 09:20	05/29/25 15:34	1
Barium	<0.00200		0.00200	0.000660	mg/L		05/28/25 09:20	05/29/25 15:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/28/25 09:20	05/29/25 15:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/28/25 09:20	05/29/25 15:34	1
Chromium	<0.00500		0.00500	0.00180	mg/L		05/28/25 09:20	05/29/25 15:34	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/28/25 09:20	05/29/25 15:34	1
Copper	<0.00500		0.00500	0.00320	mg/L		05/28/25 09:20	05/29/25 15:34	1
Lead	<0.000500		0.000500	0.000330	mg/L		05/28/25 09:20	05/29/25 15:34	1
Nickel	<0.00500		0.00500	0.00230	mg/L		05/28/25 09:20	05/29/25 15:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/28/25 09:20	05/29/25 15:34	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/28/25 09:20	05/29/25 15:34	1
Thallium	<0.00100		0.00100	0.000570	mg/L		05/28/25 09:20	05/29/25 15:34	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		05/28/25 09:20	05/29/25 15:34	1
Zinc	<0.0200		0.0200	0.0130	mg/L		05/28/25 09:20	05/29/25 15:34	1

Lab Sample ID: LCS 310-455834/2-A
Matrix: Water
Analysis Batch: 456144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455834

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2085		mg/L		104	80 - 120
Arsenic	0.200	0.1966		mg/L		98	80 - 120
Barium	0.100	0.09689		mg/L		97	80 - 120
Beryllium	0.100	0.09849		mg/L		98	80 - 120
Cadmium	0.100	0.09778		mg/L		98	80 - 120
Chromium	0.100	0.09958		mg/L		100	80 - 120
Cobalt	0.100	0.09873		mg/L		99	80 - 120
Copper	0.200	0.2037		mg/L		102	80 - 120
Lead	0.200	0.1936		mg/L		97	80 - 120
Nickel	0.200	0.2008		mg/L		100	80 - 120
Selenium	0.400	0.3857		mg/L		96	80 - 120
Silver	0.100	0.1149		mg/L		115	80 - 120
Thallium	0.100	0.08917		mg/L		89	80 - 120
Vanadium	0.100	0.09844		mg/L		98	80 - 120
Zinc	0.200	0.1872		mg/L		94	80 - 120

Lab Sample ID: 310-307094-5 MS
Matrix: Groundwater
Analysis Batch: 456144

Client Sample ID: MW-37
Prep Type: Total/NA
Prep Batch: 455834

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200		0.200	0.2259		mg/L		113	75 - 125
Arsenic	0.00264		0.200	0.2194		mg/L		108	75 - 125
Barium	0.0186		0.100	0.1222		mg/L		104	75 - 125
Beryllium	<0.00100		0.100	0.09653		mg/L		97	75 - 125
Cadmium	<0.000200		0.100	0.1003		mg/L		100	75 - 125
Chromium	<0.00500		0.100	0.09857		mg/L		99	75 - 125
Cobalt	0.0138		0.100	0.1079		mg/L		94	75 - 125

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

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

Lab Sample ID: 310-307094-5 MS
Matrix: Groundwater
Analysis Batch: 456144

Client Sample ID: MW-37
Prep Type: Total/NA
Prep Batch: 455834

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Copper	<0.00500		0.200	0.1897		mg/L		95	75 - 125	
Lead	<0.000500		0.200	0.1989		mg/L		99	75 - 125	
Nickel	0.0475		0.200	0.2376		mg/L		95	75 - 125	
Selenium	<0.00500		0.400	0.4026		mg/L		101	75 - 125	
Silver	<0.00100		0.100	0.1069		mg/L		107	75 - 125	
Thallium	<0.00100		0.100	0.08621		mg/L		86	75 - 125	
Vanadium	<0.00500		0.100	0.1000		mg/L		100	75 - 125	
Zinc	<0.0200		0.200	0.1880		mg/L		94	75 - 125	

Lab Sample ID: 310-307094-5 MSD
Matrix: Groundwater
Analysis Batch: 456144

Client Sample ID: MW-37
Prep Type: Total/NA
Prep Batch: 455834

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Antimony	<0.00200		0.200	0.2169		mg/L		108	75 - 125		4	20
Arsenic	0.00264		0.200	0.2087		mg/L		103	75 - 125		5	20
Barium	0.0186		0.100	0.1203		mg/L		102	75 - 125		2	20
Beryllium	<0.00100		0.100	0.09165		mg/L		92	75 - 125		5	20
Cadmium	<0.000200		0.100	0.09584		mg/L		96	75 - 125		5	20
Chromium	<0.00500		0.100	0.09538		mg/L		95	75 - 125		3	20
Cobalt	0.0138		0.100	0.1052		mg/L		91	75 - 125		3	20
Copper	<0.00500		0.200	0.1840		mg/L		92	75 - 125		3	20
Lead	<0.000500		0.200	0.1913		mg/L		96	75 - 125		4	20
Nickel	0.0475		0.200	0.2328		mg/L		93	75 - 125		2	20
Selenium	<0.00500		0.400	0.3908		mg/L		98	75 - 125		3	20
Silver	<0.00100		0.100	0.1094		mg/L		109	75 - 125		2	20
Thallium	<0.00100		0.100	0.08212		mg/L		82	75 - 125		5	20
Vanadium	<0.00500		0.100	0.09688		mg/L		97	75 - 125		3	20
Zinc	<0.0200		0.200	0.1793		mg/L		90	75 - 125		5	20

Lab Sample ID: 310-307094-16 DU
Matrix: Water
Analysis Batch: 456144

Client Sample ID: GW-Lagoon-Cell 1W
Prep Type: Total/NA
Prep Batch: 455834

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	0.000863	J	0.0009840	J	mg/L		13	20
Barium	0.137		0.1425		mg/L		4	20
Beryllium	<0.00100		<0.00100		mg/L		NC	20
Cadmium	0.000109	J	0.0001540	J F5	mg/L		34	20
Chromium	<0.00500		<0.00500		mg/L		NC	20
Cobalt	0.000810		0.0008810		mg/L		8	20
Copper	<0.00500		<0.00500		mg/L		NC	20
Lead	<0.000500		<0.000500		mg/L		NC	20
Nickel	0.00394	J	0.004210	J	mg/L		7	20
Selenium	<0.00500		<0.00500		mg/L		NC	20
Silver	<0.00100		<0.00100		mg/L		NC	20
Thallium	<0.00100		<0.00100		mg/L		NC	20
Vanadium	<0.00500		<0.00500		mg/L		NC	20

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

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

Lab Sample ID: 310-307094-16 DU
 Matrix: Water
 Analysis Batch: 456144

Client Sample ID: GW-Lagoon-Cell 1W
 Prep Type: Total/NA
 Prep Batch: 455834

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Zinc	<0.0200		<0.0200		mg/L		NC	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-819041/1-A
 Matrix: Water
 Analysis Batch: 819043

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 819041

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	<1.00		1.00	0.231	mg/L		05/26/25 18:30	05/27/25 04:57	1

Lab Sample ID: LCS 500-819041/2-A
 Matrix: Water
 Analysis Batch: 819043

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 819041

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Sulfide	3.97	3.619		mg/L		91	80 - 120

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-455571/1
 Matrix: Water
 Analysis Batch: 455571

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.00		5.00	3.50	mg/L			05/23/25 09:16	1

Lab Sample ID: LCS 310-455571/2
 Matrix: Water
 Analysis Batch: 455571

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Total Suspended Solids	100	114.0		mg/L		114	81 - 116

Lab Sample ID: 310-307094-9 DU
 Matrix: Water
 Analysis Batch: 455571

Client Sample ID: MW-43
 Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Suspended Solids	66.0		72.00		mg/L		9	35

Lab Sample ID: MB 310-455628/1
 Matrix: Water
 Analysis Batch: 455628

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.00		5.00	3.50	mg/L			05/23/25 11:39	1

QC Sample Results

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: LCS 310-455628/2
Matrix: Water
Analysis Batch: 455628

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	108.0		mg/L		108	81 - 116

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

QC Association Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

GC/MS VOA

Analysis Batch: 455656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	8260D	
310-307094-2	MW-1-99	Total/NA	Groundwater	8260D	
310-307094-3	MW-4-93	Total/NA	Groundwater	8260D	
310-307094-4	MW-7-93	Total/NA	Groundwater	8260D	
310-307094-5	MW-37	Total/NA	Groundwater	8260D	
310-307094-6	MW-39R	Total/NA	Groundwater	8260D	
310-307094-8	Trip Blank 1	Total/NA	Trip Blank	8260D	
MB 310-455656/5	Method Blank	Total/NA	Water	8260D	
LCS 310-455656/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-455656/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 455658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-7	MW-40R	Total/NA	Groundwater	8260D	
310-307094-9	MW-43	Total/NA	Water	8260D	
310-307094-10	MW-45R	Total/NA	Water	8260D	
310-307094-11	MW-46R	Total/NA	Water	8260D	
310-307094-12	MW-47	Total/NA	Water	8260D	
310-307094-13	MW-48	Total/NA	Water	8260D	
310-307094-14	MW-49	Total/NA	Water	8260D	
310-307094-15	PZ-10	Total/NA	Water	8260D	
310-307094-16	GW-Lagoon-Cell 1W	Total/NA	Water	8260D	
310-307094-17	MW-D	Total/NA	Water	8260D	
310-307094-18	Trip Blank 2	Total/NA	Water	8260D	
310-307094-19	Trip Blank 3	Total/NA	Water	8260D	
310-307094-20	Trip Blank 4	Total/NA	Water	8260D	
MB 310-455658/5	Method Blank	Total/NA	Water	8260D	
LCS 310-455658/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-455658/7	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 455764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	3510C	
MB 310-455764/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-455764/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-455764/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 456619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	8270E	455764
MB 310-455764/1-A	Method Blank	Total/NA	Water	8270E	455764
LCS 310-455764/2-A	Lab Control Sample	Total/NA	Water	8270E	455764
LCSD 310-455764/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	455764

GC Semi VOA

Analysis Batch: 455576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	8081B	455585
310-307094-6	MW-39R	Total/NA	Groundwater	8081B	455585

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QC Association Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

GC Semi VOA (Continued)

Analysis Batch: 455576 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-455585/1-A	Method Blank	Total/NA	Water	8081B	455585
LCS 310-455585/2-A	Lab Control Sample	Total/NA	Water	8081B	455585

Prep Batch: 455585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	3511	
310-307094-6	MW-39R	Total/NA	Groundwater	3511	
MB 310-455585/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-455585/2-A	Lab Control Sample	Total/NA	Water	3511	

Leach Batch: 455749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 310-455749/1-D	Method Blank	Total/NA	Water	1311	

Prep Batch: 455939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	3511	
310-307094-7	MW-40R	Total/NA	Groundwater	3511	
LB 310-455749/1-D	Method Blank	Total/NA	Water	3511	455749
MB 310-455939/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-455939/3-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 456115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	8081B	455939
310-307094-7	MW-40R	Total/NA	Groundwater	8081B	455939
LB 310-455749/1-D	Method Blank	Total/NA	Water	8081B	455939
MB 310-455939/1-A	Method Blank	Total/NA	Water	8081B	455939
LCS 310-455939/3-A	Lab Control Sample	Total/NA	Water	8081B	455939

Prep Batch: 819008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	8151A	
310-307094-6	MW-39R	Total/NA	Groundwater	8151A	
MB 500-819008/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-819008/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-819008/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 819169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	8151A	819008
310-307094-6	MW-39R	Total/NA	Groundwater	8151A	819008
MB 500-819008/1-A	Method Blank	Total/NA	Water	8151A	819008
LCS 500-819008/2-A	Lab Control Sample	Total/NA	Water	8151A	819008
LCSD 500-819008/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	819008

Metals

Prep Batch: 455681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	3005A	

Eurofins Cedar Falls

QC Association Summary

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Metals (Continued)

Prep Batch: 455681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-2	MW-1-99	Total/NA	Groundwater	3005A	
310-307094-3	MW-4-93	Total/NA	Groundwater	3005A	
310-307094-4	MW-7-93	Total/NA	Groundwater	3005A	
MB 310-455681/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-455681/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 455834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-5	MW-37	Total/NA	Groundwater	3005A	
310-307094-6	MW-39R	Total/NA	Groundwater	3005A	
310-307094-7	MW-40R	Total/NA	Groundwater	3005A	
310-307094-9	MW-43	Total/NA	Water	3005A	
310-307094-10	MW-45R	Total/NA	Water	3005A	
310-307094-11	MW-46R	Total/NA	Water	3005A	
310-307094-12	MW-47	Total/NA	Water	3005A	
310-307094-13	MW-48	Total/NA	Water	3005A	
310-307094-14	MW-49	Total/NA	Water	3005A	
310-307094-15	PZ-10	Total/NA	Water	3005A	
310-307094-16	GW-Lagoon-Cell 1W	Total/NA	Water	3005A	
310-307094-17	MW-D	Total/NA	Water	3005A	
MB 310-455834/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-455834/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-307094-5 MS	MW-37	Total/NA	Groundwater	3005A	
310-307094-5 MSD	MW-37	Total/NA	Groundwater	3005A	
310-307094-16 DU	GW-Lagoon-Cell 1W	Total/NA	Water	3005A	

Analysis Batch: 456144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-5	MW-37	Total/NA	Groundwater	6020B	455834
310-307094-6	MW-39R	Total/NA	Groundwater	6020B	455834
310-307094-7	MW-40R	Total/NA	Groundwater	6020B	455834
310-307094-9	MW-43	Total/NA	Water	6020B	455834
310-307094-10	MW-45R	Total/NA	Water	6020B	455834
310-307094-11	MW-46R	Total/NA	Water	6020B	455834
310-307094-12	MW-47	Total/NA	Water	6020B	455834
310-307094-13	MW-48	Total/NA	Water	6020B	455834
310-307094-14	MW-49	Total/NA	Water	6020B	455834
310-307094-15	PZ-10	Total/NA	Water	6020B	455834
310-307094-16	GW-Lagoon-Cell 1W	Total/NA	Water	6020B	455834
310-307094-17	MW-D	Total/NA	Water	6020B	455834
MB 310-455834/1-A	Method Blank	Total/NA	Water	6020B	455834
LCS 310-455834/2-A	Lab Control Sample	Total/NA	Water	6020B	455834
310-307094-5 MS	MW-37	Total/NA	Groundwater	6020B	455834
310-307094-5 MSD	MW-37	Total/NA	Groundwater	6020B	455834
310-307094-16 DU	GW-Lagoon-Cell 1W	Total/NA	Water	6020B	455834

Analysis Batch: 456147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	6020B	455681
310-307094-2	MW-1-99	Total/NA	Groundwater	6020B	455681
310-307094-3	MW-4-93	Total/NA	Groundwater	6020B	455681

QC Association Summary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Metals (Continued)

Analysis Batch: 456147 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-4	MW-7-93	Total/NA	Groundwater	6020B	455681
MB 310-455681/1-A	Method Blank	Total/NA	Water	6020B	455681
LCS 310-455681/2-A	Lab Control Sample	Total/NA	Water	6020B	455681

Analysis Batch: 456239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	6020B	455681
310-307094-2	MW-1-99	Total/NA	Groundwater	6020B	455681
310-307094-3	MW-4-93	Total/NA	Groundwater	6020B	455681
310-307094-4	MW-7-93	Total/NA	Groundwater	6020B	455681
MB 310-455681/1-A	Method Blank	Total/NA	Water	6020B	455681
LCS 310-455681/2-A	Lab Control Sample	Total/NA	Water	6020B	455681

General Chemistry

Analysis Batch: 455571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-1	MW-4-89	Total/NA	Groundwater	I-3765-85	
310-307094-2	MW-1-99	Total/NA	Groundwater	I-3765-85	
310-307094-4	MW-7-93	Total/NA	Groundwater	I-3765-85	
310-307094-5	MW-37	Total/NA	Groundwater	I-3765-85	
310-307094-6	MW-39R	Total/NA	Groundwater	I-3765-85	
310-307094-7	MW-40R	Total/NA	Groundwater	I-3765-85	
310-307094-9	MW-43	Total/NA	Water	I-3765-85	
310-307094-10	MW-45R	Total/NA	Water	I-3765-85	
310-307094-11	MW-46R	Total/NA	Water	I-3765-85	
310-307094-14	MW-49	Total/NA	Water	I-3765-85	
310-307094-15	PZ-10	Total/NA	Water	I-3765-85	
310-307094-17	MW-D	Total/NA	Water	I-3765-85	
MB 310-455571/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-455571/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-307094-9 DU	MW-43	Total/NA	Water	I-3765-85	

Analysis Batch: 455628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	I-3765-85	
310-307094-12	MW-47	Total/NA	Water	I-3765-85	
310-307094-13	MW-48	Total/NA	Water	I-3765-85	
310-307094-16	GW-Lagoon-Cell 1W	Total/NA	Water	I-3765-85	
MB 310-455628/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-455628/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Prep Batch: 819041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	9030B	
MB 500-819041/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-819041/2-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 819043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-307094-3	MW-4-93	Total/NA	Groundwater	9034	819041

QC Association Summary

Client: SCS Engineers

Job ID: 310-307094-1

Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

SDG: Des Moines County Sanitary Landfill (HMSP)

General Chemistry (Continued)

Analysis Batch: 819043 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-819041/1-A	Method Blank	Total/NA	Water	9034	819041
LCS 500-819041/2-A	Lab Control Sample	Total/NA	Water	9034	819041

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Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-4-89

Lab Sample ID: 310-307094-1

Date Collected: 05/20/25 07:59

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 08:25
Total/NA	Prep	3511			455939	BW2O	EET CF	05/28/25 12:23
Total/NA	Analysis	8081B		1	456115	BW2O	EET CF	05/29/25 20:48
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456147	NFT2	EET CF	05/29/25 14:24
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456239	ZRI4	EET CF	05/30/25 15:10
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-1-99

Lab Sample ID: 310-307094-2

Date Collected: 05/20/25 09:55

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 08:48
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456147	NFT2	EET CF	05/29/25 14:26
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456239	ZRI4	EET CF	05/30/25 15:13
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-4-93

Lab Sample ID: 310-307094-3

Date Collected: 05/21/25 14:40

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 09:11
Total/NA	Prep	3510C			455764	J5BR	EET CF	05/27/25 11:33
Total/NA	Analysis	8270E		1	456619	V7YZ	EET CF	06/05/25 06:15
Total/NA	Prep	3511			455585	BW2O	EET CF	05/23/25 09:56
Total/NA	Analysis	8081B		1	455576	BW2O	EET CF	05/23/25 12:47
Total/NA	Prep	8151A			819008	CI	EET CHI	05/27/25 07:27
Total/NA	Analysis	8151A		1	819169	H7CM	EET CHI	05/27/25 22:16
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456147	NFT2	EET CF	05/29/25 14:29
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456239	ZRI4	EET CF	05/30/25 15:16
Total/NA	Prep	9030B			819041	CLB	EET CHI	05/26/25 18:37 - 05/26/25 18:41 ¹
Total/NA	Analysis	9034		1	819043	CLB	EET CHI	05/27/25 05:22 - 05/27/25 05:35 ¹
Total/NA	Analysis	I-3765-85		1	455628	DGU1	EET CF	05/23/25 11:39

Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-7-93

Lab Sample ID: 310-307094-4

Date Collected: 05/20/25 10:41

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 09:33
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456147	NFT2	EET CF	05/29/25 14:31
Total/NA	Prep	3005A			455681	WK2X	EET CF	05/27/25 09:00
Total/NA	Analysis	6020B		1	456239	ZRI4	EET CF	05/30/25 15:19
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-37

Lab Sample ID: 310-307094-5

Date Collected: 05/20/25 11:29

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 09:56
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 15:40
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-39R

Lab Sample ID: 310-307094-6

Date Collected: 05/20/25 15:20

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 10:19
Total/NA	Prep	3511			455585	BW2O	EET CF	05/23/25 09:56
Total/NA	Analysis	8081B		1	455576	BW2O	EET CF	05/23/25 13:00
Total/NA	Prep	8151A			819008	CI	EET CHI	05/27/25 07:27
Total/NA	Analysis	8151A		1	819169	H7CM	EET CHI	05/27/25 22:34
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 15:58
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-40R

Lab Sample ID: 310-307094-7

Date Collected: 05/20/25 13:11

Matrix: Groundwater

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 15:15
Total/NA	Prep	3511			455939	BW2O	EET CF	05/28/25 12:23
Total/NA	Analysis	8081B		1	456115	BW2O	EET CF	05/29/25 21:01
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:01
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Lab Chronicle

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-307094-8

Date Collected: 05/20/25 00:00

Matrix: Trip Blank

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455656	FE5V	EET CF	05/24/25 03:51

Client Sample ID: MW-43

Lab Sample ID: 310-307094-9

Date Collected: 05/19/25 15:18

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 15:38
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:04
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-45R

Lab Sample ID: 310-307094-10

Date Collected: 05/19/25 17:14

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 16:01
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:07
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-46R

Lab Sample ID: 310-307094-11

Date Collected: 05/19/25 16:36

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 16:24
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:10
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: MW-47

Lab Sample ID: 310-307094-12

Date Collected: 05/21/25 11:54

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 16:47
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:13
Total/NA	Analysis	I-3765-85		1	455628	DGU1	EET CF	05/23/25 11:39

Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: MW-48

Lab Sample ID: 310-307094-13

Date Collected: 05/21/25 11:10

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 17:10
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:16
Total/NA	Analysis	I-3765-85		1	455628	DGU1	EET CF	05/23/25 11:39

Client Sample ID: MW-49

Lab Sample ID: 310-307094-14

Date Collected: 05/19/25 18:16

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 17:33
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:19
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: PZ-10

Lab Sample ID: 310-307094-15

Date Collected: 05/20/25 14:12

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 17:56
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:22
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Client Sample ID: GW-Lagoon-Cell 1W

Lab Sample ID: 310-307094-16

Date Collected: 05/21/25 13:25

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 18:19
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:25
Total/NA	Analysis	I-3765-85		1	455628	DGU1	EET CF	05/23/25 11:39

Client Sample ID: MW-D

Lab Sample ID: 310-307094-17

Date Collected: 05/20/25 11:53

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 18:41
Total/NA	Prep	3005A			455834	QTZ5	EET CF	05/28/25 09:20
Total/NA	Analysis	6020B		1	456144	NFT2	EET CF	05/29/25 16:37
Total/NA	Analysis	I-3765-85		1	455571	DGU1	EET CF	05/23/25 09:16

Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
 SDG: Des Moines County Sanitary Landfill (HMSP)

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-307094-18

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 14:07

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-307094-19

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 14:30

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-307094-20

Date Collected: 05/20/25 00:00

Matrix: Water

Date Received: 05/22/25 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	455658	FE5V	EET CF	05/24/25 14:53

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
 EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

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 Chicago

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	082	05-01-26

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Method Summary

Client: SCS Engineers
Project/Site: 1st 2025 Semi-Annual Groundwater Sampling

Job ID: 310-307094-1
SDG: Des Moines County Sanitary Landfill (HMSP)

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CHI
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	EET CHI
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200



Environment Testing
America



310-307094 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	<u>W. Des Moines</u>	STATE: <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE: <u>5.22.25</u>	TIME: <u>1610</u>	Received By: <u>PH</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>4</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-4-89, 1-99, 7-93, 37, 40K</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>PL 250N</u>	CONTAINER 2	
Uncorrected Temp (°C):	<u>5.8</u>		
Corrected Temp (°C):	<u>5.8</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			





Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	<small>CITY</small> <u>W. Des Moines</u>	<small>STATE</small> <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	<small>DATE</small> <u>5.22.25</u>	<small>TIME</small> <u>1610</u>	Received By: <u>PA</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>4</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-4-93, 41, 43</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• Sample Container Temperature			
Container(s) used:	<small>CONTAINER 1</small> <u>PL 1L</u>	<small>CONTAINER 2</small>	
Uncorrected Temp (°C):	<u>1.5</u>		
Corrected Temp (°C):	<u>1.5</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			





Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client. <u>SCS</u>			
City/State.	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>5.22.25</u>	TIME <u>1610</u>	Received By: <u>PH</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>3</u> of <u>4</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-39R, 46R, 47, 48</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>AA</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>PL 1/L</u>	CONTAINER 2	
Uncorrected Temp (°C):	<u>-0.3</u>		
Corrected Temp (°C):	<u>-0.3</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			





Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project.
Receipt Information			
Date/Time Received:	DATE <u>5.22.25</u>	TIME <u>1610</u>	Received By <u>PH</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>4</u> of <u>4</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-46R, 49, D, P210, 11</u>			
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE
Thermometer ID: <u>AE</u>	Correction Factor (°C) <u>0</u>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1 <u>PL 12</u>	CONTAINER 2	
Uncorrected Temp (°C):	<u>0.5</u>		
Corrected Temp (°C):	<u>0.5</u>		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Chain of Custody Record

EUROFINS

TestAmerica Laboratories, Inc. d/b/a Eurofins

Regulatory Program: DW NPDES RCRA Other

Client Contact		Project Manager: Ben Madson		Site Contact: Ben Madson		Date:		COC No				
SCS Engineers 1690 All-State Court, Suite 100 West Des Moines, IA 50265 515-631-6160		Email: bmadson@sccsengineers.com Cell 515-776-9255		Lab Contact: Samuel Miller		Carrier:		2 of 2				
Project Name: 1st 2025 Semi-Annual Groundwater Sampling Site: Des Moines County Sanitary Landfill (HMSF) P.O. # 27224414.25		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Appendix I Performs MS/MSD (Y/N)		Appendix II TSS		Appendix III Metals List A		Appendix IV VOCs		
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Appendix I	Appendix II	Appendix III	Appendix IV	Trip Blank	Sample Specific
MW-43	5/14/25	15 18	G	GW			X	X	X	X		Metals List A, Arsenic, Ba Chromium, Cobalt, Copper Selenium, Vanadium, and
MW-45R	5/14/25	7 14	G	GW			X	X	X	X		
MW-46R	5/14/25	10 36	G	GW			X	X	X	X		
MW-47	5/21/25	11 54	G	GW			X	X	X	X		
MW-48	5/21/25	1 10	G	GW			X	X	X	X		
MW-49	5/19/25	8 6	G	GW			X	X	X	X		
PZ-10	5/20/25	4 12	G	GW			X	X	X	X		
PZ-11			G	GW								
GW-Lagoon-00			G	GW								
GW-Lagoon-Cell 1W	5/21/25	13 25	G	GW			X	X	X	X		
MW-D	5/20/25	11 53	G	GW			X	X	X	X		
Trip Blank											X	Include trip blanks in every VOC sample container

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other
 Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
 Metals List A: Arsenic, Barium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Vanadium, and Zinc.

Custody Seals Intact	<input type="checkbox"/> Yes <input type="checkbox"/> No	Cooler Temp (°C)	Obs'd	Corr'd	Company	Therm ID No
Relinquished by:	Samuel Morgan	Received by:	Company	Date/Time	5/21/25 10:00	
Relinquished by:		Received by:	Company	Date/Time		
Relinquished by:		Received in Laboratory by:	Company	Date/Time		SLIMS



Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA
50613

Chain of Custody Record



TestAmerica Laboratories, Inc. d/b/a Eurofins

Regulatory Program: DW NPDES RCRA Other

Client Contact		Project Manager: Ben Madson		Site Contact: Ben Madson		Date:		COC No	
SCS Engineers		Email: bmadson@sccengineers.com		Lab Contact: Samuel Miller		Carrier:		1 of 2	
1690 All-State Court, Suite 100		West Des Moines, IA 50265		Cell 515-776-9255		Analysis Turnaround Time		Sampler	
515-631-6160		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Other:		2 weeks		For Lab Use Only:	
Project Name: 1st 2025 Semi-Annual Groundwater Sampling		1 week		2 days		1 day		Walk-in Client	
Site: Des Moines County Sanitary Landfill (HMSP)		Sample Date		Sample Time		Sample Type (G-Comp, G-Grab)		Lab Sampling	
P O # 27224414 25		Sample Date		Sample Time		Matrix		Job / SDG No	
Sample Identification		Sample Date		Sample Time		Matrix		Sample Specific	
MW-4-89	5/24/25	7:59	G	GW					Metals List A, Arsenic, Ba
MW-1-99	5/24/25	9:55	G	GW					Chromium, Cobalt, Coppe
MW-4-93	5/24/25	14:40	G	GW					Selenium, Vanadium, anc
MW-7-93	5/24/25	10:41	G	GW					
MW-37	5/24/25	11:29	G	GW					
MW-39R	5/24/25	5:20	G	GW					
MW-40R	5/24/25	13:11	G	GW					
MW-41			G	GW					
Trip Blank									
									include trip blanks in every (
									VOC sample cont

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification:

Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
Metals List A: Arsenic, Barium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Vanadium, and Zinc.
Metals List C: Arsenic, Barium, Nickel, and Zinc.

Custody Seals Intact: Yes No

Relinquished by: *Michael Morgan* Company: SCS Date/Time: 5/27/25 10:10

Relinquished by: Company: Date/Time:

Relinquished by: Company: Date/Time:

Received by: Company: Date/Time:

Received in Laboratory by: *[Signature]* Company: Date/Time: 5/27/25

Form No. CA-C-WI-002, Rev. 4.23, C

6/6/2025



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-307094-1

SDG Number: Des Moines County Sanitary Landfill (HMSP)

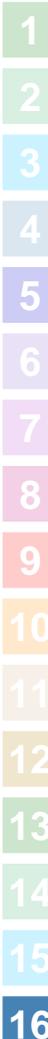
Login Number: 307094

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Homolar, Dana J

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: 310-307094-1

SDG Number: Des Moines County Sanitary Landfill (HMSP)

Login Number: 307094

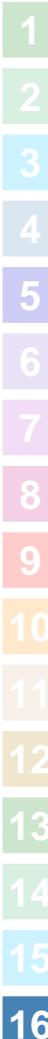
List Source: Eurofins Chicago

List Number: 2

List Creation: 05/24/25 01:40 PM

Creator: Schmidt, Kara

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.3
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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ANALYTICAL REPORT

PREPARED FOR

Attn: Mark Mayhew
SCS Engineers
1690 All State Court
Suite 100
West Des Moines, Iowa 50265

Generated 12/5/2025 9:54:27 AM

JOB DESCRIPTION

Des Moines County - 2nd 2025 Sampling Event
Des Moines County Landfill

JOB NUMBER

310-320932-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization

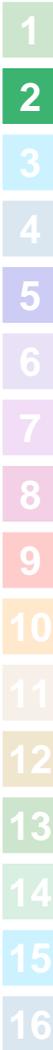


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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)595-2008

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Case Narrative

Client: SCS Engineers
Project: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1

Job ID: 310-320932-1

Eurofins Cedar Falls

Job Narrative 310-320932-1

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

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

Receipt

The samples were received on 11/19/2025 5:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-474409 recovered above the upper control limit for Carbon tetrachloride (27%D). The LCS associated with this CCV passed CCV criteria for the affected analyte; therefore, the data have been reported. The associated sample is:(CCV 310-474409/3).

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-320932-1	MW-41	Ground Water	11/18/25 11:21	11/19/25 17:40	Iowa
310-320932-2	Trip Blank	Water	11/18/25 00:00	11/19/25 17:40	Iowa
310-320932-3	MW-44	Ground Water	11/18/25 10:15	11/19/25 17:40	Iowa

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Detection Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

Client Sample ID: MW-41

Lab Sample ID: 310-320932-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00130	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0134		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.0145		0.00500	0.00180	mg/L	1		6020B	Total/NA
Cobalt	0.000278	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00366	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	23.0		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 310-320932-2

No Detections.

Client Sample ID: MW-44

Lab Sample ID: 310-320932-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	5.63		1.88	1.31	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Quantitation Limit Exceptions Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
8260D	1,2-Dibromo-3-Chloropropane	Ground Water	Total/NA	ug/L	1.20	5.0
8260D	1,2-Dibromo-3-Chloropropane	Water	Total/NA	ug/L	1.20	5.0
8260D	1,2-Dibromoethane (EDB)	Ground Water	Total/NA	ug/L	0.340	1.0
8260D	1,2-Dibromoethane (EDB)	Water	Total/NA	ug/L	0.340	1.0

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-41
Date Collected: 11/18/25 11:21
Date Received: 11/19/25 17:40

Lab Sample ID: 310-320932-1
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/21/25 18:00	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/21/25 18:00	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/21/25 18:00	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/21/25 18:00	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/21/25 18:00	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/21/25 18:00	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/21/25 18:00	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/21/25 18:00	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/21/25 18:00	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/21/25 18:00	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/21/25 18:00	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/21/25 18:00	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/21/25 18:00	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/21/25 18:00	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/21/25 18:00	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/21/25 18:00	1
Acetone	<10.0		10.0	3.80	ug/L			11/21/25 18:00	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/21/25 18:00	1
Benzene	<0.500		0.500	0.220	ug/L			11/21/25 18:00	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/21/25 18:00	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/21/25 18:00	1
Bromoform	<5.00		5.00	2.60	ug/L			11/21/25 18:00	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/21/25 18:00	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/21/25 18:00	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/21/25 18:00	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/21/25 18:00	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/21/25 18:00	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/21/25 18:00	1
Chloroform	<3.00		3.00	1.30	ug/L			11/21/25 18:00	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/21/25 18:00	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/21/25 18:00	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/21/25 18:00	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/21/25 18:00	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/21/25 18:00	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/21/25 18:00	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/21/25 18:00	1
Styrene	<1.00		1.00	0.370	ug/L			11/21/25 18:00	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/21/25 18:00	1
Toluene	<1.00		1.00	0.430	ug/L			11/21/25 18:00	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/21/25 18:00	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/21/25 18:00	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/21/25 18:00	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/21/25 18:00	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/21/25 18:00	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/21/25 18:00	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/21/25 18:00	1
Xylenes, Total	<3.00	F1	3.00	1.10	ug/L			11/21/25 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		76 - 130		11/21/25 18:00	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-41
 Date Collected: 11/18/25 11:21
 Date Received: 11/19/25 17:40

Lab Sample ID: 310-320932-1
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/21/25 18:00	1
4-Bromofluorobenzene (Surr)	103		80 - 120		11/21/25 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00130	J	0.00200	0.000530	mg/L		11/21/25 08:30	12/04/25 15:56	1
Barium	0.0134		0.00200	0.000660	mg/L		11/21/25 08:30	12/04/25 15:56	1
Chromium	0.0145		0.00500	0.00180	mg/L		11/21/25 08:30	12/04/25 15:56	1
Cobalt	0.000278	J	0.000500	0.000170	mg/L		11/21/25 08:30	12/04/25 15:56	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/21/25 08:30	12/04/25 15:56	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/21/25 08:30	12/04/25 15:56	1
Nickel	0.00366	J	0.00500	0.00230	mg/L		11/21/25 08:30	12/04/25 15:56	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/21/25 08:30	12/04/25 15:56	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/21/25 08:30	12/04/25 15:56	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/21/25 08:30	12/04/25 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	23.0		3.75	2.63	mg/L			11/20/25 07:39	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Client Sample ID: Trip Blank

Lab Sample ID: 310-320932-2

Date Collected: 11/18/25 00:00

Matrix: Water

Date Received: 11/19/25 17:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/21/25 14:59	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/21/25 14:59	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/21/25 14:59	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/21/25 14:59	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/21/25 14:59	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/21/25 14:59	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/21/25 14:59	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/21/25 14:59	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/21/25 14:59	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/21/25 14:59	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/21/25 14:59	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/21/25 14:59	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/21/25 14:59	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/21/25 14:59	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/21/25 14:59	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/21/25 14:59	1
Acetone	<10.0		10.0	3.80	ug/L			11/21/25 14:59	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/21/25 14:59	1
Benzene	<0.500		0.500	0.220	ug/L			11/21/25 14:59	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/21/25 14:59	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/21/25 14:59	1
Bromoform	<5.00		5.00	2.60	ug/L			11/21/25 14:59	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/21/25 14:59	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/21/25 14:59	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/21/25 14:59	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/21/25 14:59	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/21/25 14:59	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/21/25 14:59	1
Chloroform	<3.00		3.00	1.30	ug/L			11/21/25 14:59	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/21/25 14:59	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/21/25 14:59	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/21/25 14:59	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/21/25 14:59	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/21/25 14:59	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/21/25 14:59	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/21/25 14:59	1
Styrene	<1.00		1.00	0.370	ug/L			11/21/25 14:59	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/21/25 14:59	1
Toluene	<1.00		1.00	0.430	ug/L			11/21/25 14:59	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/21/25 14:59	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/21/25 14:59	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/21/25 14:59	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/21/25 14:59	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/21/25 14:59	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/21/25 14:59	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/21/25 14:59	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/21/25 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		76 - 130		11/21/25 14:59	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

Client Sample ID: Trip Blank

Lab Sample ID: 310-320932-2

Date Collected: 11/18/25 00:00

Matrix: Water

Date Received: 11/19/25 17:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Toluene-d8 (Surr)	92		80 - 120		11/21/25 14:59	1
4-Bromofluorobenzene (Surr)	107		80 - 120		11/21/25 14:59	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-44
 Date Collected: 11/18/25 10:15
 Date Received: 11/19/25 17:40

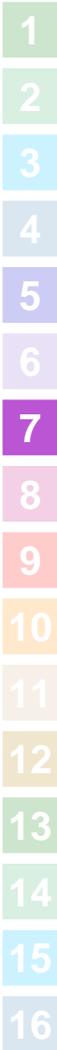
Lab Sample ID: 310-320932-3
 Matrix: Ground Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/21/25 08:30	12/04/25 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	5.63		1.88	1.31	mg/L			11/20/25 07:39	1



Definitions/Glossary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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

Surrogate Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-320932-1	MW-41	111	95	103
310-320932-1 MS	MW-41	109	102	97
310-320932-1 MSD	MW-41	104	99	98

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-320932-2	Trip Blank	105	92	107
LCS 310-474409/7	Lab Control Sample	111	99	98
LCS 310-474409/8	Lab Control Sample	105	92	107
MB 310-474409/6	Method Blank	109	94	106

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-474409/6
Matrix: Water
Analysis Batch: 474409

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/21/25 13:29	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/21/25 13:29	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/21/25 13:29	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/21/25 13:29	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/21/25 13:29	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/21/25 13:29	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/21/25 13:29	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/21/25 13:29	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/21/25 13:29	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/21/25 13:29	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/21/25 13:29	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/21/25 13:29	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/21/25 13:29	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/21/25 13:29	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/21/25 13:29	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/21/25 13:29	1
Acetone	<10.0		10.0	3.80	ug/L			11/21/25 13:29	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/21/25 13:29	1
Benzene	<0.500		0.500	0.220	ug/L			11/21/25 13:29	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/21/25 13:29	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/21/25 13:29	1
Bromoform	<5.00		5.00	2.60	ug/L			11/21/25 13:29	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/21/25 13:29	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/21/25 13:29	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/21/25 13:29	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/21/25 13:29	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/21/25 13:29	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/21/25 13:29	1
Chloroform	<3.00		3.00	1.30	ug/L			11/21/25 13:29	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/21/25 13:29	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/21/25 13:29	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/21/25 13:29	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/21/25 13:29	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/21/25 13:29	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/21/25 13:29	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/21/25 13:29	1
Styrene	<1.00		1.00	0.370	ug/L			11/21/25 13:29	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/21/25 13:29	1
Toluene	<1.00		1.00	0.430	ug/L			11/21/25 13:29	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/21/25 13:29	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/21/25 13:29	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/21/25 13:29	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/21/25 13:29	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/21/25 13:29	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/21/25 13:29	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/21/25 13:29	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/21/25 13:29	1

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-474409/6

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	109		76 - 130		11/21/25 13:29	1
Toluene-d8 (Surr)	94		80 - 120		11/21/25 13:29	1
4-Bromofluorobenzene (Surr)	106		80 - 120		11/21/25 13:29	1

Lab Sample ID: LCS 310-474409/7

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	20.64		ug/L		103	69 - 130
1,1,1,2,2-Tetrachloroethane	20.0	17.71		ug/L		89	70 - 122
1,1,2-Trichloroethane	20.0	18.59		ug/L		93	75 - 121
1,1-Dichloroethane	20.0	19.87		ug/L		99	69 - 127
1,1-Dichloroethane	20.0	20.22		ug/L		101	64 - 134
1,2,3-Trichloropropane	20.0	18.75		ug/L		94	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	17.39		ug/L		87	62 - 132
1,2-Dibromoethane (EDB)	20.0	17.14		ug/L		86	74 - 122
1,2-Dichlorobenzene	20.0	18.41		ug/L		92	74 - 120
1,2-Dichloroethane	20.0	20.36		ug/L		102	68 - 125
1,2-Dichloropropane	20.0	17.25		ug/L		86	72 - 128
1,4-Dichlorobenzene	20.0	18.97		ug/L		95	72 - 120
2-Butanone (MEK)	40.0	32.83		ug/L		82	60 - 134
2-Hexanone	40.0	36.24		ug/L		91	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	33.78		ug/L		84	62 - 136
Acetone	40.0	44.97		ug/L		112	59 - 136
Acrylonitrile	200	224.9		ug/L		112	50 - 150
Benzene	20.0	18.00		ug/L		90	71 - 125
Bromochloromethane	20.0	20.67		ug/L		103	69 - 131
Bromodichloromethane	20.0	18.99		ug/L		95	70 - 122
Bromoform	20.0	16.88		ug/L		84	62 - 122
Carbon disulfide	20.0	20.37		ug/L		102	58 - 137
Carbon tetrachloride	20.0	21.17		ug/L		106	63 - 136
Chlorobenzene	20.0	18.19		ug/L		91	74 - 120
Chlorodibromomethane	20.0	17.07		ug/L		85	69 - 121
Chloroform	20.0	20.13		ug/L		101	72 - 122
cis-1,2-Dichloroethene	20.0	19.85		ug/L		99	72 - 123
cis-1,3-Dichloropropene	20.0	17.51		ug/L		88	72 - 123
Dibromomethane	20.0	20.21		ug/L		101	72 - 122
Ethylbenzene	20.0	18.06		ug/L		90	75 - 120
Iodomethane	20.0	14.31		ug/L		72	18 - 150
Methylene Chloride	20.0	22.95		ug/L		115	72 - 128
Styrene	20.0	18.50		ug/L		92	74 - 122
Tetrachloroethene	20.0	18.39		ug/L		92	70 - 128
Toluene	20.0	18.34		ug/L		92	74 - 120
trans-1,2-Dichloroethene	20.0	20.42		ug/L		102	67 - 127
trans-1,3-Dichloropropene	20.0	16.03		ug/L		80	67 - 123
trans-1,4-Dichloro-2-butene	20.0	17.63		ug/L		88	50 - 150

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-474409/7

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Trichloroethene	20.0	17.03		ug/L		85	70 - 128
Vinyl acetate	40.0	34.68		ug/L		87	50 - 150
Xylenes, Total	40.0	36.76		ug/L		92	74 - 121

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	111		76 - 130
Toluene-d8 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Lab Sample ID: LCS 310-474409/8

Matrix: Water

Analysis Batch: 474409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	16.79		ug/L		84	33 - 138
Chloroethane	20.0	18.50		ug/L		93	59 - 139
Chloromethane	20.0	20.00		ug/L		100	52 - 146
Trichlorofluoromethane	20.0	20.73		ug/L		104	55 - 150
Vinyl chloride	20.0	19.80		ug/L		99	60 - 142

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	105		76 - 130
Toluene-d8 (Surr)	92		80 - 120
4-Bromofluorobenzene (Surr)	107		80 - 120

Lab Sample ID: 310-320932-1 MS

Matrix: Ground Water

Analysis Batch: 474409

Client Sample ID: MW-41

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
1,1,1,2-Tetrachloroethane	<1.00		25.0	23.13		ug/L		93	55 - 121
1,1,1,1-Trichloroethane	<1.00		25.0	24.30		ug/L		97	53 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	24.69		ug/L		99	55 - 123
1,1,2-Trichloroethane	<1.00		25.0	24.87		ug/L		99	60 - 121
1,1-Dichloroethane	<1.00		25.0	23.62		ug/L		94	53 - 127
1,1-Dichloroethene	<2.00		25.0	22.57		ug/L		90	51 - 134
1,2,3-Trichloropropane	<1.00		25.0	24.12		ug/L		96	56 - 122
1,2-Dibromo-3-Chloropropane	<1.20		25.0	23.79		ug/L		95	44 - 138
1,2-Dibromoethane (EDB)	<0.340		25.0	21.83		ug/L		87	60 - 122
1,2-Dichlorobenzene	<1.00		25.0	23.89		ug/L		96	60 - 120
1,2-Dichloroethane	<1.00		25.0	25.07		ug/L		100	48 - 128
1,2-Dichloropropane	<1.00		25.0	21.82		ug/L		87	59 - 128
1,4-Dichlorobenzene	<1.00		25.0	24.52		ug/L		98	58 - 120
2-Butanone (MEK)	<10.0		50.0	38.44		ug/L		77	46 - 134
2-Hexanone	<10.0		50.0	48.23		ug/L		96	46 - 141
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	44.54		ug/L		89	49 - 138
Acetone	<10.0		50.0	58.31		ug/L		117	39 - 141
Acrylonitrile	<10.0		250	267.4		ug/L		107	41 - 150

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-320932-1 MS

Matrix: Ground Water

Analysis Batch: 474409

Client Sample ID: MW-41

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.500		25.0	21.75		ug/L		87	48 - 125
Bromochloromethane	<5.00		25.0	25.66		ug/L		103	55 - 131
Bromodichloromethane	<1.00		25.0	24.05		ug/L		96	53 - 122
Bromoform	<5.00		25.0	22.60		ug/L		90	47 - 122
Carbon disulfide	<1.00		25.0	25.37		ug/L		101	45 - 137
Carbon tetrachloride	<2.00		25.0	25.16		ug/L		101	45 - 136
Chlorobenzene	<1.00		25.0	22.50		ug/L		90	59 - 120
Chlorodibromomethane	<5.00		25.0	22.02		ug/L		88	53 - 121
Chloroform	<3.00		25.0	24.04		ug/L		96	52 - 122
cis-1,2-Dichloroethene	<1.00		25.0	23.87		ug/L		95	51 - 123
cis-1,3-Dichloropropene	<5.00		25.0	21.35		ug/L		85	55 - 123
Dibromomethane	<1.00		25.0	25.37		ug/L		101	57 - 122
Ethylbenzene	<1.00		25.0	26.87		ug/L		107	53 - 120
Iodomethane	<10.0		25.0	23.54		ug/L		94	18 - 150
Methylene Chloride	<5.00		25.0	26.67		ug/L		107	59 - 128
Styrene	<1.00		25.0	23.52		ug/L		94	50 - 125
Tetrachloroethene	<1.00		25.0	22.52		ug/L		90	51 - 128
Toluene	<1.00		25.0	22.27		ug/L		89	52 - 120
trans-1,2-Dichloroethene	<1.00		25.0	23.65		ug/L		95	53 - 127
trans-1,3-Dichloropropene	<5.00		25.0	20.03		ug/L		80	50 - 123
trans-1,4-Dichloro-2-butene	<10.0		25.0	22.89		ug/L		92	28 - 150
Trichloroethene	<1.00		25.0	19.87		ug/L		79	50 - 128
Vinyl acetate	<10.0		50.0	41.63		ug/L		83	31 - 150
Xylenes, Total	<3.00	F1	50.0	67.65	F1	ug/L		135	50 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	109		76 - 130
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120

Lab Sample ID: 310-320932-1 MSD

Matrix: Ground Water

Analysis Batch: 474409

Client Sample ID: MW-41

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	<1.00		25.0	22.65		ug/L		91	55 - 121	2	20
1,1,1-Trichloroethane	<1.00		25.0	22.78		ug/L		91	53 - 130	6	20
1,1,1,2,2-Tetrachloroethane	<1.00		25.0	23.82		ug/L		95	55 - 123	4	20
1,1,2-Trichloroethane	<1.00		25.0	24.14		ug/L		97	60 - 121	3	20
1,1-Dichloroethane	<1.00		25.0	20.93		ug/L		84	53 - 127	12	20
1,1-Dichloroethene	<2.00		25.0	19.85		ug/L		79	51 - 134	13	20
1,2,3-Trichloropropane	<1.00		25.0	23.38		ug/L		94	56 - 122	3	21
1,2-Dibromo-3-Chloropropane	<1.20		25.0	23.81		ug/L		95	44 - 138	0	24
1,2-Dibromoethane (EDB)	<0.340		25.0	20.80		ug/L		83	60 - 122	5	20
1,2-Dichlorobenzene	<1.00		25.0	23.23		ug/L		93	60 - 120	3	20
1,2-Dichloroethane	<1.00		25.0	22.96		ug/L		92	48 - 128	9	20
1,2-Dichloropropane	<1.00		25.0	20.59		ug/L		82	59 - 128	6	20
1,4-Dichlorobenzene	<1.00		25.0	23.78		ug/L		95	58 - 120	3	20

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-320932-1 MSD
Matrix: Ground Water
Analysis Batch: 474409

Client Sample ID: MW-41
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
2-Butanone (MEK)	<10.0		50.0	40.17		ug/L		80	46 - 134	4	23
2-Hexanone	<10.0		50.0	46.27		ug/L		93	46 - 141	4	20
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	44.09		ug/L		88	49 - 138	1	20
Acetone	<10.0		50.0	54.03		ug/L		108	39 - 141	8	23
Acrylonitrile	<10.0		250	243.3		ug/L		97	41 - 150	9	20
Benzene	<0.500		25.0	20.48		ug/L		82	48 - 125	6	20
Bromochloromethane	<5.00		25.0	22.04		ug/L		88	55 - 131	15	21
Bromodichloromethane	<1.00		25.0	22.99		ug/L		92	53 - 122	5	20
Bromoform	<5.00		25.0	22.43		ug/L		90	47 - 122	1	20
Carbon disulfide	<1.00		25.0	20.57		ug/L		82	45 - 137	21	24
Carbon tetrachloride	<2.00		25.0	24.38		ug/L		98	45 - 136	3	20
Chlorobenzene	<1.00		25.0	20.67		ug/L		83	59 - 120	8	20
Chlorodibromomethane	<5.00		25.0	21.63		ug/L		87	53 - 121	2	20
Chloroform	<3.00		25.0	21.72		ug/L		87	52 - 122	10	20
cis-1,2-Dichloroethene	<1.00		25.0	20.96		ug/L		84	51 - 123	13	20
cis-1,3-Dichloropropene	<5.00		25.0	21.03		ug/L		84	55 - 123	2	20
Dibromomethane	<1.00		25.0	23.37		ug/L		93	57 - 122	8	20
Ethylbenzene	<1.00		25.0	24.90		ug/L		100	53 - 120	8	20
Iodomethane	<10.0		25.0	22.15		ug/L		89	18 - 150	6	32
Methylene Chloride	<5.00		25.0	23.38		ug/L		94	59 - 128	13	20
Styrene	<1.00		25.0	21.45		ug/L		86	50 - 125	9	20
Tetrachloroethene	<1.00		25.0	21.09		ug/L		84	51 - 128	7	20
Toluene	<1.00		25.0	20.42		ug/L		82	52 - 120	9	20
trans-1,2-Dichloroethene	<1.00		25.0	21.08		ug/L		84	53 - 127	11	20
trans-1,3-Dichloropropene	<5.00		25.0	19.14		ug/L		77	50 - 123	5	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	22.06		ug/L		88	28 - 150	4	24
Trichloroethene	<1.00		25.0	20.17		ug/L		81	50 - 128	2	20
Vinyl acetate	<10.0		50.0	40.55		ug/L		81	31 - 150	3	25
Xylenes, Total	<3.00	F1	50.0	62.20	F1	ug/L		124	50 - 122	8	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	104		76 - 130
Toluene-d8 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-474336/1-A
Matrix: Water
Analysis Batch: 475619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474336

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/21/25 08:30	12/04/25 15:03	1
Barium	<0.00200		0.00200	0.000660	mg/L		11/21/25 08:30	12/04/25 15:03	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/21/25 08:30	12/04/25 15:03	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/21/25 08:30	12/04/25 15:03	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/21/25 08:30	12/04/25 15:03	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/21/25 08:30	12/04/25 15:03	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/21/25 08:30	12/04/25 15:03	1

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: MB 310-474336/1-A
Matrix: Water
Analysis Batch: 475619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474336

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00500		0.00500	0.00140	mg/L		11/21/25 08:30	12/04/25 15:03	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/21/25 08:30	12/04/25 15:03	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/21/25 08:30	12/04/25 15:03	1

Lab Sample ID: LCS 310-474336/2-A
Matrix: Water
Analysis Batch: 475619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.1675		mg/L		84	80 - 120
Barium	0.100	0.08269		mg/L		83	80 - 120
Chromium	0.100	0.07987		mg/L		80	80 - 120
Cobalt	0.100	0.08736		mg/L		87	80 - 120
Copper	0.200	0.1858		mg/L		93	80 - 120
Lead	0.200	0.1824		mg/L		91	80 - 120
Nickel	0.200	0.1688		mg/L		84	80 - 120
Selenium	0.400	0.3429		mg/L		86	80 - 120
Vanadium	0.100	0.08636		mg/L		86	80 - 120
Zinc	0.200	0.1631		mg/L		82	80 - 120

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-474192/1
Matrix: Water
Analysis Batch: 474192

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			11/20/25 07:39	1

Lab Sample ID: LCS 310-474192/2
Matrix: Water
Analysis Batch: 474192

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	104.0		mg/L		104	82 - 117

QC Association Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

GC/MS VOA

Analysis Batch: 474409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320932-1	MW-41	Total/NA	Ground Water	8260D	
310-320932-2	Trip Blank	Total/NA	Water	8260D	
MB 310-474409/6	Method Blank	Total/NA	Water	8260D	
LCS 310-474409/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-474409/8	Lab Control Sample	Total/NA	Water	8260D	
310-320932-1 MS	MW-41	Total/NA	Ground Water	8260D	
310-320932-1 MSD	MW-41	Total/NA	Ground Water	8260D	

Metals

Prep Batch: 474336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320932-1	MW-41	Total/NA	Ground Water	3005A	
310-320932-3	MW-44	Total/NA	Ground Water	3005A	
MB 310-474336/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-474336/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 475619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320932-1	MW-41	Total/NA	Ground Water	6020B	474336
310-320932-3	MW-44	Total/NA	Ground Water	6020B	474336
MB 310-474336/1-A	Method Blank	Total/NA	Water	6020B	474336
LCS 310-474336/2-A	Lab Control Sample	Total/NA	Water	6020B	474336

General Chemistry

Analysis Batch: 474192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320932-1	MW-41	Total/NA	Ground Water	I-3765-85	
310-320932-3	MW-44	Total/NA	Ground Water	I-3765-85	
MB 310-474192/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-474192/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-41
 Date Collected: 11/18/25 11:21
 Date Received: 11/19/25 17:40

Lab Sample ID: 310-320932-1
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	474409	WSE8	EET CF	11/21/25 18:00
Total/NA	Prep	3005A			474336	RLT9	EET CF	11/21/25 08:30
Total/NA	Analysis	6020B		1	475619	NFT2	EET CF	12/04/25 15:56
Total/NA	Analysis	I-3765-85		1	474192	DGU1	EET CF	11/20/25 07:39

Client Sample ID: Trip Blank
 Date Collected: 11/18/25 00:00
 Date Received: 11/19/25 17:40

Lab Sample ID: 310-320932-2
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	474409	WSE8	EET CF	11/21/25 14:59

Client Sample ID: MW-44
 Date Collected: 11/18/25 10:15
 Date Received: 11/19/25 17:40

Lab Sample ID: 310-320932-3
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			474336	RLT9	EET CF	11/21/25 08:30
Total/NA	Analysis	6020B		1	475619	NFT2	EET CF	12/04/25 15:59
Total/NA	Analysis	I-3765-85		1	474192	DGU1	EET CF	11/20/25 07:39

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: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

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 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

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

Method Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320932-1
SDG: Des Moines County Landfill

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

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





Environment Testing
America



310-320932 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>ScS</u>			
City/State:	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11-19-15</u>	TIME <u>1740</u>	Received By: <u>PH</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ <u>All</u>	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID <u>CC</u>	Correction Factor (°C): <u>0</u>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>0.6</u>	Corrected Temp (°C):	<u>0.6</u>
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Cedar Falls IA 50613-6907
phone 319 277 2401 fax 319 277 2425

Regulatory Program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact SCS Engineers 1690 All-State Court, Suite 100 West Des Moines IA 50265 712-661-9682		Project Manager: Email smarczewsk@scsengineers.com Cell 712-661-9682		Site Contact: Sean Marczewski Lab Contact: Samuel Miller		Date: Carrier:		COC No 1 of 3 COCs			
Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix		# of Cont.	
Sample Identification MW-4-89 MW-1-99 MW-2-93 MW-43 MW-38 MW-40R MW-41 PZ-11 GW-Lagoon-00 GW-Lagoon-Cell 1W MW-5-90 Trip Blank		11-18 11:21 C GW									
Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other		Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		Please include trip blanks in each cooler with VOC containers.		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Special Instructions/QC Requirements & Comments: Metals List A Arsenic, barium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc Metals List B Arsenic, barium, cobalt, nickel, and zinc Metals List C Arsenic, barium, nickel, and zinc		Custody Seal No <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temp (°C) Obs'd _____		Therm ID No _____		Date/Time _____		Date/Time _____	
Relinquished by <i>Gurteff Horvath</i>		Company <i>SCS</i>		Received by _____		Company _____		Date/Time <i>11-19-2020</i>		Date/Time _____	
Relinquished by _____		Company _____		Received by _____		Company _____		Date/Time _____		Date/Time _____	
Relinquished by _____		Company _____		Received in Laboratory by <i>[Signature]</i>		Company _____		Date/Time <i>11-19-20 17:40</i>		Date/Time _____	



Cedar Falls IA 50613-6907
phone 319 277 2401 fax 319 277.2425

Regulatory Program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact		Project Manager:		Site Contact: Sean Marczewski		Date:		COC No	
SCS Engineers		Email smarczewski@sceengineers.com		Lab Contact: Samuel Miller		Carrier:		3 of 3 COCs	
1690 All-State Court, Suite 100		Analysis Turnaround Time		Total Suspended Solids		Appendix I		Sampler:	
West Des Moines IA 50265		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Alpha-BHC		Arsenic		For Lab Use Only:	
712-661-9682		Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		2,4,6-TP[Silvex][ZC]		Dichlorodifluoromethane		Walk-in Client:	
Project Name Des Moines County - 2 nd 2025 Sampling Event		Sample Date		Appendix I VOCs		Trip Blank		Lab Sampling	
Site Des Moines County Landfill		Sample Time		Metals List A		Appendix I		Job / SDG No	
P O # 27224414 26		Matrix		Perform MS / MSD (Y / N)		Appendix I			
Sample Identification		# of Cont.		Filtered Sample (Y / N)		Appendix I		Sample Specific Notes	
MW-39R						X			
PZ-10						X			
MW-6-90						X			
MW-6-93		11-18 1015		C GW		X			
MW-44						X			
MW-D1						X			
MW-D2						X			
Trip Blank						X		Please include trip blanks in each cooler with VOC containers.	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return to Client <input type="checkbox"/>		Disposal by Lab <input type="checkbox"/>		Archive for _____ Months	
Possible Hazard Identification:		Custody Seal No		Cooler Temp (°C) Obs'd		Corrd		Therm ID No	
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample		Company SCS		Received by		Company		Date/Time	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Company		Date/Time 10-19 1000		Company		Date/Time	
Special Instructions/QC Requirements & Comments:		Company		Date/Time		Company		Date/Time	
Metals List A Arsenic, barium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc		Company		Date/Time		Company		Date/Time	
Metals List B Arsenic, barium, cobalt, nickel, and zinc		Company		Date/Time		Company		Date/Time	
Metals List C Arsenic, barium, nickel, and zinc		Company		Date/Time		Company		Date/Time	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Relinquished by		Date/Time		Company		Date/Time	
Relinquished by: Garrett Hoan		Relinquished by		Date/Time		Company		Date/Time	
Relinquished by		Relinquished by		Date/Time		Company		Date/Time	



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-320932-1
SDG Number: Des Moines County Landfill

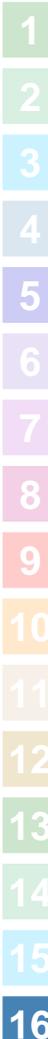
Login Number: 320932

List Number: 1

Creator: Homolar, Dana J

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	



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ANALYTICAL REPORT

PREPARED FOR

Attn: Mark Mayhew
SCS Engineers
1690 All State Court
Suite 100
West Des Moines, Iowa 50265
Generated 12/5/2025 1:02:41 PM Revision 1

JOB DESCRIPTION

Des Moines County - 2nd 2025 Sampling Event
Des Moines County Landfill

JOB NUMBER

310-320687-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
12/5/2025 1:02:41 PM
Revision 1

Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)595-2008



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Case Narrative

Client: SCS Engineers
Project: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1

Job ID: 310-320687-1

Eurofins Cedar Falls

Job Narrative 310-320687-1

REVISION

The report being provided is a revision of the original report sent on 12/4/2025. The report (revision 1) is being revised due to Updated VOC analyte list per COC.

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

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

Receipt

The samples were received on 11/15/2025 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 1.1°C, 1.3°C and 3.3°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473879 recovered outside of the control limits for Bromomethane (-43%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-473879/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473879 recovered outside of the control limits for Vinyl chloride (-22%D), Chloroethane (-25%D), Chloromethane (-25%D), and Trichlorofluoromethane (-23%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-473879/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473879 recovered outside of the control limits for Carbon disulfide (-24%D), Carbon tetrachloride (-25%D), Dichlorobromomethane (-23%D), Tetrachloroethene (-21%D), 1,1,1-Trichloroethane (-21%D), Bromoform (-23%D), 1,2-Dichloropropane (-22%D), 1,1,1,2-Tetrachloroethane (-21%D), and 1,1-Dichloroethane (-23%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-473879/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473929 recovered above the upper control limit for Dichlorodifluoromethane (21%D) and Bromomethane (76%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-473929/4).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-473929 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA

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

Herbicides

Method 8151A: The continuing calibration verification (CCV) associated with batch 500-843964 recovered above the upper control limit for Silvex (2,4,5-TP) and 2,4,5-T. The samples associated with this CCV were non-detects for the affected analytes; therefore,

Eurofins Cedar Falls

Case Narrative

Client: SCS Engineers
Project: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1

Job ID: 310-320687-1 (Continued)

Eurofins Cedar Falls

the data have been reported. The associated sample is:(CCVRT 500-843964/3).

Method 8151A: The continuing calibration verification (CCV) associated with batch 500-843964 recovered above the upper control limit for 2,4-D, Silvex (2,4,5-TP) and 2,4,5-T. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 500-843964/10).

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

Pesticides

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

Metals

Method 6020B: The laboratory control sample (LCS) for preparation batch 310-474157 and analytical batch 310-474547 recovered outside control limits for the following analytes: Silver. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 6020B: The method blank for preparation batch 310-474157 contained Chromium, Zinc above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 6020B: The initial calibration verification (ICV) result for batch 310-475370 was above the upper control limit. The affected analytes are: thallium. Sample results were non-detects, and have been reported as qualified data.

Method 6020B: The initial calibration verification (ICV) result for batch 310-475370 was above the upper control limit. The affected analytes are: thallium. Sample results were non-detects, and have been reported as qualified data.

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-320687-1	MW-4-89	Ground Water	11/12/25 15:00	11/15/25 11:20	Iowa
310-320687-2	MW-1-99	Ground Water	11/12/25 10:45	11/15/25 11:20	Iowa
310-320687-3	MW-2-93	Ground Water	11/13/25 14:08	11/15/25 11:20	Iowa
310-320687-4	MW-43	Ground Water	11/12/25 12:46	11/15/25 11:20	Iowa
310-320687-5	MW-38	Ground Water	11/12/25 14:58	11/15/25 11:20	Iowa
310-320687-6	MW-40R	Ground Water	11/14/25 09:19	11/15/25 11:20	Iowa
310-320687-7	PZ-11	Ground Water	11/14/25 11:24	11/15/25 11:20	Iowa
310-320687-8	MW-45R	Ground Water	11/13/25 10:16	11/15/25 11:20	Iowa
310-320687-9	MW-46R	Ground Water	11/13/25 11:15	11/15/25 11:20	Iowa
310-320687-10	MW-47	Ground Water	11/13/25 12:07	11/15/25 11:20	Iowa
310-320687-11	MW-48	Ground Water	11/13/25 13:11	11/15/25 11:20	Iowa
310-320687-12	MW-49	Ground Water	11/11/25 13:40	11/15/25 11:20	Iowa
310-320687-13	MW-4-90	Ground Water	11/11/25 16:02	11/15/25 11:20	Iowa
310-320687-14	MW-4-93	Ground Water	11/11/25 14:50	11/15/25 11:20	Iowa
310-320687-15	MW-7-90R	Ground Water	11/11/25 16:44	11/15/25 11:20	Iowa
310-320687-16	MW-7-93	Ground Water	11/13/25 15:09	11/15/25 11:20	Iowa
310-320687-17	MW-37	Ground Water	11/13/25 14:02	11/15/25 11:20	Iowa
310-320687-18	MW-39R	Ground Water	11/13/25 16:28	11/15/25 11:20	Iowa
310-320687-19	PZ-10	Ground Water	11/14/25 10:06	11/15/25 11:20	Iowa
310-320687-20	MW-D1	Ground Water	11/12/25 12:46	11/15/25 11:20	Iowa
310-320687-21	MW-D2	Ground Water	11/13/25 10:16	11/15/25 11:20	Iowa
310-320687-22	Trip Blank 1	Water	11/13/25 00:00	11/15/25 11:20	Iowa
310-320687-23	Trip Blank 2	Water	11/13/25 00:00	11/15/25 11:20	Iowa
310-320687-24	Trip Blank 3	Water	11/13/25 00:00	11/15/25 11:20	Iowa
310-320687-25	Trip Blank 4	Water	11/13/25 00:00	11/15/25 11:20	Iowa

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Detection Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: MW-4-89

Lab Sample ID: 310-320687-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0887		0.00200	0.000660	mg/L	1		6020B	Total/NA

Client Sample ID: MW-1-99

Lab Sample ID: 310-320687-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000742	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0470		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00141		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00456	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Selenium	0.00172	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.88		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-2-93

Lab Sample ID: 310-320687-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	2.02		1.00	0.490	ug/L	1		8260D	Total/NA
Benzene	0.433	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	19.2		1.00	0.350	ug/L	1		8260D	Total/NA
Arsenic	0.00324		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.112		0.00200	0.000660	mg/L	1		6020B	Total/NA
Nickel	0.0309		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.5		7.50	5.25	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-43

Lab Sample ID: 310-320687-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00768		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.603		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00162		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00491	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00212	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	44.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-38

Lab Sample ID: 310-320687-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.371		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.38		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-40R

Lab Sample ID: 310-320687-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000627	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.105		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000263	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000434	J	0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.00333	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00177	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	29.8		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: PZ-11

Lab Sample ID: 310-320687-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00252		0.00200	0.000530	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: PZ-11 (Continued)

Lab Sample ID: 310-320687-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.101		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00173		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00314	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.50	J	7.50	5.25	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-45R

Lab Sample ID: 310-320687-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00129	J	0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.000957	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0326		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00125		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000394	J	0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.00341	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00254	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Zinc	0.0343		0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	42.5		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-46R

Lab Sample ID: 310-320687-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.42	J	10.0	3.80	ug/L	1		8260D	Total/NA
Arsenic	0.00144	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0292		0.00200	0.000660	mg/L	1		6020B	Total/NA
Beryllium	0.000558	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cobalt	0.00162		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00594		0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00234	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	32.0		7.50	5.25	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-47

Lab Sample ID: 310-320687-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.83		1.00	0.400	ug/L	1		8260D	Total/NA
Arsenic	0.000888	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.120		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000745		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00310	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00217	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.00		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-48

Lab Sample ID: 310-320687-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	41.6		1.00	0.400	ug/L	1		8260D	Total/NA
Chlorobenzene	0.395	J	1.00	0.350	ug/L	1		8260D	Total/NA
Chloroethane	9.73		4.00	0.900	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.79		1.00	0.550	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.38		1.00	0.480	ug/L	1		8260D	Total/NA
Arsenic	0.000668	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.163		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000308		0.000200	0.000100	mg/L	1		6020B	Total/NA
Vanadium	0.00316	J	0.00500	0.00170	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: MW-48 (Continued)

Lab Sample ID: 310-320687-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	4.25		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-49

Lab Sample ID: 310-320687-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00169	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0422		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000178	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.00384	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Cobalt	0.00775		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00696		0.00500	0.00320	mg/L	1		6020B	Total/NA
Lead	0.00399		0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.0127		0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00597		0.00500	0.00170	mg/L	1		6020B	Total/NA
Zinc	0.0307		0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	65.3		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-4-90

Lab Sample ID: 310-320687-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	7.96		4.00	0.900	ug/L	1		8260D	Total/NA
Arsenic	0.00497		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.224		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00236		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00459	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00230	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	18.3		5.00	3.50	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-4-93

Lab Sample ID: 310-320687-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.44		1.00	0.400	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.13		1.00	0.490	ug/L	1		8260D	Total/NA
Chlorobenzene	14.2		1.00	0.350	ug/L	1		8260D	Total/NA
Arsenic	0.00128	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0322		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0113		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0502		0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00325	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Zinc	0.0184	J	0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.13		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-7-90R

Lab Sample ID: 310-320687-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00269		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.739		0.00200	0.000660	mg/L	1		6020B	Total/NA
Nickel	0.00489	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Zinc	0.0207		0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.38		1.88	1.31	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: MW-7-93

Lab Sample ID: 310-320687-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00108	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0975		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0133		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0617		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	9.33		5.00	3.50	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-37

Lab Sample ID: 310-320687-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	34.8		1.00	0.400	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	2.00		2.00	0.460	ug/L	1		8260D	Total/NA
Benzene	0.455	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	3.42		1.00	0.350	ug/L	1		8260D	Total/NA
Chloroethane	19.9		4.00	0.900	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.50		1.00	0.550	ug/L	1		8260D	Total/NA
Trichloroethene	0.382	J	1.00	0.350	ug/L	1		8260D	Total/NA
Arsenic	0.00887		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0196		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0120		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000970		0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.0488		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	38.0		7.50	5.25	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-39R

Lab Sample ID: 310-320687-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	41.7		1.00	0.400	ug/L	1		8260D	Total/NA
Benzene	0.652		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	0.383	J	1.00	0.350	ug/L	1		8260D	Total/NA
Chloroethane	2.26	J	4.00	0.900	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	18.2		1.00	0.550	ug/L	1		8260D	Total/NA
Dichlorodifluoromethane	19.9		3.00	0.850	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.10		1.00	0.480	ug/L	1		8260D	Total/NA
Trichloroethene	3.42		1.00	0.350	ug/L	1		8260D	Total/NA
Vinyl chloride	1.29		1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.00122	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.189		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00128		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0208		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.00		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: PZ-10

Lab Sample ID: 310-320687-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	0.377	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	5.89		1.00	0.490	ug/L	1		8260D	Total/NA
Benzene	1.06		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	11.4		1.00	0.350	ug/L	1		8260D	Total/NA
Chloroethane	2.75	J	4.00	0.900	ug/L	1		8260D	Total/NA
Arsenic	0.00539		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.293		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.00268	J	0.00500	0.00180	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: PZ-10 (Continued)

Lab Sample ID: 310-320687-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0109		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0124		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.50		1.88	1.31	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D1

Lab Sample ID: 310-320687-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.27	J	10.0	3.80	ug/L	1		8260D	Total/NA
Arsenic	0.00833		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.624		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00165		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00513		0.00500	0.00230	mg/L	1		6020B	Total/NA
Vanadium	0.00237	J	0.00500	0.00170	mg/L	1		6020B	Total/NA
Total Suspended Solids	51.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D2

Lab Sample ID: 310-320687-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00225		0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.000829	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0333		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00122		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000431	J	0.000500	0.000330	mg/L	1		6020B	Total/NA
Nickel	0.00324	J	0.00500	0.00230	mg/L	1		6020B	Total/NA
Zinc	0.0383		0.0200	0.0130	mg/L	1		6020B	Total/NA
Total Suspended Solids	39.5		3.75	2.63	mg/L	1		I-3765-85	Total/NA

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-320687-22

No Detections.

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-320687-23

No Detections.

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-320687-24

No Detections.

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-320687-25

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Quantitation Limit Exceptions Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
8260D	1,2-Dibromo-3-Chloropropane	Ground Water	Total/NA	ug/L	1.20	5.0
8260D	1,2-Dibromo-3-Chloropropane	Water	Total/NA	ug/L	1.20	5.0
8260D	1,2-Dibromoethane (EDB)	Ground Water	Total/NA	ug/L	0.340	1.0
8260D	1,2-Dibromoethane (EDB)	Water	Total/NA	ug/L	0.340	1.0

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-89

Lab Sample ID: 310-320687-1

Date Collected: 11/12/25 15:00

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 14:52	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 14:52	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 14:52	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 14:52	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 14:52	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 14:52	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 14:52	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 14:52	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 14:52	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 14:52	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 14:52	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 14:52	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 14:52	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 14:52	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 14:52	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 14:52	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 14:52	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 14:52	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 14:52	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 14:52	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 14:52	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 14:52	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 14:52	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 14:52	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 14:52	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 14:52	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 14:52	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 14:52	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 14:52	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 14:52	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 14:52	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 14:52	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 14:52	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 14:52	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 14:52	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 14:52	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 14:52	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 14:52	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 14:52	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 14:52	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 14:52	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 14:52	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 14:52	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 14:52	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 14:52	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 14:52	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	116		76 - 130		11/18/25 14:52	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-89

Lab Sample ID: 310-320687-1

Date Collected: 11/12/25 15:00

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/18/25 14:52	1
4-Bromofluorobenzene (Surr)	101		80 - 120		11/18/25 14:52	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0900		0.0900	0.00900	ug/L		11/17/25 12:41	12/03/25 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	71		10 - 150	11/17/25 12:41	12/03/25 18:30	1
Tetrachloro-m-xylene (Surr)	61		17 - 150	11/17/25 12:41	12/03/25 18:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/19/25 08:30	12/02/25 21:04	1
Barium	0.0887		0.00200	0.000660	mg/L		11/19/25 08:30	12/02/25 21:04	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/19/25 08:30	12/02/25 21:04	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/19/25 08:30	12/02/25 21:04	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/19/25 08:30	12/02/25 21:04	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/19/25 08:30	12/02/25 21:04	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/19/25 08:30	12/02/25 21:04	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/19/25 08:30	12/02/25 21:04	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/19/25 08:30	12/02/25 21:04	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/19/25 08:30	12/03/25 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.31	mg/L			11/17/25 11:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-1-99

Lab Sample ID: 310-320687-2

Date Collected: 11/12/25 10:45

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 15:14	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 15:14	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 15:14	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 15:14	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 15:14	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 15:14	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 15:14	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 15:14	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 15:14	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 15:14	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 15:14	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 15:14	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 15:14	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 15:14	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 15:14	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 15:14	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 15:14	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 15:14	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 15:14	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 15:14	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 15:14	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 15:14	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 15:14	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 15:14	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 15:14	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 15:14	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 15:14	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 15:14	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 15:14	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 15:14	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 15:14	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 15:14	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 15:14	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 15:14	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 15:14	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 15:14	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 15:14	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 15:14	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 15:14	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 15:14	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 15:14	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 15:14	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 15:14	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 15:14	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 15:14	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 15:14	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	115		76 - 130		11/18/25 15:14	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-1-99

Lab Sample ID: 310-320687-2

Date Collected: 11/12/25 10:45

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/18/25 15:14	1
4-Bromofluorobenzene (Surr)	102		80 - 120		11/18/25 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000742	J	0.00200	0.000530	mg/L		11/19/25 08:30	12/02/25 21:07	1
Barium	0.0470		0.00200	0.000660	mg/L		11/19/25 08:30	12/02/25 21:07	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/19/25 08:30	12/02/25 21:07	1
Cobalt	0.00141		0.000500	0.000170	mg/L		11/19/25 08:30	12/02/25 21:07	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/19/25 08:30	12/02/25 21:07	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/19/25 08:30	12/02/25 21:07	1
Nickel	0.00456	J	0.00500	0.00230	mg/L		11/19/25 08:30	12/02/25 21:07	1
Selenium	0.00172	J	0.00500	0.00140	mg/L		11/19/25 08:30	12/02/25 21:07	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/19/25 08:30	12/02/25 21:07	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/19/25 08:30	12/03/25 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	1.88		1.88	1.31	mg/L			11/17/25 11:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-2-93

Lab Sample ID: 310-320687-3

Date Collected: 11/13/25 14:08

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 15:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 15:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 15:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 15:36	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 15:36	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 15:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 15:36	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 15:36	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 15:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 15:36	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 15:36	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 15:36	1
1,4-Dichlorobenzene	2.02		1.00	0.490	ug/L			11/18/25 15:36	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 15:36	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 15:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 15:36	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 15:36	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 15:36	1
Benzene	0.433	J	0.500	0.220	ug/L			11/18/25 15:36	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 15:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 15:36	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 15:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 15:36	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 15:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 15:36	1
Chlorobenzene	19.2		1.00	0.350	ug/L			11/18/25 15:36	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 15:36	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 15:36	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 15:36	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 15:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 15:36	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 15:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 15:36	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 15:36	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 15:36	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 15:36	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 15:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 15:36	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 15:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 15:36	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 15:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 15:36	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 15:36	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 15:36	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 15:36	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 15:36	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	117		76 - 130		11/18/25 15:36	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-2-93

Lab Sample ID: 310-320687-3

Date Collected: 11/13/25 14:08

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		11/18/25 15:36	1
4-Bromofluorobenzene (Surr)	106		80 - 120		11/18/25 15:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00324		0.00200	0.000530	mg/L		11/19/25 08:30	12/02/25 21:10	1
Barium	0.112		0.00200	0.000660	mg/L		11/19/25 08:30	12/02/25 21:10	1
Nickel	0.0309		0.00500	0.00230	mg/L		11/19/25 08:30	12/02/25 21:10	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/19/25 08:30	12/03/25 13:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	12.5		7.50	5.25	mg/L			11/18/25 10:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-43

Lab Sample ID: 310-320687-4

Date Collected: 11/12/25 12:46

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 15:58	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 15:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 15:58	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 15:58	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 15:58	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 15:58	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 15:58	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 15:58	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 15:58	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 15:58	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 15:58	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 15:58	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 15:58	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 15:58	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 15:58	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 15:58	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 15:58	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 15:58	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 15:58	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 15:58	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 15:58	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 15:58	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 15:58	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 15:58	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 15:58	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 15:58	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 15:58	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 15:58	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 15:58	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 15:58	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 15:58	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 15:58	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 15:58	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 15:58	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 15:58	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 15:58	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 15:58	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 15:58	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 15:58	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 15:58	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 15:58	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 15:58	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 15:58	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 15:58	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 15:58	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 15:58	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	120		76 - 130		11/18/25 15:58	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-43
 Date Collected: 11/12/25 12:46
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-4
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		80 - 120		11/18/25 15:58	1
4-Bromofluorobenzene (Surr)	103		80 - 120		11/18/25 15:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/19/25 08:30	12/02/25 21:13	1
Arsenic	0.00768		0.00200	0.000530	mg/L		11/19/25 08:30	12/02/25 21:13	1
Barium	0.603		0.00200	0.000660	mg/L		11/19/25 08:30	12/02/25 21:13	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/19/25 08:30	12/02/25 21:13	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/19/25 08:30	12/02/25 21:13	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/19/25 08:30	12/02/25 21:13	1
Cobalt	0.00162		0.000500	0.000170	mg/L		11/19/25 08:30	12/02/25 21:13	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/19/25 08:30	12/02/25 21:13	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/19/25 08:30	12/02/25 21:13	1
Nickel	0.00491	J	0.00500	0.00230	mg/L		11/19/25 08:30	12/02/25 21:13	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/19/25 08:30	12/02/25 21:13	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/19/25 08:30	12/02/25 21:13	1
Thallium	<0.00100	^1+	0.00100	0.000570	mg/L		11/19/25 08:30	12/02/25 21:13	1
Vanadium	0.00212	J	0.00500	0.00170	mg/L		11/19/25 08:30	12/02/25 21:13	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/19/25 08:30	12/03/25 13:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	44.0		15.0	10.5	mg/L			11/17/25 11:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-38
Date Collected: 11/12/25 14:58
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-5
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 16:20	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 16:20	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 16:20	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 16:20	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 16:20	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 16:20	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 16:20	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 16:20	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 16:20	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 16:20	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 16:20	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 16:20	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 16:20	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 16:20	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 16:20	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 16:20	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 16:20	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 16:20	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 16:20	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 16:20	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 16:20	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 16:20	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 16:20	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 16:20	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 16:20	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 16:20	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 16:20	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 16:20	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 16:20	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 16:20	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 16:20	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 16:20	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 16:20	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 16:20	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 16:20	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 16:20	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 16:20	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 16:20	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 16:20	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 16:20	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 16:20	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 16:20	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 16:20	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 16:20	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 16:20	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 16:20	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	120		76 - 130		11/18/25 16:20	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-38
Date Collected: 11/12/25 14:58
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-5
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

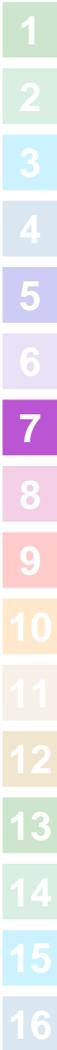
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		11/18/25 16:20	1
4-Bromofluorobenzene (Surr)	104		80 - 120		11/18/25 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:12	1
Barium	0.371		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:12	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:12	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	3.38		1.88	1.31	mg/L			11/17/25 11:50	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-40R

Lab Sample ID: 310-320687-6

Date Collected: 11/14/25 09:19

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 01:48	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 01:48	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 01:48	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 01:48	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 01:48	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 01:48	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 01:48	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 01:48	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 01:48	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 01:48	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 01:48	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 01:48	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 01:48	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 01:48	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 01:48	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 01:48	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 01:48	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 01:48	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 01:48	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 01:48	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 01:48	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 01:48	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 01:48	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 01:48	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 01:48	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 01:48	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 01:48	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 01:48	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 01:48	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 01:48	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 01:48	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 01:48	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 01:48	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 01:48	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 01:48	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 01:48	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 01:48	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 01:48	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 01:48	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 01:48	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 01:48	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 01:48	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 01:48	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 01:48	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 01:48	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 01:48	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		76 - 130		11/19/25 01:48	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-40R

Lab Sample ID: 310-320687-6

Date Collected: 11/14/25 09:19

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		11/19/25 01:48	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 01:48	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0911		0.0911	0.00911	ug/L		11/17/25 12:51	12/03/25 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	48		10 - 150	11/17/25 12:51	12/03/25 18:44	1
Tetrachloro-m-xylene (Surr)	66		17 - 150	11/17/25 12:51	12/03/25 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000627	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:20	1
Barium	0.105		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:20	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	11/23/25 18:20	1
Cobalt	0.000263	J	0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:20	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:20	1
Lead	0.000434	J	0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:20	1
Nickel	0.00333	J	0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:20	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:20	1
Vanadium	0.00177	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:20	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	29.8		1.88	1.31	mg/L			11/18/25 11:54	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: PZ-11
Date Collected: 11/14/25 11:24
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-7
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 02:11	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 02:11	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 02:11	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 02:11	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 02:11	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 02:11	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 02:11	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 02:11	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 02:11	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 02:11	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 02:11	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 02:11	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 02:11	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 02:11	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 02:11	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 02:11	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 02:11	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 02:11	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 02:11	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 02:11	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 02:11	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 02:11	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 02:11	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 02:11	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 02:11	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 02:11	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 02:11	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 02:11	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 02:11	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 02:11	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 02:11	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 02:11	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 02:11	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 02:11	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 02:11	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 02:11	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 02:11	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 02:11	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 02:11	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 02:11	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 02:11	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 02:11	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 02:11	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 02:11	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 02:11	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 02:11	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 02:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		76 - 130		11/19/25 02:11	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: PZ-11
 Date Collected: 11/14/25 11:24
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-7
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		11/19/25 02:11	1
4-Bromofluorobenzene (Surr)	108		80 - 120		11/19/25 02:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00252		0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:23	1
Barium	0.101		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:23	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	11/23/25 18:23	1
Cobalt	0.00173		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:23	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:23	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:23	1
Nickel	0.00314	J	0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:23	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:23	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:23	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	5.50	J	7.50	5.25	mg/L			11/18/25 10:42	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-45R

Lab Sample ID: 310-320687-8

Date Collected: 11/13/25 10:16

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 16:42	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 16:42	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 16:42	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 16:42	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 16:42	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 16:42	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 16:42	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 16:42	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 16:42	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 16:42	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 16:42	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 16:42	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 16:42	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 16:42	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 16:42	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 16:42	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 16:42	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 16:42	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 16:42	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 16:42	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 16:42	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 16:42	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 16:42	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 16:42	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 16:42	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 16:42	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 16:42	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 16:42	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 16:42	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 16:42	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 16:42	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 16:42	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 16:42	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 16:42	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 16:42	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 16:42	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 16:42	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 16:42	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 16:42	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 16:42	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 16:42	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 16:42	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 16:42	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 16:42	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 16:42	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 16:42	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	123		76 - 130		11/18/25 16:42	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-45R
 Date Collected: 11/13/25 10:16
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-8
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/18/25 16:42	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/18/25 16:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00129	J	0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:26	1
Arsenic	0.000957	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:26	1
Barium	0.0326		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:26	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:26	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:26	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/25/25 08:00	11/25/25 18:41	1
Cobalt	0.00125		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:26	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:26	1
Lead	0.000394	J	0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:26	1
Nickel	0.00341	J	0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:26	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:26	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:26	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:26	1
Vanadium	0.00254	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:26	1
Zinc	0.0343		0.0200	0.0130	mg/L		11/25/25 08:00	11/25/25 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	42.5		3.75	2.63	mg/L			11/18/25 10:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-46R

Lab Sample ID: 310-320687-9

Date Collected: 11/13/25 11:15

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 02:34	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 02:34	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 02:34	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 02:34	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 02:34	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 02:34	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 02:34	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 02:34	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 02:34	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 02:34	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 02:34	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 02:34	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 02:34	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 02:34	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 02:34	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 02:34	1
Acetone	8.42	J	10.0	3.80	ug/L			11/19/25 02:34	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 02:34	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 02:34	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 02:34	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 02:34	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 02:34	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 02:34	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 02:34	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 02:34	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 02:34	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 02:34	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 02:34	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 02:34	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 02:34	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 02:34	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 02:34	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 02:34	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 02:34	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 02:34	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 02:34	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 02:34	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 02:34	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 02:34	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 02:34	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 02:34	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 02:34	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 02:34	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 02:34	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 02:34	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 02:34	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 02:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		76 - 130		11/19/25 02:34	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-46R
 Date Collected: 11/13/25 11:15
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-9
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		11/19/25 02:34	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 02:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:34	1
Arsenic	0.00144	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:34	1
Barium	0.0292		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:34	1
Beryllium	0.000558	J	0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:34	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/25/25 08:00	11/25/25 18:44	1
Cobalt	0.00162		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:34	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:34	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:34	1
Nickel	0.00594		0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:34	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:34	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:34	1
Vanadium	0.00234	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:34	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/25/25 08:00	11/25/25 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	32.0		7.50	5.25	mg/L			11/18/25 10:42	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-47

Lab Sample ID: 310-320687-10

Date Collected: 11/13/25 12:07

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 02:56	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 02:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 02:56	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 02:56	1
1,1-Dichloroethane	1.83		1.00	0.400	ug/L			11/19/25 02:56	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 02:56	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 02:56	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 02:56	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 02:56	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 02:56	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 02:56	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 02:56	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 02:56	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 02:56	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 02:56	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 02:56	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 02:56	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 02:56	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 02:56	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 02:56	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 02:56	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 02:56	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 02:56	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 02:56	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 02:56	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 02:56	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 02:56	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 02:56	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 02:56	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 02:56	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 02:56	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 02:56	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 02:56	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 02:56	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 02:56	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 02:56	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 02:56	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 02:56	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 02:56	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 02:56	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 02:56	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 02:56	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 02:56	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 02:56	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 02:56	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 02:56	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		76 - 130		11/19/25 02:56	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-47
 Date Collected: 11/13/25 12:07
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-10
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		11/19/25 02:56	1
4-Bromofluorobenzene (Surr)	106		80 - 120		11/19/25 02:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:37	1
Arsenic	0.000888	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:37	1
Barium	0.120		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:37	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:37	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:37	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	11/23/25 18:37	1
Cobalt	0.000745		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:37	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:37	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:37	1
Nickel	0.00310	J	0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:37	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:37	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:37	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:37	1
Vanadium	0.00217	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:37	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	4.00		1.88	1.31	mg/L			11/18/25 10:42	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-48

Lab Sample ID: 310-320687-11

Date Collected: 11/13/25 13:11

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 03:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 03:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 03:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 03:19	1
1,1-Dichloroethane	41.6		1.00	0.400	ug/L			11/19/25 03:19	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 03:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 03:19	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 03:19	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 03:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 03:19	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 03:19	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 03:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 03:19	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 03:19	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 03:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 03:19	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 03:19	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 03:19	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 03:19	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 03:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 03:19	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 03:19	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 03:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 03:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 03:19	1
Chlorobenzene	0.395	J	1.00	0.350	ug/L			11/19/25 03:19	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 03:19	1
Chloroethane	9.73		4.00	0.900	ug/L			11/19/25 03:19	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 03:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 03:19	1
cis-1,2-Dichloroethene	2.79		1.00	0.550	ug/L			11/19/25 03:19	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 03:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 03:19	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 03:19	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 03:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 03:19	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 03:19	1
Tetrachloroethene	1.38		1.00	0.480	ug/L			11/19/25 03:19	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 03:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 03:19	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 03:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 03:19	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 03:19	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 03:19	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 03:19	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 03:19	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 03:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		76 - 130		11/19/25 03:19	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-48
Date Collected: 11/13/25 13:11
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-11
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		11/19/25 03:19	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 03:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:40	1
Arsenic	0.000668	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:40	1
Barium	0.163		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:40	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:40	1
Cadmium	0.000308		0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:40	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	11/23/25 18:40	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:40	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:40	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:40	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:40	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:40	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:40	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:40	1
Vanadium	0.00316	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:40	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	4.25		1.88	1.31	mg/L			11/18/25 10:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-49

Lab Sample ID: 310-320687-12

Date Collected: 11/11/25 13:40

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 17:04	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 17:04	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 17:04	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 17:04	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 17:04	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 17:04	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 17:04	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 17:04	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 17:04	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 17:04	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 17:04	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 17:04	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 17:04	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 17:04	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 17:04	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 17:04	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 17:04	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 17:04	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 17:04	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 17:04	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 17:04	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 17:04	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 17:04	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 17:04	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 17:04	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 17:04	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 17:04	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 17:04	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 17:04	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 17:04	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 17:04	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 17:04	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 17:04	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 17:04	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 17:04	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 17:04	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 17:04	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 17:04	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 17:04	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 17:04	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 17:04	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 17:04	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 17:04	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 17:04	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 17:04	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 17:04	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	123		76 - 130		11/18/25 17:04	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-49
Date Collected: 11/11/25 13:40
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-12
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/18/25 17:04	1
4-Bromofluorobenzene (Surr)	103		80 - 120		11/18/25 17:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:43	1
Arsenic	0.00169	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:43	1
Barium	0.0422		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:43	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:43	1
Cadmium	0.000178	J	0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:43	1
Chromium	0.00384	J	0.00500	0.00180	mg/L		11/25/25 08:00	11/25/25 18:46	1
Cobalt	0.00775		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:43	1
Copper	0.00696		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:43	1
Lead	0.00399		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:43	1
Nickel	0.0127		0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:43	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:43	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:43	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:43	1
Vanadium	0.00597		0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:43	1
Zinc	0.0307		0.0200	0.0130	mg/L		11/25/25 08:00	11/25/25 18:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	65.3		3.75	2.63	mg/L			11/17/25 10:49	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-90

Lab Sample ID: 310-320687-13

Date Collected: 11/11/25 16:02

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 17:26	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 17:26	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 17:26	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 17:26	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 17:26	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 17:26	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 17:26	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 17:26	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 17:26	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 17:26	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 17:26	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 17:26	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 17:26	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 17:26	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 17:26	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 17:26	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 17:26	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 17:26	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 17:26	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 17:26	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 17:26	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 17:26	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 17:26	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 17:26	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 17:26	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 17:26	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 17:26	1
Chloroethane	7.96		4.00	0.900	ug/L			11/18/25 17:26	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 17:26	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 17:26	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 17:26	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 17:26	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 17:26	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 17:26	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 17:26	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 17:26	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 17:26	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 17:26	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 17:26	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 17:26	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 17:26	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 17:26	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 17:26	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 17:26	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 17:26	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 17:26	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	120		76 - 130		11/18/25 17:26	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-90

Lab Sample ID: 310-320687-13

Date Collected: 11/11/25 16:02

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/18/25 17:26	1
4-Bromofluorobenzene (Surr)	99		80 - 120		11/18/25 17:26	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	<0.0914		0.0914	0.0164	ug/L		11/17/25 12:51	12/03/25 18:58	1
alpha-BHC	<0.0914		0.0914	0.00914	ug/L		11/17/25 12:51	12/03/25 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	60		10 - 150	11/17/25 12:51	12/03/25 18:58	1
Tetrachloro-m-xylene	74		17 - 150	11/17/25 12:51	12/03/25 18:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:46	1
Arsenic	0.00497		0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:46	1
Barium	0.224		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:46	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:46	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:46	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	11/23/25 18:46	1
Cobalt	0.00236		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:46	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:46	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:46	1
Nickel	0.00459	J	0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:46	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:46	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:46	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:46	1
Vanadium	0.00230	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:46	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	18.3		5.00	3.50	mg/L			11/17/25 10:49	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-93

Lab Sample ID: 310-320687-14

Date Collected: 11/11/25 14:50

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 17:47	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 17:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 17:47	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 17:47	1
1,1-Dichloroethane	1.44		1.00	0.400	ug/L			11/18/25 17:47	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 17:47	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 17:47	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 17:47	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 17:47	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 17:47	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 17:47	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 17:47	1
1,4-Dichlorobenzene	1.13		1.00	0.490	ug/L			11/18/25 17:47	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 17:47	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 17:47	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 17:47	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 17:47	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 17:47	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 17:47	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 17:47	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 17:47	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 17:47	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 17:47	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 17:47	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 17:47	1
Chlorobenzene	14.2		1.00	0.350	ug/L			11/18/25 17:47	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 17:47	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 17:47	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 17:47	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 17:47	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 17:47	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 17:47	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 17:47	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 17:47	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 17:47	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 17:47	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 17:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 17:47	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 17:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 17:47	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 17:47	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 17:47	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 17:47	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 17:47	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 17:47	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 17:47	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	118		76 - 130		11/18/25 17:47	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-93

Lab Sample ID: 310-320687-14

Date Collected: 11/11/25 14:50

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/18/25 17:47	1
4-Bromofluorobenzene (Surr)	105		80 - 120		11/18/25 17:47	1

Method: SW846 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol (and/or 3-Methylphenol)	<9.80		9.80	0.686	ug/L		11/17/25 07:50	11/20/25 01:13	1
Phenol	<9.80		9.80	1.08	ug/L		11/17/25 07:50	11/20/25 01:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	67		21 - 110	11/17/25 07:50	11/20/25 01:13	1
Phenol-d5 (Surr)	54		21 - 110	11/17/25 07:50	11/20/25 01:13	1
2,4,6-Tribromophenol (Surr)	89		20 - 144	11/17/25 07:50	11/20/25 01:13	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.0989		0.0989	0.0198	ug/L		11/17/25 12:51	12/03/25 19:12	1
Endrin aldehyde	<0.0989		0.0989	0.0267	ug/L		11/17/25 12:51	12/03/25 19:12	1
Methoxychlor	<0.0989		0.0989	0.0316	ug/L		11/17/25 12:51	12/03/25 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	64		10 - 150	11/17/25 12:51	12/03/25 19:12	1
Tetrachloro-m-xylene	77		17 - 150	11/17/25 12:51	12/03/25 19:12	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.950		0.950	0.120	ug/L		11/18/25 19:15	11/19/25 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	119		25 - 130	11/18/25 19:15	11/19/25 15:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00128	J	0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:49	1
Barium	0.0322		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:49	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/25/25 08:00	11/25/25 18:49	1
Cobalt	0.0113		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:49	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:49	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:49	1
Nickel	0.0502		0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:49	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:49	1
Vanadium	0.00325	J	0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:49	1
Zinc	0.0184	J	0.0200	0.0130	mg/L		11/25/25 08:00	11/25/25 18:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		11/18/25 18:20	11/19/25 23:27	1
Total Suspended Solids (USGS I-3765-85)	2.13		1.88	1.31	mg/L			11/17/25 10:49	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-7-90R

Lab Sample ID: 310-320687-15

Date Collected: 11/11/25 16:44

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 18:09	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 18:09	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 18:09	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 18:09	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 18:09	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 18:09	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 18:09	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 18:09	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 18:09	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 18:09	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 18:09	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 18:09	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 18:09	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 18:09	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 18:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 18:09	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 18:09	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 18:09	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 18:09	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 18:09	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 18:09	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 18:09	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 18:09	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 18:09	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 18:09	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 18:09	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 18:09	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 18:09	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 18:09	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 18:09	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 18:09	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 18:09	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 18:09	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 18:09	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 18:09	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 18:09	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 18:09	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 18:09	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 18:09	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 18:09	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 18:09	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 18:09	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 18:09	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 18:09	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 18:09	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 18:09	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	122		76 - 130		11/18/25 18:09	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-7-90R

Lab Sample ID: 310-320687-15

Date Collected: 11/11/25 16:44

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		80 - 120		11/18/25 18:09	1
4-Bromofluorobenzene (Surr)	103		80 - 120		11/18/25 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00269		0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:51	1
Barium	0.739		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:51	1
Nickel	0.00489	J	0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:51	1
Zinc	0.0207		0.0200	0.0130	mg/L		11/25/25 08:00	11/25/25 18:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	4.38		1.88	1.31	mg/L			11/17/25 10:49	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-7-93

Lab Sample ID: 310-320687-16

Date Collected: 11/13/25 15:09

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 03:42	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 03:42	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 03:42	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 03:42	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 03:42	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 03:42	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 03:42	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 03:42	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 03:42	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 03:42	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 03:42	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 03:42	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 03:42	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 03:42	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 03:42	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 03:42	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 03:42	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 03:42	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 03:42	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 03:42	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 03:42	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 03:42	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 03:42	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 03:42	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 03:42	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 03:42	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 03:42	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 03:42	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 03:42	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 03:42	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 03:42	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 03:42	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 03:42	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 03:42	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 03:42	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 03:42	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 03:42	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 03:42	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 03:42	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 03:42	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 03:42	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 03:42	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 03:42	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 03:42	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 03:42	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 03:42	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 03:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	96		76 - 130		11/19/25 03:42	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-7-93

Lab Sample ID: 310-320687-16

Date Collected: 11/13/25 15:09

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		11/19/25 03:42	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 03:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00108	J	0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 15:45	1
Barium	0.0975		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 15:45	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 15:45	1
Cobalt	0.0133		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 15:45	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 15:45	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 15:45	1
Nickel	0.0617		0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 15:45	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 15:45	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 15:45	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	9.33		5.00	3.50	mg/L			11/18/25 10:42	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-37
Date Collected: 11/13/25 14:02
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-17
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 04:05	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 04:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 04:05	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 04:05	1
1,1-Dichloroethane	34.8		1.00	0.400	ug/L			11/19/25 04:05	1
1,1-Dichloroethene	2.00		2.00	0.460	ug/L			11/19/25 04:05	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 04:05	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 04:05	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 04:05	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 04:05	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 04:05	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 04:05	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 04:05	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 04:05	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 04:05	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 04:05	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 04:05	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 04:05	1
Benzene	0.455	J	0.500	0.220	ug/L			11/19/25 04:05	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 04:05	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 04:05	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 04:05	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 04:05	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 04:05	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 04:05	1
Chlorobenzene	3.42		1.00	0.350	ug/L			11/19/25 04:05	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 04:05	1
Chloroethane	19.9		4.00	0.900	ug/L			11/19/25 04:05	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 04:05	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 04:05	1
cis-1,2-Dichloroethene	2.50		1.00	0.550	ug/L			11/19/25 04:05	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 04:05	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 04:05	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 04:05	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 04:05	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 04:05	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 04:05	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 04:05	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 04:05	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 04:05	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 04:05	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 04:05	1
Trichloroethene	0.382	J	1.00	0.350	ug/L			11/19/25 04:05	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 04:05	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 04:05	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 04:05	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 04:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		76 - 130		11/19/25 04:05	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-37
Date Collected: 11/13/25 14:02
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-17
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		11/19/25 04:05	1
4-Bromofluorobenzene (Surr)	108		80 - 120		11/19/25 04:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00887		0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 15:56	1
Barium	0.0196		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 15:56	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 15:56	1
Cobalt	0.0120		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 15:56	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 15:56	1
Lead	0.000970		0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 15:56	1
Nickel	0.0488		0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 15:56	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 15:56	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 15:56	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	38.0		7.50	5.25	mg/L			11/18/25 10:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-39R

Lab Sample ID: 310-320687-18

Date Collected: 11/13/25 16:28

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 04:28	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 04:28	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 04:28	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 04:28	1
1,1-Dichloroethane	41.7		1.00	0.400	ug/L			11/19/25 04:28	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 04:28	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 04:28	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 04:28	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 04:28	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 04:28	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 04:28	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 04:28	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 04:28	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 04:28	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 04:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 04:28	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 04:28	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 04:28	1
Benzene	0.652		0.500	0.220	ug/L			11/19/25 04:28	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 04:28	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 04:28	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 04:28	1
Bromomethane	<4.00	*	4.00	1.10	ug/L			11/19/25 04:28	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 04:28	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 04:28	1
Chlorobenzene	0.383	J	1.00	0.350	ug/L			11/19/25 04:28	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 04:28	1
Chloroethane	2.26	J	4.00	0.900	ug/L			11/19/25 04:28	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 04:28	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 04:28	1
cis-1,2-Dichloroethene	18.2		1.00	0.550	ug/L			11/19/25 04:28	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 04:28	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 04:28	1
Dichlorodifluoromethane	19.9		3.00	0.850	ug/L			11/19/25 04:28	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 04:28	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 04:28	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 04:28	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 04:28	1
Tetrachloroethene	1.10		1.00	0.480	ug/L			11/19/25 04:28	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 04:28	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 04:28	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 04:28	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 04:28	1
Trichloroethene	3.42		1.00	0.350	ug/L			11/19/25 04:28	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 04:28	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 04:28	1
Vinyl chloride	1.29		1.00	0.430	ug/L			11/19/25 04:28	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 04:28	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-39R

Lab Sample ID: 310-320687-18

Date Collected: 11/13/25 16:28

Matrix: Ground Water

Date Received: 11/15/25 11:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		76 - 130		11/19/25 04:28	1
Toluene-d8 (Surr)	102		80 - 120		11/19/25 04:28	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 04:28	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.0949		0.0949	0.00949	ug/L		11/17/25 12:51	12/03/25 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	70		10 - 150	11/17/25 12:51	12/03/25 19:26	1
Tetrachloro-m-xylene (Surr)	67		17 - 150	11/17/25 12:51	12/03/25 19:26	1

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	<0.958		0.958	0.101	ug/L		11/18/25 19:15	11/19/25 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	113		25 - 130	11/18/25 19:15	11/19/25 15:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00122	J	0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 15:58	1
Barium	0.189		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 15:58	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 15:58	1
Cobalt	0.00128		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 15:58	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 15:58	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 15:58	1
Nickel	0.0208		0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 15:58	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 15:58	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 15:58	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 15:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	4.00		1.88	1.31	mg/L			11/18/25 10:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: PZ-10
Date Collected: 11/14/25 10:06
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-19
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 04:50	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 04:50	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 04:50	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 04:50	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 04:50	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 04:50	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 04:50	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 04:50	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 04:50	1
1,2-Dichlorobenzene	0.377	J	1.00	0.370	ug/L			11/19/25 04:50	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 04:50	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 04:50	1
1,4-Dichlorobenzene	5.89		1.00	0.490	ug/L			11/19/25 04:50	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 04:50	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 04:50	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 04:50	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 04:50	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 04:50	1
Benzene	1.06		0.500	0.220	ug/L			11/19/25 04:50	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 04:50	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 04:50	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 04:50	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 04:50	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 04:50	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 04:50	1
Chlorobenzene	11.4		1.00	0.350	ug/L			11/19/25 04:50	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 04:50	1
Chloroethane	2.75	J	4.00	0.900	ug/L			11/19/25 04:50	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 04:50	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 04:50	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 04:50	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 04:50	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 04:50	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 04:50	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 04:50	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 04:50	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 04:50	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 04:50	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 04:50	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 04:50	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 04:50	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 04:50	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 04:50	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 04:50	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 04:50	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 04:50	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		76 - 130		11/19/25 04:50	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: PZ-10
 Date Collected: 11/14/25 10:06
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-19
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		11/19/25 04:50	1
4-Bromofluorobenzene (Surr)	107		80 - 120		11/19/25 04:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00539		0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 16:01	1
Barium	0.293		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 16:01	1
Chromium	0.00268	J	0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 16:01	1
Cobalt	0.0109		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 16:01	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 16:01	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 16:01	1
Nickel	0.0124		0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 16:01	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 16:01	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 16:01	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	5.50		1.88	1.31	mg/L			11/18/25 11:54	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-D1

Lab Sample ID: 310-320687-20

Date Collected: 11/12/25 12:46

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 18:31	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 18:31	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 18:31	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 18:31	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 18:31	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 18:31	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 18:31	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 18:31	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 18:31	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 18:31	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 18:31	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 18:31	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 18:31	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 18:31	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 18:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 18:31	1
Acetone	5.27	J	10.0	3.80	ug/L			11/18/25 18:31	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 18:31	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 18:31	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 18:31	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 18:31	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 18:31	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 18:31	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 18:31	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 18:31	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 18:31	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 18:31	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 18:31	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 18:31	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 18:31	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 18:31	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 18:31	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 18:31	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 18:31	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 18:31	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 18:31	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 18:31	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 18:31	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 18:31	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 18:31	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 18:31	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 18:31	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 18:31	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 18:31	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 18:31	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 18:31	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	123		76 - 130		11/18/25 18:31	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-D1
 Date Collected: 11/12/25 12:46
 Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-20
 Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		11/18/25 18:31	1
4-Bromofluorobenzene (Surr)	105		80 - 120		11/18/25 18:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	12/02/25 16:04	1
Arsenic	0.00833		0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 16:04	1
Barium	0.624		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 16:04	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	12/02/25 16:04	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	12/02/25 16:04	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 16:04	1
Cobalt	0.00165		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 16:04	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 16:04	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 16:04	1
Nickel	0.00513		0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 16:04	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 16:04	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/20/25 09:00	12/02/25 16:04	1
Thallium	<0.00100	^1+	0.00100	0.000570	mg/L		11/20/25 09:00	12/02/25 16:04	1
Vanadium	0.00237	J	0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 16:04	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	51.0		15.0	10.5	mg/L			11/17/25 11:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-D2

Lab Sample ID: 310-320687-21

Date Collected: 11/13/25 10:16

Matrix: Ground Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 05:13	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 05:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 05:13	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 05:13	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 05:13	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 05:13	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 05:13	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 05:13	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 05:13	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 05:13	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 05:13	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 05:13	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 05:13	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 05:13	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 05:13	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 05:13	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 05:13	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 05:13	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 05:13	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 05:13	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 05:13	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 05:13	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 05:13	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 05:13	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 05:13	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 05:13	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 05:13	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 05:13	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 05:13	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 05:13	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 05:13	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 05:13	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 05:13	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 05:13	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 05:13	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 05:13	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 05:13	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 05:13	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 05:13	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 05:13	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 05:13	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 05:13	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 05:13	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 05:13	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 05:13	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 05:13	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 05:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		76 - 130		11/19/25 05:13	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-D2
Date Collected: 11/13/25 10:16
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-21
Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		11/19/25 05:13	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 05:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00225		0.00200	0.00100	mg/L		11/20/25 09:00	12/02/25 16:12	1
Arsenic	0.000829	J	0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 16:12	1
Barium	0.0333		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 16:12	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	12/02/25 16:12	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	12/02/25 16:12	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 16:12	1
Cobalt	0.00122		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 16:12	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 16:12	1
Lead	0.000431	J	0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 16:12	1
Nickel	0.00324	J	0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 16:12	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 16:12	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/20/25 09:00	12/02/25 16:12	1
Thallium	<0.00100	^1+	0.00100	0.000570	mg/L		11/20/25 09:00	12/02/25 16:12	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 16:12	1
Zinc	0.0383		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	39.5		3.75	2.63	mg/L			11/18/25 10:42	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-320687-22

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 00:17	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 00:17	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 00:17	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 00:17	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 00:17	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 00:17	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 00:17	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 00:17	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 00:17	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 00:17	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 00:17	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 00:17	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 00:17	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 00:17	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 00:17	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 00:17	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 00:17	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 00:17	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 00:17	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 00:17	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 00:17	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 00:17	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 00:17	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 00:17	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 00:17	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 00:17	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 00:17	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 00:17	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 00:17	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 00:17	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 00:17	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 00:17	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 00:17	1
Dichlorodifluoromethane	<3.00		3.00	0.850	ug/L			11/19/25 00:17	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 00:17	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 00:17	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 00:17	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 00:17	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 00:17	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 00:17	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 00:17	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 00:17	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 00:17	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 00:17	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 00:17	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 00:17	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 00:17	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 00:17	1

Client Sample Results

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-320687-22

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Dibromofluoromethane (Surr)	99		76 - 130		11/19/25 00:17	1
Toluene-d8 (Surr)	102		80 - 120		11/19/25 00:17	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 00:17	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-320687-23

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 00:40	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 00:40	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 00:40	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 00:40	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 00:40	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 00:40	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 00:40	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 00:40	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 00:40	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 00:40	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 00:40	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 00:40	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 00:40	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 00:40	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 00:40	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 00:40	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 00:40	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 00:40	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 00:40	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 00:40	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 00:40	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 00:40	1
Bromomethane	<4.00	+	4.00	1.10	ug/L			11/19/25 00:40	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 00:40	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 00:40	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 00:40	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 00:40	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 00:40	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 00:40	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 00:40	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 00:40	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 00:40	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 00:40	1
Dichlorodifluoromethane	<3.00		3.00	0.850	ug/L			11/19/25 00:40	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 00:40	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 00:40	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 00:40	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 00:40	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 00:40	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 00:40	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 00:40	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 00:40	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 00:40	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 00:40	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 00:40	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 00:40	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 00:40	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 00:40	1

Client Sample Results

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-320687-23

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Dibromofluoromethane (Surr)	98		76 - 130		11/19/25 00:40	1
Toluene-d8 (Surr)	103		80 - 120		11/19/25 00:40	1
4-Bromofluorobenzene (Surr)	108		80 - 120		11/19/25 00:40	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-320687-24

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 01:02	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 01:02	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 01:02	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 01:02	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 01:02	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 01:02	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 01:02	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 01:02	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 01:02	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 01:02	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 01:02	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 01:02	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 01:02	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 01:02	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 01:02	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 01:02	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 01:02	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 01:02	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 01:02	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 01:02	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 01:02	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 01:02	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 01:02	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 01:02	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 01:02	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 01:02	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 01:02	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 01:02	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 01:02	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 01:02	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 01:02	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 01:02	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 01:02	1
Dichlorodifluoromethane	<3.00		3.00	0.850	ug/L			11/19/25 01:02	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 01:02	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 01:02	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 01:02	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 01:02	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 01:02	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 01:02	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 01:02	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 01:02	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 01:02	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 01:02	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 01:02	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 01:02	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 01:02	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 01:02	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-320687-24

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Dibromofluoromethane (Surr)	98		76 - 130		11/19/25 01:02	1
Toluene-d8 (Surr)	103		80 - 120		11/19/25 01:02	1
4-Bromofluorobenzene (Surr)	108		80 - 120		11/19/25 01:02	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-320687-25

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/19/25 01:25	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/19/25 01:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/19/25 01:25	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/19/25 01:25	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/19/25 01:25	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/19/25 01:25	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/19/25 01:25	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/19/25 01:25	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/19/25 01:25	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/19/25 01:25	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/19/25 01:25	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/19/25 01:25	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/19/25 01:25	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/19/25 01:25	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/19/25 01:25	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/19/25 01:25	1
Acetone	<10.0		10.0	3.80	ug/L			11/19/25 01:25	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/19/25 01:25	1
Benzene	<0.500		0.500	0.220	ug/L			11/19/25 01:25	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/19/25 01:25	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/19/25 01:25	1
Bromoform	<5.00		5.00	2.60	ug/L			11/19/25 01:25	1
Bromomethane	<4.00	*+	4.00	1.10	ug/L			11/19/25 01:25	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/19/25 01:25	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/19/25 01:25	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/19/25 01:25	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/19/25 01:25	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/19/25 01:25	1
Chloroform	<3.00		3.00	1.30	ug/L			11/19/25 01:25	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/19/25 01:25	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/19/25 01:25	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/19/25 01:25	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/19/25 01:25	1
Dichlorodifluoromethane	<3.00		3.00	0.850	ug/L			11/19/25 01:25	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/19/25 01:25	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/19/25 01:25	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/19/25 01:25	1
Styrene	<1.00		1.00	0.370	ug/L			11/19/25 01:25	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/19/25 01:25	1
Toluene	<1.00		1.00	0.430	ug/L			11/19/25 01:25	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/19/25 01:25	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/19/25 01:25	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/19/25 01:25	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/19/25 01:25	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/19/25 01:25	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/19/25 01:25	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/19/25 01:25	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/19/25 01:25	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: Trip Blank 4

Lab Sample ID: 310-320687-25

Date Collected: 11/13/25 00:00

Matrix: Water

Date Received: 11/15/25 11:20

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Dibromofluoromethane (Surr)	99		76 - 130		11/19/25 01:25	1
Toluene-d8 (Surr)	101		80 - 120		11/19/25 01:25	1
4-Bromofluorobenzene (Surr)	109		80 - 120		11/19/25 01:25	1

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Definitions/Glossary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
F1	MS and/or MSD recovery 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
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

Surrogate Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-320687-1	MW-4-89	116	98	101
310-320687-2	MW-1-99	115	97	102
310-320687-3	MW-2-93	117	96	106
310-320687-4	MW-43	120	94	103
310-320687-5	MW-38	120	96	104
310-320687-6	MW-40R	100	102	109
310-320687-6 MS	MW-40R	100	103	102
310-320687-6 MSD	MW-40R	98	103	101
310-320687-7	PZ-11	99	102	108
310-320687-8	MW-45R	123	95	100
310-320687-9	MW-46R	99	103	109
310-320687-10	MW-47	100	102	106
310-320687-11	MW-48	99	103	109
310-320687-12	MW-49	123	95	103
310-320687-13	MW-4-90	120	98	99
310-320687-14	MW-4-93	118	97	105
310-320687-15	MW-7-90R	122	94	103
310-320687-16	MW-7-93	96	102	109
310-320687-17	MW-37	101	102	108
310-320687-18	MW-39R	102	102	109
310-320687-19	PZ-10	100	103	107
310-320687-20	MW-D1	123	95	105
310-320687-21	MW-D2	98	102	109

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-320687-22	Trip Blank 1	99	102	109
310-320687-23	Trip Blank 2	98	103	108
310-320687-24	Trip Blank 3	98	103	108
310-320687-25	Trip Blank 4	99	101	109
LCS 310-473879/7	Lab Control Sample	95	101	103
LCS 310-473879/8	Lab Control Sample	105	97	102
LCS 310-473929/7	Lab Control Sample	98	104	102
LCS 310-473929/8	Lab Control Sample	99	103	107
MB 310-473879/6	Method Blank	107	97	104
MB 310-473929/6	Method Blank	99	102	110

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
 TOL = Toluene-d8 (Surr)
 BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Matrix: Ground Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	2FP (21-110)	PHL (21-110)	TBP (20-144)
310-320687-14	MW-4-93	67	54	89
Surrogate Legend				
2FP = 2-Fluorophenol (Surr)				
PHL = Phenol-d5 (Surr)				
TBP = 2,4,6-Tribromophenol (Surr)				

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Ground Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB1 (10-150)	TCX1 (17-150)
310-320687-1	MW-4-89	71	61
310-320687-6	MW-40R	48	66
310-320687-13	MW-4-90	60	74
310-320687-14	MW-4-93	64	77
310-320687-18	MW-39R	70	67
Surrogate Legend			
DCB = DCB Decachlorobiphenyl (Surr)			
TCX = Tetrachloro-m-xylene (Surr)			

Method: 8151A - Herbicides (GC)

Matrix: Ground Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCPAA1 (25-130)
310-320687-14	MW-4-93	119
310-320687-18	MW-39R	113
Surrogate Legend		
DCPAA = DCAA		

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCPAA1 (25-130)
LCS 500-843597/2-A	Lab Control Sample	109
LCSD 500-843597/3-A	Lab Control Sample Dup	114
MB 500-843597/1-A	Method Blank	100
MB 500-843597/1-A	Method Blank	111
Surrogate Legend		
DCPAA = DCAA		

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-473879/6
Matrix: Water
Analysis Batch: 473879

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 10:28	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 10:28	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 10:28	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 10:28	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 10:28	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 10:28	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 10:28	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 10:28	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 10:28	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 10:28	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 10:28	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 10:28	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 10:28	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 10:28	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 10:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 10:28	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 10:28	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 10:28	1
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 10:28	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 10:28	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 10:28	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 10:28	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 10:28	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 10:28	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 10:28	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 10:28	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 10:28	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 10:28	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 10:28	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 10:28	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 10:28	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 10:28	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 10:28	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 10:28	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 10:28	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 10:28	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 10:28	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 10:28	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 10:28	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 10:28	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 10:28	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 10:28	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 10:28	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 10:28	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 10:28	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 10:28	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 10:28	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-473879/6
Matrix: Water
Analysis Batch: 473879

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

<u>Surrogate</u>	<u>MB</u>	<u>MB</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	107		76 - 130		11/18/25 10:28	1
Toluene-d8 (Surr)	97		80 - 120		11/18/25 10:28	1
4-Bromofluorobenzene (Surr)	104		80 - 120		11/18/25 10:28	1

Lab Sample ID: LCS 310-473879/7
Matrix: Water
Analysis Batch: 473879

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

<u>Analyte</u>	<u>Spike</u>	<u>LCS</u>	<u>LCS</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u>
	Added	Result	Qualifier				Limits
1,1,1,2-Tetrachloroethane	20.0	17.14		ug/L		86	70 - 121
1,1,1-Trichloroethane	20.0	17.26		ug/L		86	69 - 130
1,1,2,2-Tetrachloroethane	20.0	18.31		ug/L		92	70 - 122
1,1,2-Trichloroethane	20.0	18.64		ug/L		93	75 - 121
1,1-Dichloroethane	20.0	16.87		ug/L		84	69 - 127
1,1-Dichloroethene	20.0	17.92		ug/L		90	64 - 134
1,2,3-Trichloropropane	20.0	18.97		ug/L		95	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	15.76		ug/L		79	62 - 132
1,2-Dibromoethane (EDB)	20.0	17.39		ug/L		87	74 - 122
1,2-Dichlorobenzene	20.0	18.75		ug/L		94	74 - 120
1,2-Dichloroethane	20.0	17.25		ug/L		86	68 - 125
1,2-Dichloropropane	20.0	16.92		ug/L		85	72 - 128
1,4-Dichlorobenzene	20.0	19.30		ug/L		97	72 - 120
2-Butanone (MEK)	40.0	41.51		ug/L		104	60 - 134
2-Hexanone	40.0	34.76		ug/L		87	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	37.30		ug/L		93	62 - 136
Acetone	40.0	35.02		ug/L		88	59 - 136
Acrylonitrile	200	186.2		ug/L		93	50 - 150
Benzene	20.0	18.78		ug/L		94	71 - 125
Bromochloromethane	20.0	19.05		ug/L		95	69 - 131
Bromodichloromethane	20.0	16.52		ug/L		83	70 - 122
Bromoform	20.0	16.13		ug/L		81	62 - 122
Carbon disulfide	20.0	16.89		ug/L		84	58 - 137
Carbon tetrachloride	20.0	17.08		ug/L		85	63 - 136
Chlorobenzene	20.0	17.81		ug/L		89	74 - 120
Chlorodibromomethane	20.0	17.76		ug/L		89	69 - 121
Chloroform	20.0	19.64		ug/L		98	72 - 122
cis-1,2-Dichloroethene	20.0	18.23		ug/L		91	72 - 123
cis-1,3-Dichloropropene	20.0	18.31		ug/L		92	72 - 123
Dibromomethane	20.0	18.75		ug/L		94	72 - 122
Ethylbenzene	20.0	19.93		ug/L		100	75 - 120
Iodomethane	20.0	19.50		ug/L		98	18 - 150
Methylene Chloride	20.0	18.25		ug/L		91	72 - 128
Styrene	20.0	20.10		ug/L		100	74 - 122
Tetrachloroethene	20.0	18.18		ug/L		91	70 - 128
Toluene	20.0	18.21		ug/L		91	74 - 120
trans-1,2-Dichloroethene	20.0	17.73		ug/L		89	67 - 127
trans-1,3-Dichloropropene	20.0	17.46		ug/L		87	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.45		ug/L		92	50 - 150

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-473879/7
Matrix: Water
Analysis Batch: 473879

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	17.39		ug/L		87	70 - 128
Vinyl acetate	40.0	41.74		ug/L		104	50 - 150
Xylenes, Total	40.0	39.98		ug/L		100	74 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	95		76 - 130
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	103		80 - 120

Lab Sample ID: LCS 310-473879/8
Matrix: Water
Analysis Batch: 473879

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	13.25		ug/L		66	33 - 138
Chloroethane	20.0	16.79		ug/L		84	59 - 139
Chloromethane	20.0	16.74		ug/L		84	52 - 146
Trichlorofluoromethane	20.0	17.13		ug/L		86	55 - 150
Vinyl chloride	20.0	17.14		ug/L		86	60 - 142

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	105		76 - 130
Toluene-d8 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120

Lab Sample ID: MB 310-473929/6
Matrix: Water
Analysis Batch: 473929

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/18/25 23:08	1
1,1,1-Trichloroethane	<1.00		1.00	0.420	ug/L			11/18/25 23:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			11/18/25 23:08	1
1,1,2-Trichloroethane	<1.00		1.00	0.330	ug/L			11/18/25 23:08	1
1,1-Dichloroethane	<1.00		1.00	0.400	ug/L			11/18/25 23:08	1
1,1-Dichloroethene	<2.00		2.00	0.460	ug/L			11/18/25 23:08	1
1,2,3-Trichloropropane	<1.00		1.00	0.430	ug/L			11/18/25 23:08	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/18/25 23:08	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/18/25 23:08	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/18/25 23:08	1
1,2-Dichloroethane	<1.00		1.00	0.890	ug/L			11/18/25 23:08	1
1,2-Dichloropropane	<1.00		1.00	0.380	ug/L			11/18/25 23:08	1
1,4-Dichlorobenzene	<1.00		1.00	0.490	ug/L			11/18/25 23:08	1
2-Butanone (MEK)	<10.0		10.0	3.40	ug/L			11/18/25 23:08	1
2-Hexanone	<10.0		10.0	3.80	ug/L			11/18/25 23:08	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	3.50	ug/L			11/18/25 23:08	1
Acetone	<10.0		10.0	3.80	ug/L			11/18/25 23:08	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/18/25 23:08	1

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-473929/6
Matrix: Water
Analysis Batch: 473929

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			11/18/25 23:08	1
Bromochloromethane	<5.00		5.00	1.70	ug/L			11/18/25 23:08	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/18/25 23:08	1
Bromoform	<5.00		5.00	2.60	ug/L			11/18/25 23:08	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/18/25 23:08	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/18/25 23:08	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/18/25 23:08	1
Chlorobenzene	<1.00		1.00	0.350	ug/L			11/18/25 23:08	1
Chlorodibromomethane	<5.00		5.00	1.50	ug/L			11/18/25 23:08	1
Chloroethane	<4.00		4.00	0.900	ug/L			11/18/25 23:08	1
Chloroform	<3.00		3.00	1.30	ug/L			11/18/25 23:08	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/18/25 23:08	1
cis-1,2-Dichloroethene	<1.00		1.00	0.550	ug/L			11/18/25 23:08	1
cis-1,3-Dichloropropene	<5.00		5.00	1.20	ug/L			11/18/25 23:08	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/18/25 23:08	1
Dichlorodifluoromethane	<3.00		3.00	0.850	ug/L			11/18/25 23:08	1
Ethylbenzene	<1.00		1.00	0.420	ug/L			11/18/25 23:08	1
Iodomethane	<10.0		10.0	2.60	ug/L			11/18/25 23:08	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/18/25 23:08	1
Styrene	<1.00		1.00	0.370	ug/L			11/18/25 23:08	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/18/25 23:08	1
Toluene	<1.00		1.00	0.430	ug/L			11/18/25 23:08	1
trans-1,2-Dichloroethene	<1.00		1.00	0.410	ug/L			11/18/25 23:08	1
trans-1,3-Dichloropropene	<5.00		5.00	2.30	ug/L			11/18/25 23:08	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	2.40	ug/L			11/18/25 23:08	1
Trichloroethene	<1.00		1.00	0.350	ug/L			11/18/25 23:08	1
Trichlorofluoromethane	<4.00		4.00	0.470	ug/L			11/18/25 23:08	1
Vinyl acetate	<10.0		10.0	7.10	ug/L			11/18/25 23:08	1
Vinyl chloride	<1.00		1.00	0.430	ug/L			11/18/25 23:08	1
Xylenes, Total	<3.00		3.00	1.10	ug/L			11/18/25 23:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Dibromofluoromethane (Surr)</i>	99		76 - 130		11/18/25 23:08	1
<i>Toluene-d8 (Surr)</i>	102		80 - 120		11/18/25 23:08	1
<i>4-Bromofluorobenzene (Surr)</i>	110		80 - 120		11/18/25 23:08	1

Lab Sample ID: LCS 310-473929/7
Matrix: Water
Analysis Batch: 473929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	19.68		ug/L		98	70 - 121
1,1,1-Trichloroethane	20.0	18.41		ug/L		92	69 - 130
1,1,2,2-Tetrachloroethane	20.0	20.40		ug/L		102	70 - 122
1,1,2-Trichloroethane	20.0	18.79		ug/L		94	75 - 121
1,1-Dichloroethane	20.0	19.77		ug/L		99	69 - 127
1,1-Dichloroethene	20.0	21.19		ug/L		106	64 - 134
1,2,3-Trichloropropane	20.0	22.37		ug/L		112	70 - 122

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-473929/7
Matrix: Water
Analysis Batch: 473929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	20.0	21.59		ug/L		108	62 - 132
1,2-Dibromoethane (EDB)	20.0	19.44		ug/L		97	74 - 122
1,2-Dichlorobenzene	20.0	21.85		ug/L		109	74 - 120
1,2-Dichloroethane	20.0	18.14		ug/L		91	68 - 125
1,2-Dichloropropane	20.0	18.15		ug/L		91	72 - 128
1,4-Dichlorobenzene	20.0	21.80		ug/L		109	72 - 120
2-Butanone (MEK)	40.0	39.27		ug/L		98	60 - 134
2-Hexanone	40.0	38.72		ug/L		97	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	37.97		ug/L		95	62 - 136
Acetone	40.0	38.32		ug/L		96	59 - 136
Acrylonitrile	200	191.2		ug/L		96	50 - 150
Benzene	20.0	18.60		ug/L		93	71 - 125
Bromochloromethane	20.0	19.46		ug/L		97	69 - 131
Bromodichloromethane	20.0	18.42		ug/L		92	70 - 122
Bromoform	20.0	18.58		ug/L		93	62 - 122
Carbon disulfide	20.0	19.86		ug/L		99	58 - 137
Carbon tetrachloride	20.0	18.59		ug/L		93	63 - 136
Chlorobenzene	20.0	20.52		ug/L		103	74 - 120
Chlorodibromomethane	20.0	18.84		ug/L		94	69 - 121
Chloroform	20.0	18.75		ug/L		94	72 - 122
cis-1,2-Dichloroethene	20.0	19.31		ug/L		97	72 - 123
cis-1,3-Dichloropropene	20.0	17.42		ug/L		87	72 - 123
Dibromomethane	20.0	19.27		ug/L		96	72 - 122
Ethylbenzene	20.0	21.13		ug/L		106	75 - 120
Iodomethane	20.0	21.42		ug/L		107	18 - 150
Methylene Chloride	20.0	19.99		ug/L		100	72 - 128
Styrene	20.0	20.39		ug/L		102	74 - 122
Tetrachloroethene	20.0	21.35		ug/L		107	70 - 128
Toluene	20.0	20.42		ug/L		102	74 - 120
trans-1,2-Dichloroethene	20.0	19.60		ug/L		98	67 - 127
trans-1,3-Dichloropropene	20.0	16.41		ug/L		82	67 - 123
trans-1,4-Dichloro-2-butene	20.0	16.42		ug/L		82	50 - 150
Trichloroethene	20.0	17.99		ug/L		90	70 - 128
Vinyl acetate	40.0	30.83		ug/L		77	50 - 150
Xylenes, Total	40.0	40.97		ug/L		102	74 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	98		76 - 130
Toluene-d8 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120

Lab Sample ID: LCS 310-473929/8
Matrix: Water
Analysis Batch: 473929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	28.66	*+	ug/L		143	33 - 138
Chloroethane	20.0	19.99		ug/L		100	59 - 139

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-473929/8
Matrix: Water
Analysis Batch: 473929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	20.0	21.30		ug/L		107	52 - 146
Trichlorofluoromethane	20.0	20.65		ug/L		103	55 - 150
Vinyl chloride	20.0	20.79		ug/L		104	60 - 142

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	99		76 - 130
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	107		80 - 120

Lab Sample ID: 310-320687-6 MS
Matrix: Ground Water
Analysis Batch: 473929

Client Sample ID: MW-40R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	<1.00		20.0	17.52		ug/L		88	55 - 121
1,1,1-Trichloroethane	<1.00		20.0	14.70		ug/L		74	53 - 130
1,1,2,2-Tetrachloroethane	<1.00		20.0	19.35		ug/L		97	55 - 123
1,1,2-Trichloroethane	<1.00		20.0	17.43		ug/L		87	60 - 121
1,1-Dichloroethane	<1.00		20.0	16.98		ug/L		85	53 - 127
1,1-Dichloroethene	<2.00		20.0	17.30		ug/L		87	51 - 134
1,2,3-Trichloropropane	<1.00		20.0	19.99		ug/L		100	56 - 122
1,2-Dibromo-3-Chloropropane	<1.20		20.0	19.28		ug/L		96	44 - 138
1,2-Dibromoethane (EDB)	<0.340		20.0	17.36		ug/L		87	60 - 122
1,2-Dichlorobenzene	<1.00		20.0	19.69		ug/L		98	60 - 120
1,2-Dichloroethane	<1.00		20.0	16.03		ug/L		80	48 - 128
1,2-Dichloropropane	<1.00		20.0	15.80		ug/L		79	59 - 128
1,4-Dichlorobenzene	<1.00		20.0	19.59		ug/L		98	58 - 120
2-Butanone (MEK)	<10.0		40.0	33.27		ug/L		83	46 - 134
2-Hexanone	<10.0		40.0	35.40		ug/L		88	46 - 141
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	35.63		ug/L		89	49 - 138
Acetone	<10.0		40.0	35.52		ug/L		89	39 - 141
Acrylonitrile	<10.0		200	176.7		ug/L		88	41 - 150
Benzene	<0.500		20.0	15.77		ug/L		79	48 - 125
Bromochloromethane	<5.00		20.0	17.25		ug/L		86	55 - 131
Bromodichloromethane	<1.00		20.0	16.27		ug/L		81	53 - 122
Bromoform	<5.00		20.0	17.23		ug/L		86	47 - 122
Carbon disulfide	<1.00		20.0	17.47		ug/L		87	45 - 137
Carbon tetrachloride	<2.00		20.0	14.95		ug/L		75	45 - 136
Chlorobenzene	<1.00		20.0	18.18		ug/L		91	59 - 120
Chlorodibromomethane	<5.00		20.0	17.42		ug/L		87	53 - 121
Chloroform	<3.00		20.0	16.41		ug/L		82	52 - 122
cis-1,2-Dichloroethene	<1.00		20.0	16.83		ug/L		84	51 - 123
cis-1,3-Dichloropropene	<5.00		20.0	14.88		ug/L		74	55 - 123
Dibromomethane	<1.00		20.0	17.25		ug/L		86	57 - 122
Ethylbenzene	<1.00		20.0	17.73		ug/L		89	53 - 120
Iodomethane	<10.0		20.0	19.42		ug/L		97	18 - 150
Methylene Chloride	<5.00		20.0	17.80		ug/L		89	59 - 128
Styrene	<1.00		20.0	18.04		ug/L		90	50 - 125

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-320687-6 MS
Matrix: Ground Water
Analysis Batch: 473929

Client Sample ID: MW-40R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Tetrachloroethene	<1.00		20.0	16.50		ug/L		83	51 - 128
Toluene	<1.00		20.0	17.05		ug/L		85	52 - 120
trans-1,2-Dichloroethene	<1.00		20.0	16.86		ug/L		84	53 - 127
trans-1,3-Dichloropropene	<5.00		20.0	14.36		ug/L		72	50 - 123
trans-1,4-Dichloro-2-butene	<10.0		20.0	14.91		ug/L		75	28 - 150
Trichloroethene	<1.00		20.0	14.93		ug/L		75	50 - 128
Vinyl acetate	<10.0		40.0	26.81		ug/L		67	31 - 150
Xylenes, Total	<3.00		40.0	35.23		ug/L		88	50 - 122

Surrogate	MS %Recovery	MS Qualifier	MS Limits
Dibromofluoromethane (Surr)	100		76 - 130
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120

Lab Sample ID: 310-320687-6 MSD
Matrix: Ground Water
Analysis Batch: 473929

Client Sample ID: MW-40R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<1.00		20.0	17.57		ug/L		88	55 - 121	0	20
1,1,1-Trichloroethane	<1.00		20.0	14.76		ug/L		74	53 - 130	0	20
1,1,2,2-Tetrachloroethane	<1.00		20.0	19.84		ug/L		99	55 - 123	3	20
1,1,2-Trichloroethane	<1.00		20.0	17.40		ug/L		87	60 - 121	0	20
1,1-Dichloroethane	<1.00		20.0	17.28		ug/L		86	53 - 127	2	20
1,1-Dichloroethene	<2.00		20.0	17.52		ug/L		88	51 - 134	1	20
1,2,3-Trichloropropane	<1.00		20.0	20.84		ug/L		104	56 - 122	4	21
1,2-Dibromo-3-Chloropropane	<1.20		20.0	20.35		ug/L		102	44 - 138	5	24
1,2-Dibromoethane (EDB)	<0.340		20.0	17.86		ug/L		89	60 - 122	3	20
1,2-Dichlorobenzene	<1.00		20.0	20.00		ug/L		100	60 - 120	2	20
1,2-Dichloroethane	<1.00		20.0	16.14		ug/L		81	48 - 128	1	20
1,2-Dichloropropane	<1.00		20.0	15.52		ug/L		78	59 - 128	2	20
1,4-Dichlorobenzene	<1.00		20.0	19.66		ug/L		98	58 - 120	0	20
2-Butanone (MEK)	<10.0		40.0	35.85		ug/L		90	46 - 134	7	23
2-Hexanone	<10.0		40.0	37.05		ug/L		93	46 - 141	5	20
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	36.16		ug/L		90	49 - 138	1	20
Acetone	<10.0		40.0	36.47		ug/L		91	39 - 141	3	23
Acrylonitrile	<10.0		200	182.6		ug/L		91	41 - 150	3	20
Benzene	<0.500		20.0	15.65		ug/L		78	48 - 125	1	20
Bromochloromethane	<5.00		20.0	17.14		ug/L		86	55 - 131	1	21
Bromodichloromethane	<1.00		20.0	16.42		ug/L		82	53 - 122	1	20
Bromoform	<5.00		20.0	17.71		ug/L		89	47 - 122	3	20
Carbon disulfide	<1.00		20.0	16.21		ug/L		81	45 - 137	8	24
Carbon tetrachloride	<2.00		20.0	14.79		ug/L		74	45 - 136	1	20
Chlorobenzene	<1.00		20.0	17.92		ug/L		90	59 - 120	1	20
Chlorodibromomethane	<5.00		20.0	17.61		ug/L		88	53 - 121	1	20
Chloroform	<3.00		20.0	16.19		ug/L		81	52 - 122	1	20
cis-1,2-Dichloroethene	<1.00		20.0	17.02		ug/L		85	51 - 123	1	20
cis-1,3-Dichloropropene	<5.00		20.0	15.17		ug/L		76	55 - 123	2	20

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 310-320687-6 MSD
Matrix: Ground Water
Analysis Batch: 473929

Client Sample ID: MW-40R
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Dibromomethane	<1.00		20.0	17.19		ug/L		86	57 - 122	0	20
Ethylbenzene	<1.00		20.0	17.88		ug/L		89	53 - 120	1	20
Iodomethane	<10.0		20.0	20.38		ug/L		102	18 - 150	5	32
Methylene Chloride	<5.00		20.0	17.93		ug/L		90	59 - 128	1	20
Styrene	<1.00		20.0	18.23		ug/L		91	50 - 125	1	20
Tetrachloroethene	<1.00		20.0	16.50		ug/L		83	51 - 128	0	20
Toluene	<1.00		20.0	17.20		ug/L		86	52 - 120	1	20
trans-1,2-Dichloroethene	<1.00		20.0	16.51		ug/L		83	53 - 127	2	20
trans-1,3-Dichloropropene	<5.00		20.0	14.60		ug/L		73	50 - 123	2	20
trans-1,4-Dichloro-2-butene	<10.0		20.0	15.37		ug/L		77	28 - 150	3	24
Trichloroethene	<1.00		20.0	14.67		ug/L		73	50 - 128	2	20
Vinyl acetate	<10.0		40.0	27.37		ug/L		68	31 - 150	2	25
Xylenes, Total	<3.00		40.0	35.24		ug/L		88	50 - 122	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	98		76 - 130
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-843597/1-A
Matrix: Water
Analysis Batch: 843799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 843597

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4-D	<1.00		1.00	0.126	ug/L		11/18/25 07:09	11/18/25 17:04	1
Silvex (2,4,5-TP)	<1.00		1.00	0.105	ug/L		11/18/25 07:09	11/18/25 17:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	100		25 - 130	11/18/25 07:09	11/18/25 17:04	1

Lab Sample ID: MB 500-843597/1-A
Matrix: Water
Analysis Batch: 843964

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 843597

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4-D	<1.00		1.00	0.126	ug/L		11/18/25 07:09	11/19/25 14:20	1
Silvex (2,4,5-TP)	<1.00		1.00	0.105	ug/L		11/18/25 07:09	11/19/25 14:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCAA	111		25 - 130	11/18/25 07:09	11/19/25 14:20	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 500-843597/2-A
Matrix: Water
Analysis Batch: 843799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 843597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	10.0	9.422		ug/L		94	30 - 115
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
DCAA	109		25 - 130				

Lab Sample ID: LCSD 500-843597/3-A
Matrix: Water
Analysis Batch: 843799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 843597

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	10.0	10.44		ug/L		104	30 - 115	10	20
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
DCAA	114		25 - 130						

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-473973/1-A
Matrix: Water
Analysis Batch: 475370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/19/25 08:30	12/02/25 19:55	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/19/25 08:30	12/02/25 19:55	1
Barium	<0.00200		0.00200	0.000660	mg/L		11/19/25 08:30	12/02/25 19:55	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/19/25 08:30	12/02/25 19:55	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/19/25 08:30	12/02/25 19:55	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/19/25 08:30	12/02/25 19:55	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/19/25 08:30	12/02/25 19:55	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/19/25 08:30	12/02/25 19:55	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/19/25 08:30	12/02/25 19:55	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/19/25 08:30	12/02/25 19:55	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/19/25 08:30	12/02/25 19:55	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/19/25 08:30	12/02/25 19:55	1
Thallium	<0.00100	^1+	0.00100	0.000570	mg/L		11/19/25 08:30	12/02/25 19:55	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/19/25 08:30	12/02/25 19:55	1

Lab Sample ID: MB 310-473973/1-A
Matrix: Water
Analysis Batch: 475450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<0.0200		0.0200	0.0130	mg/L		11/19/25 08:30	12/03/25 12:32	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: LCS 310-473973/2-A
Matrix: Water
Analysis Batch: 475370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Antimony	0.200	0.2113		mg/L		106	80 - 120	
Arsenic	0.200	0.1746		mg/L		87	80 - 120	
Barium	0.100	0.08968		mg/L		90	80 - 120	
Beryllium	0.100	0.09144		mg/L		91	80 - 120	
Cadmium	0.100	0.08630		mg/L		86	80 - 120	
Chromium	0.100	0.08522		mg/L		85	80 - 120	
Cobalt	0.100	0.09261		mg/L		93	80 - 120	
Copper	0.200	0.1777		mg/L		89	80 - 120	
Lead	0.200	0.1855		mg/L		93	80 - 120	
Nickel	0.200	0.1758		mg/L		88	80 - 120	
Selenium	0.400	0.3442		mg/L		86	80 - 120	
Silver	0.100	0.1157		mg/L		116	80 - 120	
Thallium	0.100	0.08945	^1+	mg/L		89	80 - 120	
Vanadium	0.100	0.08585		mg/L		86	80 - 120	

Lab Sample ID: LCS 310-473973/2-A
Matrix: Water
Analysis Batch: 475450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Zinc	0.200	0.1852		mg/L		93	80 - 120	

Lab Sample ID: MB 310-474157/1-A
Matrix: Water
Analysis Batch: 474547

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474157

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	11/23/25 18:05	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/20/25 09:00	11/23/25 18:05	1
Barium	<0.00200		0.00200	0.000660	mg/L		11/20/25 09:00	11/23/25 18:05	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	11/23/25 18:05	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	11/23/25 18:05	1
Chromium	0.005249		0.00500	0.00180	mg/L		11/20/25 09:00	11/23/25 18:05	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/20/25 09:00	11/23/25 18:05	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	11/23/25 18:05	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	11/23/25 18:05	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/20/25 09:00	11/23/25 18:05	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	11/23/25 18:05	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/20/25 09:00	11/23/25 18:05	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/20/25 09:00	11/23/25 18:05	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	11/23/25 18:05	1
Zinc	0.05078		0.0200	0.0130	mg/L		11/20/25 09:00	11/23/25 18:05	1

Lab Sample ID: LCS 310-474157/2-A
Matrix: Water
Analysis Batch: 474547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Antimony	0.200	0.2102		mg/L		105	80 - 120	

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: LCS 310-474157/2-A
Matrix: Water
Analysis Batch: 474547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.1925		mg/L		96	80 - 120
Barium	0.100	0.09492		mg/L		95	80 - 120
Beryllium	0.100	0.1008		mg/L		101	80 - 120
Cadmium	0.100	0.09860		mg/L		99	80 - 120
Chromium	0.100	0.09938		mg/L		99	80 - 120
Cobalt	0.100	0.09752		mg/L		98	80 - 120
Copper	0.200	0.2119		mg/L		106	80 - 120
Lead	0.200	0.2076		mg/L		104	80 - 120
Nickel	0.200	0.2122		mg/L		106	80 - 120
Selenium	0.400	0.3847		mg/L		96	80 - 120
Silver	0.100	0.1359	*+	mg/L		136	80 - 120
Thallium	0.100	0.09966		mg/L		100	80 - 120
Vanadium	0.100	0.1036		mg/L		104	80 - 120
Zinc	0.200	0.1999		mg/L		100	80 - 120

Lab Sample ID: 310-320687-5 MS
Matrix: Ground Water
Analysis Batch: 474547

Client Sample ID: MW-38
Prep Type: Total/NA
Prep Batch: 474157

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200		0.200	0.2088		mg/L		104	75 - 125
Arsenic	<0.00200		0.200	0.1939		mg/L		97	75 - 125
Barium	0.371		0.100	0.4523		mg/L		82	75 - 125
Beryllium	<0.00100		0.100	0.1052		mg/L		105	75 - 125
Cadmium	<0.000200		0.100	0.09531		mg/L		95	75 - 125
Cobalt	<0.000500		0.100	0.09322		mg/L		93	75 - 125
Copper	<0.00500		0.200	0.1927		mg/L		96	75 - 125
Lead	<0.000500		0.200	0.1914		mg/L		96	75 - 125
Nickel	<0.00500		0.200	0.1930		mg/L		96	75 - 125
Selenium	0.00794		0.400	0.3842		mg/L		94	75 - 125
Silver	<0.00100	F1 *+	0.100	0.1282	F1	mg/L		128	75 - 125
Thallium	<0.00100		0.100	0.08818		mg/L		88	75 - 125
Vanadium	<0.00500		0.100	0.1003		mg/L		100	75 - 125
Zinc	<0.0200		0.200	0.1896		mg/L		95	75 - 125

Lab Sample ID: 310-320687-5 MSD
Matrix: Ground Water
Analysis Batch: 474547

Client Sample ID: MW-38
Prep Type: Total/NA
Prep Batch: 474157

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00200		0.200	0.2218		mg/L		111	75 - 125	6	20
Arsenic	<0.00200		0.200	0.2051		mg/L		103	75 - 125	6	20
Barium	0.371		0.100	0.4725		mg/L		102	75 - 125	4	20
Beryllium	<0.00100		0.100	0.1127		mg/L		113	75 - 125	7	20
Cadmium	<0.000200		0.100	0.1000		mg/L		100	75 - 125	5	20
Cobalt	<0.000500		0.100	0.09978		mg/L		100	75 - 125	7	20
Copper	<0.00500		0.200	0.2035		mg/L		102	75 - 125	5	20
Lead	<0.000500		0.200	0.1961		mg/L		98	75 - 125	2	20
Nickel	<0.00500		0.200	0.2054		mg/L		103	75 - 125	6	20

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QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: 310-320687-5 MSD
Matrix: Ground Water
Analysis Batch: 474547

Client Sample ID: MW-38
Prep Type: Total/NA
Prep Batch: 474157

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	0.00794		0.400	0.3956		mg/L		97	75 - 125	3	20
Silver	<0.00100	F1 *+	0.100	0.1324	F1	mg/L		132	75 - 125	3	20
Thallium	<0.00100		0.100	0.08727		mg/L		87	75 - 125	1	20
Vanadium	<0.00500		0.100	0.1059		mg/L		106	75 - 125	5	20
Zinc	<0.0200		0.200	0.2009		mg/L		100	75 - 125	6	20

Lab Sample ID: 310-320687-15 DU
Matrix: Ground Water
Analysis Batch: 474547

Client Sample ID: MW-7-90R
Prep Type: Total/NA
Prep Batch: 474157

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	0.00269		0.002786		mg/L		4	20
Barium	0.739		0.7358		mg/L		0.4	20
Beryllium	<0.00100		<0.00100		mg/L		NC	20
Cadmium	0.000270		0.0002550		mg/L		6	20
Cobalt	0.00156		0.001543		mg/L		0.8	20
Copper	0.0102		0.009863		mg/L		3	20
Lead	0.000926		0.0008960		mg/L		3	20
Nickel	0.00489	J	0.004398	J	mg/L		11	20
Selenium	<0.00500		<0.00500		mg/L		NC	20
Silver	<0.00100	*+	<0.00100	*+	mg/L		NC	20
Thallium	<0.00100		<0.00100		mg/L		NC	20
Vanadium	0.00206	J	0.002216	J	mg/L		7	20

Lab Sample ID: MB 310-474160/1-A
Matrix: Water
Analysis Batch: 475370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/20/25 09:00	12/02/25 15:40	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/20/25 09:00	12/02/25 15:40	1
Barium	<0.00200		0.00200	0.000660	mg/L		11/20/25 09:00	12/02/25 15:40	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/20/25 09:00	12/02/25 15:40	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/20/25 09:00	12/02/25 15:40	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/20/25 09:00	12/02/25 15:40	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/20/25 09:00	12/02/25 15:40	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/20/25 09:00	12/02/25 15:40	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/20/25 09:00	12/02/25 15:40	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/20/25 09:00	12/02/25 15:40	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/20/25 09:00	12/02/25 15:40	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/20/25 09:00	12/02/25 15:40	1
Thallium	<0.00100	^1+	0.00100	0.000570	mg/L		11/20/25 09:00	12/02/25 15:40	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/20/25 09:00	12/02/25 15:40	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/20/25 09:00	12/02/25 15:40	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: LCS 310-474160/2-A
Matrix: Water
Analysis Batch: 475370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2088		mg/L		104	80 - 120
Arsenic	0.200	0.1780		mg/L		89	80 - 120
Barium	0.100	0.08885		mg/L		89	80 - 120
Beryllium	0.100	0.09663		mg/L		97	80 - 120
Cadmium	0.100	0.08880		mg/L		89	80 - 120
Chromium	0.100	0.08834		mg/L		88	80 - 120
Cobalt	0.100	0.09678		mg/L		97	80 - 120
Copper	0.200	0.1861		mg/L		93	80 - 120
Lead	0.200	0.1893		mg/L		95	80 - 120
Nickel	0.200	0.1858		mg/L		93	80 - 120
Selenium	0.400	0.3418		mg/L		85	80 - 120
Silver	0.100	0.1150		mg/L		115	80 - 120
Thallium	0.100	0.08963	^1+	mg/L		90	80 - 120
Vanadium	0.100	0.08810		mg/L		88	80 - 120
Zinc	0.200	0.1677		mg/L		84	80 - 120

Lab Sample ID: 310-320687-16 MS
Matrix: Ground Water
Analysis Batch: 475370

Client Sample ID: MW-7-93
Prep Type: Total/NA
Prep Batch: 474160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200		0.200	0.2284		mg/L		114	75 - 125
Arsenic	0.00108	J	0.200	0.2014		mg/L		100	75 - 125
Barium	0.0975		0.100	0.1985		mg/L		101	75 - 125
Beryllium	<0.00100		0.100	0.1007		mg/L		101	75 - 125
Cadmium	0.000124	J	0.100	0.09334		mg/L		93	75 - 125
Chromium	<0.00500		0.100	0.09352		mg/L		94	75 - 125
Cobalt	0.0133		0.100	0.1131		mg/L		100	75 - 125
Copper	<0.00500		0.200	0.1881		mg/L		94	75 - 125
Lead	<0.000500		0.200	0.1919		mg/L		96	75 - 125
Nickel	0.0617		0.200	0.2594		mg/L		99	75 - 125
Selenium	<0.00500		0.400	0.3882		mg/L		97	75 - 125
Silver	<0.00100		0.100	0.1122		mg/L		112	75 - 125
Thallium	<0.00100	^1+	0.100	0.08893	^1+	mg/L		89	75 - 125
Vanadium	<0.00500		0.100	0.09636		mg/L		96	75 - 125
Zinc	<0.0200		0.200	0.1951		mg/L		98	75 - 125

Lab Sample ID: 310-320687-16 MSD
Matrix: Ground Water
Analysis Batch: 475370

Client Sample ID: MW-7-93
Prep Type: Total/NA
Prep Batch: 474160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	<0.00200		0.200	0.2492		mg/L		125	75 - 125	9	20
Arsenic	0.00108	J	0.200	0.2171		mg/L		108	75 - 125	7	20
Barium	0.0975		0.100	0.2096		mg/L		112	75 - 125	5	20
Beryllium	<0.00100		0.100	0.1082		mg/L		108	75 - 125	7	20
Cadmium	0.000124	J	0.100	0.1008		mg/L		101	75 - 125	8	20
Chromium	<0.00500		0.100	0.1088		mg/L		109	75 - 125	15	20
Cobalt	0.0133		0.100	0.1229		mg/L		110	75 - 125	8	20

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QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: 310-320687-16 MSD
Matrix: Ground Water
Analysis Batch: 475370

Client Sample ID: MW-7-93
Prep Type: Total/NA
Prep Batch: 474160

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Copper	<0.00500		0.200	0.2051		mg/L		103	75 - 125	9	20
Lead	<0.000500		0.200	0.2070		mg/L		104	75 - 125	8	20
Nickel	0.0617		0.200	0.2858		mg/L		112	75 - 125	10	20
Selenium	<0.00500		0.400	0.4218		mg/L		105	75 - 125	8	20
Silver	<0.00100		0.100	0.1162		mg/L		116	75 - 125	3	20
Thallium	<0.00100	^1+	0.100	0.09367	^1+	mg/L		94	75 - 125	5	20
Vanadium	<0.00500		0.100	0.1050		mg/L		105	75 - 125	9	20
Zinc	<0.0200		0.200	0.2009		mg/L		100	75 - 125	3	20

Lab Sample ID: MB 310-474684/1-A
Matrix: Water
Analysis Batch: 474913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 474684

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00200		0.00200	0.00100	mg/L		11/25/25 08:00	11/25/25 18:21	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/25/25 08:00	11/25/25 18:21	1
Barium	0.001053	J	0.00200	0.000660	mg/L		11/25/25 08:00	11/25/25 18:21	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/25/25 08:00	11/25/25 18:21	1
Chromium	<0.00500		0.00500	0.00180	mg/L		11/25/25 08:00	11/25/25 18:21	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/25/25 08:00	11/25/25 18:21	1
Copper	<0.00500		0.00500	0.00320	mg/L		11/25/25 08:00	11/25/25 18:21	1
Lead	<0.000500		0.000500	0.000330	mg/L		11/25/25 08:00	11/25/25 18:21	1
Nickel	<0.00500		0.00500	0.00230	mg/L		11/25/25 08:00	11/25/25 18:21	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/25/25 08:00	11/25/25 18:21	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/25/25 08:00	11/25/25 18:21	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/25/25 08:00	11/25/25 18:21	1
Vanadium	<0.00500		0.00500	0.00170	mg/L		11/25/25 08:00	11/25/25 18:21	1
Zinc	<0.0200		0.0200	0.0130	mg/L		11/25/25 08:00	11/25/25 18:21	1

Lab Sample ID: LCS 310-474684/2-A
Matrix: Water
Analysis Batch: 474913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 474684

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Added	Result				Qualifier
Antimony	0.200	0.1989		mg/L		99	80 - 120
Arsenic	0.200	0.1898		mg/L		95	80 - 120
Barium	0.100	0.09358		mg/L		94	80 - 120
Cadmium	0.100	0.09499		mg/L		95	80 - 120
Chromium	0.100	0.09364		mg/L		94	80 - 120
Cobalt	0.100	0.09850		mg/L		98	80 - 120
Copper	0.200	0.1903		mg/L		95	80 - 120
Lead	0.200	0.1940		mg/L		97	80 - 120
Nickel	0.200	0.1905		mg/L		95	80 - 120
Selenium	0.400	0.3703		mg/L		93	80 - 120
Silver	0.100	0.1196		mg/L		120	80 - 120
Thallium	0.100	0.09986		mg/L		100	80 - 120
Vanadium	0.100	0.09230		mg/L		92	80 - 120
Zinc	0.200	0.1919		mg/L		96	80 - 120

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QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

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

Lab Sample ID: 310-320687-5 MS
Matrix: Ground Water
Analysis Batch: 474913

Client Sample ID: MW-38
Prep Type: Total/NA
Prep Batch: 474684

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS Qualifier	Unit	D	%Rec	%Rec Limits
	Result			Result					
Antimony	0.00202		0.200	0.1915		mg/L		95	75 - 125
Arsenic	<0.00200		0.200	0.1841		mg/L		92	75 - 125
Barium	0.341	B	0.100	0.4200		mg/L		79	75 - 125
Cadmium	<0.000200		0.100	0.09092		mg/L		91	75 - 125
Chromium	0.00192	J	0.100	0.08963		mg/L		88	75 - 125
Cobalt	<0.000500		0.100	0.08964		mg/L		90	75 - 125
Copper	<0.00500		0.200	0.1763		mg/L		88	75 - 125
Lead	<0.000500		0.200	0.1839		mg/L		92	75 - 125
Nickel	<0.00500		0.200	0.1741		mg/L		87	75 - 125
Selenium	0.00696		0.400	0.3623		mg/L		89	75 - 125
Silver	<0.00100		0.100	0.1143		mg/L		114	75 - 125
Thallium	<0.00100		0.100	0.08956		mg/L		90	75 - 125
Vanadium	<0.00500		0.100	0.08955		mg/L		90	75 - 125
Zinc	<0.0200		0.200	0.1792		mg/L		90	75 - 125

Lab Sample ID: 310-320687-5 MSD
Matrix: Ground Water
Analysis Batch: 474913

Client Sample ID: MW-38
Prep Type: Total/NA
Prep Batch: 474684

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result			Result							
Antimony	0.00202		0.200	0.2098		mg/L		104	75 - 125	9	20
Arsenic	<0.00200		0.200	0.2030		mg/L		101	75 - 125	10	20
Barium	0.341	B	0.100	0.4528		mg/L		111	75 - 125	8	20
Cadmium	<0.000200		0.100	0.1003		mg/L		100	75 - 125	10	20
Chromium	0.00192	J	0.100	0.09994		mg/L		98	75 - 125	11	20
Cobalt	<0.000500		0.100	0.09919		mg/L		99	75 - 125	10	20
Copper	<0.00500		0.200	0.1973		mg/L		99	75 - 125	11	20
Lead	<0.000500		0.200	0.2032		mg/L		102	75 - 125	10	20
Nickel	<0.00500		0.200	0.1922		mg/L		96	75 - 125	10	20
Selenium	0.00696		0.400	0.3997		mg/L		98	75 - 125	10	20
Silver	<0.00100		0.100	0.1226		mg/L		123	75 - 125	7	20
Thallium	<0.00100		0.100	0.09547		mg/L		95	75 - 125	6	20
Vanadium	<0.00500		0.100	0.09806		mg/L		98	75 - 125	9	20
Zinc	<0.0200		0.200	0.1979		mg/L		99	75 - 125	10	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-843914/1-A
Matrix: Water
Analysis Batch: 843921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 843914

Analyte	MB	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result								
Sulfide	<1.00		1.00	0.231	mg/L		11/18/25 18:00	11/19/25 23:19	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 500-843914/2-A
Matrix: Water
Analysis Batch: 843921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 843914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.32	3.566		mg/L		107	80 - 120

Method: I-3765-85 - Residue, Non-filterable (TSS)

Lab Sample ID: MB 310-473757/1
Matrix: Water
Analysis Batch: 473757

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			11/17/25 10:49	1

Lab Sample ID: LCS 310-473757/2
Matrix: Water
Analysis Batch: 473757

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	98.00		mg/L		98	82 - 117

Lab Sample ID: 310-320687-13 DU
Matrix: Ground Water
Analysis Batch: 473757

Client Sample ID: MW-4-90
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	18.3		17.33		mg/L		6	35

Lab Sample ID: MB 310-473774/1
Matrix: Water
Analysis Batch: 473774

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			11/17/25 11:50	1

Lab Sample ID: LCS 310-473774/2
Matrix: Water
Analysis Batch: 473774

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	82 - 117

Lab Sample ID: 310-320687-20 DU
Matrix: Ground Water
Analysis Batch: 473774

Client Sample ID: MW-D1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	51.0		51.00		mg/L		0	35

QC Sample Results

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Method: I-3765-85 - Residue, Non-filterable (TSS) (Continued)

Lab Sample ID: MB 310-473903/1
Matrix: Water
Analysis Batch: 473903

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			11/18/25 10:10	1

Lab Sample ID: LCS 310-473903/2
Matrix: Water
Analysis Batch: 473903

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	82 - 117

Lab Sample ID: MB 310-473914/1
Matrix: Water
Analysis Batch: 473914

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			11/18/25 10:42	1

Lab Sample ID: LCS 310-473914/2
Matrix: Water
Analysis Batch: 473914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	103.0		mg/L		103	82 - 117

Lab Sample ID: MB 310-473950/1
Matrix: Water
Analysis Batch: 473950

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			11/18/25 11:54	1

Lab Sample ID: LCS 310-473950/2
Matrix: Water
Analysis Batch: 473950

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	99.00		mg/L		99	82 - 117

QC Association Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

GC/MS VOA

Analysis Batch: 473879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	8260D	
310-320687-2	MW-1-99	Total/NA	Ground Water	8260D	
310-320687-3	MW-2-93	Total/NA	Ground Water	8260D	
310-320687-4	MW-43	Total/NA	Ground Water	8260D	
310-320687-5	MW-38	Total/NA	Ground Water	8260D	
310-320687-8	MW-45R	Total/NA	Ground Water	8260D	
310-320687-12	MW-49	Total/NA	Ground Water	8260D	
310-320687-13	MW-4-90	Total/NA	Ground Water	8260D	
310-320687-14	MW-4-93	Total/NA	Ground Water	8260D	
310-320687-15	MW-7-90R	Total/NA	Ground Water	8260D	
310-320687-20	MW-D1	Total/NA	Ground Water	8260D	
MB 310-473879/6	Method Blank	Total/NA	Water	8260D	
LCS 310-473879/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-473879/8	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 473929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-6	MW-40R	Total/NA	Ground Water	8260D	
310-320687-7	PZ-11	Total/NA	Ground Water	8260D	
310-320687-9	MW-46R	Total/NA	Ground Water	8260D	
310-320687-10	MW-47	Total/NA	Ground Water	8260D	
310-320687-11	MW-48	Total/NA	Ground Water	8260D	
310-320687-16	MW-7-93	Total/NA	Ground Water	8260D	
310-320687-17	MW-37	Total/NA	Ground Water	8260D	
310-320687-18	MW-39R	Total/NA	Ground Water	8260D	
310-320687-19	PZ-10	Total/NA	Ground Water	8260D	
310-320687-21	MW-D2	Total/NA	Ground Water	8260D	
310-320687-22	Trip Blank 1	Total/NA	Water	8260D	
310-320687-23	Trip Blank 2	Total/NA	Water	8260D	
310-320687-24	Trip Blank 3	Total/NA	Water	8260D	
310-320687-25	Trip Blank 4	Total/NA	Water	8260D	
MB 310-473929/6	Method Blank	Total/NA	Water	8260D	
LCS 310-473929/7	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-473929/8	Lab Control Sample	Total/NA	Water	8260D	
310-320687-6 MS	MW-40R	Total/NA	Ground Water	8260D	
310-320687-6 MSD	MW-40R	Total/NA	Ground Water	8260D	

GC/MS Semi VOA

Prep Batch: 473723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	3510C	

Analysis Batch: 474140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	8270E	473723

GC Semi VOA

Prep Batch: 473789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	3511	

Eurofins Cedar Falls

QC Association Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

GC Semi VOA (Continued)

Prep Batch: 473789 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-6	MW-40R	Total/NA	Ground Water	3511	
310-320687-13	MW-4-90	Total/NA	Ground Water	3511	
310-320687-14	MW-4-93	Total/NA	Ground Water	3511	
310-320687-18	MW-39R	Total/NA	Ground Water	3511	

Analysis Batch: 475467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	8081B	473789
310-320687-6	MW-40R	Total/NA	Ground Water	8081B	473789
310-320687-13	MW-4-90	Total/NA	Ground Water	8081B	473789
310-320687-14	MW-4-93	Total/NA	Ground Water	8081B	473789
310-320687-18	MW-39R	Total/NA	Ground Water	8081B	473789

Prep Batch: 843597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	8151A	
310-320687-18	MW-39R	Total/NA	Ground Water	8151A	
MB 500-843597/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-843597/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-843597/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 843799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-843597/1-A	Method Blank	Total/NA	Water	8151A	843597
LCS 500-843597/2-A	Lab Control Sample	Total/NA	Water	8151A	843597
LCSD 500-843597/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	843597

Analysis Batch: 843964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	8151A	843597
310-320687-18	MW-39R	Total/NA	Ground Water	8151A	843597
MB 500-843597/1-A	Method Blank	Total/NA	Water	8151A	843597

Metals

Prep Batch: 473973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	3005A	
310-320687-2	MW-1-99	Total/NA	Ground Water	3005A	
310-320687-3	MW-2-93	Total/NA	Ground Water	3005A	
310-320687-4	MW-43	Total/NA	Ground Water	3005A	
MB 310-473973/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-473973/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 474157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-5	MW-38	Total/NA	Ground Water	3005A	
310-320687-6	MW-40R	Total/NA	Ground Water	3005A	
310-320687-7	PZ-11	Total/NA	Ground Water	3005A	
310-320687-8	MW-45R	Total/NA	Ground Water	3005A	
310-320687-9	MW-46R	Total/NA	Ground Water	3005A	

Eurofins Cedar Falls

QC Association Summary

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Metals (Continued)

Prep Batch: 474157 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-10	MW-47	Total/NA	Ground Water	3005A	
310-320687-11	MW-48	Total/NA	Ground Water	3005A	
310-320687-12	MW-49	Total/NA	Ground Water	3005A	
310-320687-13	MW-4-90	Total/NA	Ground Water	3005A	
310-320687-14	MW-4-93	Total/NA	Ground Water	3005A	
310-320687-15	MW-7-90R	Total/NA	Ground Water	3005A	
MB 310-474157/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-474157/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-320687-5 MS	MW-38	Total/NA	Ground Water	3005A	
310-320687-5 MSD	MW-38	Total/NA	Ground Water	3005A	
310-320687-15 DU	MW-7-90R	Total/NA	Ground Water	3005A	

Prep Batch: 474160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-16	MW-7-93	Total/NA	Ground Water	3005A	
310-320687-17	MW-37	Total/NA	Ground Water	3005A	
310-320687-18	MW-39R	Total/NA	Ground Water	3005A	
310-320687-19	PZ-10	Total/NA	Ground Water	3005A	
310-320687-20	MW-D1	Total/NA	Ground Water	3005A	
310-320687-21	MW-D2	Total/NA	Ground Water	3005A	
MB 310-474160/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-474160/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-320687-16 MS	MW-7-93	Total/NA	Ground Water	3005A	
310-320687-16 MSD	MW-7-93	Total/NA	Ground Water	3005A	

Analysis Batch: 474547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-5	MW-38	Total/NA	Ground Water	6020B	474157
310-320687-6	MW-40R	Total/NA	Ground Water	6020B	474157
310-320687-7	PZ-11	Total/NA	Ground Water	6020B	474157
310-320687-8	MW-45R	Total/NA	Ground Water	6020B	474157
310-320687-9	MW-46R	Total/NA	Ground Water	6020B	474157
310-320687-10	MW-47	Total/NA	Ground Water	6020B	474157
310-320687-11	MW-48	Total/NA	Ground Water	6020B	474157
310-320687-12	MW-49	Total/NA	Ground Water	6020B	474157
310-320687-13	MW-4-90	Total/NA	Ground Water	6020B	474157
310-320687-14	MW-4-93	Total/NA	Ground Water	6020B	474157
310-320687-15	MW-7-90R	Total/NA	Ground Water	6020B	474157
MB 310-474157/1-A	Method Blank	Total/NA	Water	6020B	474157
LCS 310-474157/2-A	Lab Control Sample	Total/NA	Water	6020B	474157
310-320687-5 MS	MW-38	Total/NA	Ground Water	6020B	474157
310-320687-5 MSD	MW-38	Total/NA	Ground Water	6020B	474157
310-320687-15 DU	MW-7-90R	Total/NA	Ground Water	6020B	474157

Prep Batch: 474684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-8	MW-45R	Total/NA	Ground Water	3005A	
310-320687-9	MW-46R	Total/NA	Ground Water	3005A	
310-320687-12	MW-49	Total/NA	Ground Water	3005A	
310-320687-14	MW-4-93	Total/NA	Ground Water	3005A	
310-320687-15	MW-7-90R	Total/NA	Ground Water	3005A	

Eurofins Cedar Falls

QC Association Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Metals (Continued)

Prep Batch: 474684 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-474684/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-474684/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-320687-5 MS	MW-38	Total/NA	Ground Water	3005A	
310-320687-5 MSD	MW-38	Total/NA	Ground Water	3005A	

Analysis Batch: 474913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-8	MW-45R	Total/NA	Ground Water	6020B	474684
310-320687-9	MW-46R	Total/NA	Ground Water	6020B	474684
310-320687-12	MW-49	Total/NA	Ground Water	6020B	474684
310-320687-14	MW-4-93	Total/NA	Ground Water	6020B	474684
310-320687-15	MW-7-90R	Total/NA	Ground Water	6020B	474684
MB 310-474684/1-A	Method Blank	Total/NA	Water	6020B	474684
LCS 310-474684/2-A	Lab Control Sample	Total/NA	Water	6020B	474684
310-320687-5 MS	MW-38	Total/NA	Ground Water	6020B	474684
310-320687-5 MSD	MW-38	Total/NA	Ground Water	6020B	474684

Analysis Batch: 475370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	6020B	473973
310-320687-2	MW-1-99	Total/NA	Ground Water	6020B	473973
310-320687-3	MW-2-93	Total/NA	Ground Water	6020B	473973
310-320687-4	MW-43	Total/NA	Ground Water	6020B	473973
310-320687-16	MW-7-93	Total/NA	Ground Water	6020B	474160
310-320687-17	MW-37	Total/NA	Ground Water	6020B	474160
310-320687-18	MW-39R	Total/NA	Ground Water	6020B	474160
310-320687-19	PZ-10	Total/NA	Ground Water	6020B	474160
310-320687-20	MW-D1	Total/NA	Ground Water	6020B	474160
310-320687-21	MW-D2	Total/NA	Ground Water	6020B	474160
MB 310-473973/1-A	Method Blank	Total/NA	Water	6020B	473973
MB 310-474160/1-A	Method Blank	Total/NA	Water	6020B	474160
LCS 310-473973/2-A	Lab Control Sample	Total/NA	Water	6020B	473973
LCS 310-474160/2-A	Lab Control Sample	Total/NA	Water	6020B	474160
310-320687-16 MS	MW-7-93	Total/NA	Ground Water	6020B	474160
310-320687-16 MSD	MW-7-93	Total/NA	Ground Water	6020B	474160

Analysis Batch: 475450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	6020B	473973
310-320687-2	MW-1-99	Total/NA	Ground Water	6020B	473973
310-320687-3	MW-2-93	Total/NA	Ground Water	6020B	473973
310-320687-4	MW-43	Total/NA	Ground Water	6020B	473973
MB 310-473973/1-A	Method Blank	Total/NA	Water	6020B	473973
LCS 310-473973/2-A	Lab Control Sample	Total/NA	Water	6020B	473973

General Chemistry

Analysis Batch: 473757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-12	MW-49	Total/NA	Ground Water	I-3765-85	
310-320687-13	MW-4-90	Total/NA	Ground Water	I-3765-85	

QC Association Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

General Chemistry (Continued)

Analysis Batch: 473757 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	I-3765-85	
310-320687-15	MW-7-90R	Total/NA	Ground Water	I-3765-85	
MB 310-473757/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-473757/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-320687-13 DU	MW-4-90	Total/NA	Ground Water	I-3765-85	

Analysis Batch: 473774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-1	MW-4-89	Total/NA	Ground Water	I-3765-85	
310-320687-2	MW-1-99	Total/NA	Ground Water	I-3765-85	
310-320687-4	MW-43	Total/NA	Ground Water	I-3765-85	
310-320687-5	MW-38	Total/NA	Ground Water	I-3765-85	
310-320687-20	MW-D1	Total/NA	Ground Water	I-3765-85	
MB 310-473774/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-473774/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-320687-20 DU	MW-D1	Total/NA	Ground Water	I-3765-85	

Analysis Batch: 473903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-3	MW-2-93	Total/NA	Ground Water	I-3765-85	
310-320687-8	MW-45R	Total/NA	Ground Water	I-3765-85	
310-320687-11	MW-48	Total/NA	Ground Water	I-3765-85	
310-320687-17	MW-37	Total/NA	Ground Water	I-3765-85	
310-320687-18	MW-39R	Total/NA	Ground Water	I-3765-85	
MB 310-473903/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-473903/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 473914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-7	PZ-11	Total/NA	Ground Water	I-3765-85	
310-320687-9	MW-46R	Total/NA	Ground Water	I-3765-85	
310-320687-10	MW-47	Total/NA	Ground Water	I-3765-85	
310-320687-16	MW-7-93	Total/NA	Ground Water	I-3765-85	
310-320687-21	MW-D2	Total/NA	Ground Water	I-3765-85	
MB 310-473914/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-473914/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 473950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-6	MW-40R	Total/NA	Ground Water	I-3765-85	
310-320687-19	PZ-10	Total/NA	Ground Water	I-3765-85	
MB 310-473950/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-473950/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Prep Batch: 843914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	9030B	
MB 500-843914/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-843914/2-A	Lab Control Sample	Total/NA	Water	9030B	

QC Association Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

General Chemistry

Analysis Batch: 843921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-320687-14	MW-4-93	Total/NA	Ground Water	9034	843914
MB 500-843914/1-A	Method Blank	Total/NA	Water	9034	843914
LCS 500-843914/2-A	Lab Control Sample	Total/NA	Water	9034	843914

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- 14
- 15
- 16

Lab Chronicle

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-89
Date Collected: 11/12/25 15:00
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 14:52
Total/NA	Prep	3511			473789	BW2O	EET CF	11/17/25 12:41
Total/NA	Analysis	8081B		1	475467	BW2O	EET CF	12/03/25 18:30
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 21:04
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475450	NFT2	EET CF	12/03/25 13:28
Total/NA	Analysis	I-3765-85		1	473774	DGU1	EET CF	11/17/25 11:50

Client Sample ID: MW-1-99
Date Collected: 11/12/25 10:45
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 15:14
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 21:07
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475450	NFT2	EET CF	12/03/25 13:31
Total/NA	Analysis	I-3765-85		1	473774	DGU1	EET CF	11/17/25 11:50

Client Sample ID: MW-2-93
Date Collected: 11/13/25 14:08
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 15:36
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 21:10
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475450	NFT2	EET CF	12/03/25 13:39
Total/NA	Analysis	I-3765-85		1	473903	DGU1	EET CF	11/18/25 10:10

Client Sample ID: MW-43
Date Collected: 11/12/25 12:46
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 15:58
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 21:13
Total/NA	Prep	3005A			473973	RLT9	EET CF	11/19/25 08:30
Total/NA	Analysis	6020B		1	475450	NFT2	EET CF	12/03/25 13:42
Total/NA	Analysis	I-3765-85		1	473774	DGU1	EET CF	11/17/25 11:50

Lab Chronicle

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: MW-38
Date Collected: 11/12/25 14:58
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 16:20
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:12
Total/NA	Analysis	I-3765-85		1	473774	DGU1	EET CF	11/17/25 11:50

Client Sample ID: MW-40R
Date Collected: 11/14/25 09:19
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-6
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 01:48
Total/NA	Prep	3511			473789	BW2O	EET CF	11/17/25 12:51
Total/NA	Analysis	8081B		1	475467	BW2O	EET CF	12/03/25 18:44
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:20
Total/NA	Analysis	I-3765-85		1	473950	DGU1	EET CF	11/18/25 11:54

Client Sample ID: PZ-11
Date Collected: 11/14/25 11:24
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-7
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 02:11
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:23
Total/NA	Analysis	I-3765-85		1	473914	DGU1	EET CF	11/18/25 10:42

Client Sample ID: MW-45R
Date Collected: 11/13/25 10:16
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-8
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 16:42
Total/NA	Prep	3005A			474684	RLT9	EET CF	11/25/25 08:00
Total/NA	Analysis	6020B		1	474913	NFT2	EET CF	11/25/25 18:41
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:26
Total/NA	Analysis	I-3765-85		1	473903	DGU1	EET CF	11/18/25 10:10

Client Sample ID: MW-46R
Date Collected: 11/13/25 11:15
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-9
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 02:34

Eurofins Cedar Falls

Lab Chronicle

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-46R
Date Collected: 11/13/25 11:15
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-9
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			474684	RLT9	EET CF	11/25/25 08:00
Total/NA	Analysis	6020B		1	474913	NFT2	EET CF	11/25/25 18:44
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:34
Total/NA	Analysis	I-3765-85		1	473914	DGU1	EET CF	11/18/25 10:42

Client Sample ID: MW-47
Date Collected: 11/13/25 12:07
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-10
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 02:56
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:37
Total/NA	Analysis	I-3765-85		1	473914	DGU1	EET CF	11/18/25 10:42

Client Sample ID: MW-48
Date Collected: 11/13/25 13:11
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-11
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 03:19
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:40
Total/NA	Analysis	I-3765-85		1	473903	DGU1	EET CF	11/18/25 10:10

Client Sample ID: MW-49
Date Collected: 11/11/25 13:40
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-12
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 17:04
Total/NA	Prep	3005A			474684	RLT9	EET CF	11/25/25 08:00
Total/NA	Analysis	6020B		1	474913	NFT2	EET CF	11/25/25 18:46
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:43
Total/NA	Analysis	I-3765-85		1	473757	DGU1	EET CF	11/17/25 10:49

Client Sample ID: MW-4-90
Date Collected: 11/11/25 16:02
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-13
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 17:26

Lab Chronicle

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-4-90

Lab Sample ID: 310-320687-13

Date Collected: 11/11/25 16:02

Matrix: Ground Water

Date Received: 11/15/25 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3511			473789	BW20	EET CF	11/17/25 12:51
Total/NA	Analysis	8081B		1	475467	BW20	EET CF	12/03/25 18:58
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:46
Total/NA	Analysis	I-3765-85		1	473757	DGU1	EET CF	11/17/25 10:49

Client Sample ID: MW-4-93

Lab Sample ID: 310-320687-14

Date Collected: 11/11/25 14:50

Matrix: Ground Water

Date Received: 11/15/25 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 17:47
Total/NA	Prep	3510C			473723	J5BR	EET CF	11/17/25 07:50
Total/NA	Analysis	8270E		1	474140	V7YZ	EET CF	11/20/25 01:13
Total/NA	Prep	3511			473789	BW20	EET CF	11/17/25 12:51
Total/NA	Analysis	8081B		1	475467	BW20	EET CF	12/03/25 19:12
Total/NA	Prep	8151A			843597	CI	EET CHI	11/18/25 19:15
Total/NA	Analysis	8151A		1	843964	H7CM	EET CHI	11/19/25 15:32
Total/NA	Prep	3005A			474684	RLT9	EET CF	11/25/25 08:00
Total/NA	Analysis	6020B		1	474913	NFT2	EET CF	11/25/25 18:49
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:49
Total/NA	Prep	9030B			843914	CLB	EET CHI	11/18/25 18:20 - 11/18/25 18:30 ¹
Total/NA	Analysis	9034		1	843921	CLB	EET CHI	11/19/25 23:27 - 11/19/25 23:32 ¹
Total/NA	Analysis	I-3765-85		1	473757	DGU1	EET CF	11/17/25 10:49

Client Sample ID: MW-7-90R

Lab Sample ID: 310-320687-15

Date Collected: 11/11/25 16:44

Matrix: Ground Water

Date Received: 11/15/25 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 18:09
Total/NA	Prep	3005A			474684	RLT9	EET CF	11/25/25 08:00
Total/NA	Analysis	6020B		1	474913	NFT2	EET CF	11/25/25 18:52
Total/NA	Prep	3005A			474157	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	474547	ZRI4	EET CF	11/23/25 18:51
Total/NA	Analysis	I-3765-85		1	473757	DGU1	EET CF	11/17/25 10:49

Client Sample ID: MW-7-93

Lab Sample ID: 310-320687-16

Date Collected: 11/13/25 15:09

Matrix: Ground Water

Date Received: 11/15/25 11:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 03:42

Lab Chronicle

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Client Sample ID: MW-7-93

Date Collected: 11/13/25 15:09

Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-16

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			474160	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 15:45
Total/NA	Analysis	I-3765-85		1	473914	DGU1	EET CF	11/18/25 10:42

Client Sample ID: MW-37

Date Collected: 11/13/25 14:02

Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-17

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 04:05
Total/NA	Prep	3005A			474160	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 15:56
Total/NA	Analysis	I-3765-85		1	473903	DGU1	EET CF	11/18/25 10:10

Client Sample ID: MW-39R

Date Collected: 11/13/25 16:28

Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-18

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 04:28
Total/NA	Prep	3511			473789	BW2O	EET CF	11/17/25 12:51
Total/NA	Analysis	8081B		1	475467	BW2O	EET CF	12/03/25 19:26
Total/NA	Prep	8151A			843597	CI	EET CHI	11/18/25 19:15
Total/NA	Analysis	8151A		1	843964	H7CM	EET CHI	11/19/25 15:50
Total/NA	Prep	3005A			474160	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 15:58
Total/NA	Analysis	I-3765-85		1	473903	DGU1	EET CF	11/18/25 10:10

Client Sample ID: PZ-10

Date Collected: 11/14/25 10:06

Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-19

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 04:50
Total/NA	Prep	3005A			474160	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 16:01
Total/NA	Analysis	I-3765-85		1	473950	DGU1	EET CF	11/18/25 11:54

Client Sample ID: MW-D1

Date Collected: 11/12/25 12:46

Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-20

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473879	WSE8	EET CF	11/18/25 18:31

Eurofins Cedar Falls

Lab Chronicle

Client: SCS Engineers
 Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
 SDG: Des Moines County Landfill

Client Sample ID: MW-D1
Date Collected: 11/12/25 12:46
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-20
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			474160	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 16:04
Total/NA	Analysis	I-3765-85		1	473774	DGU1	EET CF	11/17/25 11:50

Client Sample ID: MW-D2
Date Collected: 11/13/25 10:16
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-21
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 05:13
Total/NA	Prep	3005A			474160	RLT9	EET CF	11/20/25 09:00
Total/NA	Analysis	6020B		1	475370	NFT2	EET CF	12/02/25 16:12
Total/NA	Analysis	I-3765-85		1	473914	DGU1	EET CF	11/18/25 10:42

Client Sample ID: Trip Blank 1
Date Collected: 11/13/25 00:00
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 00:17

Client Sample ID: Trip Blank 2
Date Collected: 11/13/25 00:00
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 00:40

Client Sample ID: Trip Blank 3
Date Collected: 11/13/25 00:00
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 01:02

Client Sample ID: Trip Blank 4
Date Collected: 11/13/25 00:00
Date Received: 11/15/25 11:20

Lab Sample ID: 310-320687-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	473929	FE5V	EET CF	11/19/25 01:25

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
 EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

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 Chicago

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	082	05-01-26

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

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

Method Summary

Client: SCS Engineers
Project/Site: Des Moines County - 2nd 2025 Sampling Event

Job ID: 310-320687-1
SDG: Des Moines County Landfill

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
6020B	Metals (ICP/MS)	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CHI
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	EET CHI
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CHI = Eurofins Chicago, 18410 Crossing Drive, Suite E, Tinley Park, IL 60487, TEL (708)534-5200



Environment Testing
America



310-320687 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>ScS</u>			
City/State:	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11-15-25</u>	TIME <u>1120</u>	Received By: <u>Pff</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <u>sat</u> <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>4</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-49, 4-90, 4-93, 7-90R,</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	<u>CC</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>0.9</u>	Corrected Temp (°C):	<u>0.9</u>
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			





Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11-15-25</u>	TIME <u>1120</u>	Received By: <u>PJT</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <u>sat</u> <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes Cooler ID:
Multiple Coolers?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>4</u>
Cooler Custody Seals Present?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
<u>MW-4-89, 1-99, 2-93, 43, 38, D-1</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>CC</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature -- If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>3.3</u>		Corrected Temp (°C): <u>3.3</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>ScS</u>			
City/State:	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11-15-25</u>	TIME <u>1120</u>	Received By: <u>PJH</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <u>sat</u> <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes</i> Cooler ID.			
Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes:</i> Cooler # <u>3</u> of <u>4</u>			
Cooler Custody Seals Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes:</i> Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes:</i> Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes:</i> Which VOA samples are in cooler? ↓			
<u>P2-11, MW-45R, 46R, 47, 48, Pz-10, MV-02</u>			
Temperature Record			
Coolant. <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>CC</u>		Correction Factor (°C). <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C). <u>1.3</u>		Corrected Temp (°C). <u>1.3</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C).			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) <i>If yes:</i> Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Environment Testing
America

Place COC scanning label
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY <u>W. Des Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>11-15-25</u>	TIME <u>1120</u>	Received By. <u>PJH</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <u>sat</u> <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>4</u> of <u>4</u>
Cooler Custody Seals Present?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
<u>The Rest</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>CC</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C) <u>1.1</u>		Corrected Temp (°C): <u>1.1</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Regulatory Program: DW NPDES RCRA Other

Client Contact		Project Manager:		Site Contact: Sean Marczewski		Date:		COC No				
SCS Engineers 1690 All-State Court, Suite 100 West Des Moines, IA 50265 712-661-9682		Email: smarczewski@sceengineers.com Cell 712-661-9682		Lab Contact: Samuel Miller		Carrier:		1 of 3 COCs				
Project Name: Des Moines County - 2 nd 2025 Sampling Even		Analysis Turnaround Time		Appendix I		Appendix I		Sampler				
Site: Des Moines County Landfill		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Metals List C		Appendix I		For Lab Use Only:				
P O # 27224414 26		Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Total Suspended Solids		Appendix I		Walk-in Client:				
Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont	Perform MS / MSD (Y / N)	Filtered Sample (Y / N)	Appendix I VOCs	Appendix I VOCs	Appendix I	Trip Blank	Sample Specific Notes
MW-4-89	11-12	1500	C	GW				X	X			
MW-1-99	11-12	1045	C	GW				X	X			
MW-2-93	11-13	1408	C	GW				X	X			
MW-43	11-12	1246	C	GW				X	X			
MW-38	11-12	1456	C	GW				X	X			
MW-40R	11-14	919	C	GW				X	X			
MW-41								X	X			NO Sample get
PZ-11	11-14	1124	C	GW				X	X			NO Sample get
GW-Lagoon-00								X	X			NO Sample get
GW-Lagoon-Cell 1W								X	X			NO Sample get
MW-5-90								X	X			NO Sample get
Trip Blank											X	NO Sample get

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH; 6= Other

Possible Hazard Identification:
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
 Metals List A: Arsenic, barium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc
 Metals List B: Arsenic, barium, cobalt, nickel, and zinc
 Metals List C: Arsenic, barium, nickel, and zinc.

Custody Seals Intact: Yes No

Relinquished by: *Garrett Hawk* Company: *SES* Date/Time: *11-14 1412*

Relinquished by: *Samuel Miller* Company: *Eurofins* Date/Time: *11-14-25 1500*

Relinquished by: *Samuel Miller* Company: *Eurofins* Date/Time: *11-14-25 1120*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months



Client Contact
 SCS Engineers
 1690 All-State Court, Suite 100
 West Des Moines, IA 50265
 712-661-9682

Regulatory Program: DW NPDES RCRA Other

Project Manager:
 Email: smarczewski@scsengineers.com
 Cell 712-661-9682

Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
 Other:
 2 weeks
 1 week
 2 days
 1 day

Project Name: Des Moines County - 2nd 2025 Sampling Event
Site: Des Moines County Landfill
P O #: 27224414.26

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Date: _____											Sample Specific Notes								
						Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Appendix I	Total Suspended Solids	Endosulfan Sulfate	Alpha-BHC	Metals List A	Appendix I VOCs	2,4-D [2C]	3,4-Methylphenol	Endrin Aldehyde		4,4'-DDT	Methoxychlor	Phenol	Sulfide	Metals List C	Trip Blank		
MW-46R	10-16	11-13	C	GW		X																			
MW-46R	10-13	11-15	C	GW		X																			
MW-47	11-13	12-07	C	GW		X																			
MW-48	11-13	13-11	C	GW		X																			
MW-49	11-11	13-10	C	GW		X																			
MW-4-90	11-11	16-02	C	GW		X																			
MW-4-93	11-11	14-50	C	GW		X																			
MW-7-90R	11-11	16-44	C	GW		X																			
MW-7-93	11-13	15-09	C	GW		X																			
MW-37	11-13	14-02	C	GW		X																			
Trip Blank																									

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification:
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non-Hazard Flammable Skin Irritant Poison 8 Unknown

Special Instructions/QC Requirements & Comments:
 Metals List A Arsenic barium chromium cobalt, copper lead nickel selenium vanadium and zinc
 Metals List B Arsenic barium cobalt, nickel and zinc
 Metals List C Arsenic, barium, nickel, and zinc.

Custody Seals Intact: Yes No

Relinquished by Garrett Horak Company SCS Date/Time 11-14 1619

Relinquished by Michelle Spigel Company Eurofins Date/Time 11-14 25 1500

Relinquished by _____ Company _____ Date/Time _____

Received by Michelle Spigel Company Eurofins Date/Time 11-14 25 1418

Received by _____ Company _____ Date/Time _____

Received in Laboratory by JA Company _____ Date/Time 11-16-25 1120

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Please include trip blanks in each cooler with VOC containers

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 Miller, Samuel	Carrier Tracking No(s): N/A	COC No 310-89090 1			
Client Contact: Shipping/Receiving		Phone: N/A	E-Mail Samuel.Miller@et.eurofins.com	State of Origin: Iowa	Page Page 1 of 1			
Company Eurofins Environment Testing North Central			Accreditations Required (See note): State Program - Iowa		Job #: 310-320687-1			
Address: 18410 Crossing Drive, Suite E, City Tinley Park State, Zip: IL, 60487 Phone: 708-534-5200(Tel) 708-534-5211(Fax) Email N/A		Due Date Requested 12/2/2025	Analysis Requested			Preservation Codes: -		
Project Name: Des Moines County - 2nd 2025 Sampling Event		TAT Requested (days): N/A				 310-320687 COC		
Site: 310-SCS Des Moines County Sanitary Landf		PO #: N/A	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 9034_Calc/9030B 8151A/8151A_AP_LV12.4-D					
Project #: 31002156		WO #: N/A				Total Number of containers		
SSOW#: N/A		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)						
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
MW-4-93 (310-320687-14)	11/11/25	14 50 Central	G	Water		X	2	
MW-39R (310-320687-18)	11/13/25	16 28 Central	G	Water		X	1	
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/test/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				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested I, II, III, IV, Other (specify)			Primary Deliverable Rank 2		Special Instructions/QC Requirements			
Empty Kit Relinquished by		Date	Time		Method of Shipment:			
Relinquished by:		Date/Time: 11/17/25 1250	Company:		Received by:		Date/Time: 11/18/25 0900	Company: EETA
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 4.6-7.6°C Box			



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-320687-1
SDG Number: Des Moines County Landfill

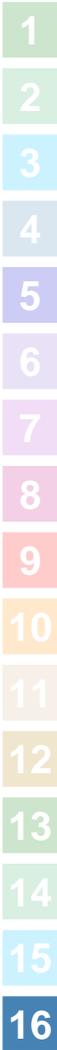
Login Number: 320687

List Number: 1

Creator: Hirsch, Preston

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

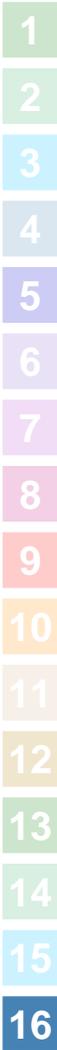
Client: SCS Engineers

Job Number: 310-320687-1
SDG Number: Des Moines County Landfill

Login Number: 320687
List Number: 2
Creator: Knox, Angel

List Source: Eurofins Chicago
List Creation: 11/18/25 12:27 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Appendix B-2
Data Validation

Completed by: Semir Omerovic
 Date of Sampling: 5/20/2025
 Lab Report Date: 6/4/2025
 Site Name: Des Moines County Regional Landfill
 Project Type: 1st 2025 Semi-Annual Bracketing Sampling Event
 Lab Report Number: 310-307083-1

OK NO N/A NOTES

Sample Collection and Sample Handling

Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Case Narrative	X			
Holding Times	X			

Analytical Sensitivity and Blanks

Method Blank Detections		X		Method 8260D: The method blank for analytical batch 310-455656 contained cis-1,2-Dichloroethene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or reanalysis of samples was not performed.
Trip Blank Detections		X		Detections below the reporting limit for Bromodichloromethane and cis-1,2-Dichloroethene were reported.

Accuracy

ICV/CCV		X		Method 8260D: The continuing calibration verification (CCV) associated with batch 310-455656 recovered above the upper control limit for 1,1-Dichloroethene (20.8%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data were reported. The associated sample is:(CCV 310-455656/3).
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Other QA QC samples	X			

Precision

QA/QC Sample RPDs	X			
Field Duplicates			X	

Completed by: Semir Omerovic
 Date of Sampling: 5/20/2025
 Lab Report Date: 6/6/2025
 Site Name: Des Moines County Regional Landfill
 Project Type: 1st 2025 Semi-Annual HMSP Sampling Event
 Lab Report Number: 310-307094-1

OK NO N/A NOTES

Sample Collection and Sample Handling

Chain of Custody	X		
Temperature	X		
Preservation	X		
Condition	X		
Case Narrative	X		
Holding Times		X	Method 8081B: The following sample(s) was analyzed outside of analytical holding time.

Analytical Sensitivity and Blanks

Method Blank Detections		X	Method 8260D: The method blank for analytical batch 310-455656 contained cis-1,2-Dichloroethene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or reanalysis of samples was not performed.
Trip Blank Detections		X	Two detections below reporting limits for Bromodichloromethane and Methylene Chloride associated with Trip Blank 1 and Trip Blank 2 were reported. One detection below reporting limits for Bromodichloromethane associated with Trip Blank 3 and Trip Blank 4 were reported.

Accuracy

ICV/CCV		X	Method 8260D: The continuing calibration verification (CCV) associated with batch 310-455656 recovered above the upper control limit for 1,1-Dichloroethene (20.8%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data were reported. The associated sample is:(CCV 310-455656/3).
LCS/LCSD	X		
MS/MSD		X	Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-455764. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.
Surrogates (organics only)		X	Method 8270E: Surrogate recovery for the following sample was outside of acceptance limits: (MB 310-455764/1-A). There was insufficient sample and holding-time to perform a re-extraction; therefore, the data were reported. Method 8151A: Surrogate recovery for the following sample was outside the upper control limit: MW-4-93 (310-307094-3). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.
Other QA QC samples	X		

Precision

QA/QC Sample RPDs	X		
Field Duplicates	X		Sample MW-37 and duplicate MW-D had less than 50% RPD for analyzed parameters, with the exception of 1,4-Dichlorobenzene.

Completed by: Semir Omerovic
 Date of Sampling: 11/18/2025
 Lab Report Date: 12/5/2025
 Site Name: Des Moines County Regional Landfill
 Project Type: 2nd 2025 Semi-Annual Bracketing Sampling Event
 Lab Report Number: 310-320932-1

OK NO N/A NOTES

Sample Collection and Sample Handling

Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Case Narrative	X			
Holding Times	X			

Analytical Sensitivity and Blanks

Method Blank Detections	X			
Trip Blank Detections	X			

Accuracy

ICV/CCV		X		Method 8260D: The continuing calibration verification (CCV) associated with batch 310-474409 recovered above the upper control limit for Carbon tetrachloride (27%D). The LCS associated with this CCV passed CCV criteria for the affected analyte; therefore, the data have been reported. The associated sample is:(CCV 310-474409/3).
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Other QA QC samples	X			

Precision

QA/QC Sample RPDs	X			
Field Duplicates			X	

Completed by: Semir Omerovic
 Date of Sampling: 11/12/2025
 Lab Report Date: 12/5/2025
 Site Name: Des Moines County Regional Landfill
 Project Type: 2nd 2025 Semi-Annual HMSP Sampling Event
 Lab Report Number: 310-320687-1

OK NO N/A NOTES

Sample Collection and Sample Handling

Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Case Narrative	X			
Holding Times	X			

Analytical Sensitivity and Blanks

Method Blank Detections		X		Method 6020B: The method blank for preparation batch 310-474157 contained Chromium, Zinc above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.
Trip Blank Detections	X			

Accuracy

ICV/CCV		X		<p>Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473879 recovered outside of the control limits for Bromomethane (-43%D). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported. The associated sample is impacted: (CCV 310-473879/4).</p> <p>Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473879 recovered outside of the control limits for Vinyl chloride (-22%D), Chloroethane (-25%D), Chloromethane (-25%D), and Trichlorofluoromethane (-23%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data has been reported. The associated sample is:(CCV 310-473879/4).</p> <p>Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473879 recovered outside of the control limits for Carbon disulfide (-24%D), Carbon tetrachloride (-25%D), Dichlorobromomethane (-23%D), Tetrachloroethene (-21%D), 1,1,1-Trichloroethane (-21%D), Bromoform (-23%D), 1,2-Dichloropropane (-22%D), 1,1,1,2-Tetrachloroethane (-21%D), and 1,1-Dichloroethane (-23%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data has been reported. The associated sample is:(CCV 310-473879/3).</p>
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Completed by: Semir Omerovic
 Date of Sampling: 11/12/2025
 Lab Report Date: 12/5/2025
 Site Name: Des Moines County Regional Landfill
 Project Type: 2nd 2025 Semi-Annual HMSP Sampling Event
 Lab Report Number: 310-320687-1

	OK	NO	N/A	NOTES
ICV/CCV		X		<p>Method 8151A: The continuing calibration verification (CCV) associated with batch 500-843964 recovered above the upper control limit for Silvex (2,4,5-TP) and 2,4,5-T. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data has been reported. The associated sample is:(CCVRT 500-843964/3).</p> <p>Method 8151A: The continuing calibration verification (CCV) associated with batch 500-843964 recovered above the upper control limit for 2,4-D, Silvex (2,4,5-TP) and 2,4,5-T. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data has been reported. The associated sample is:(CCV 500-843964/10).</p> <p>Method 6020B: The initial calibration verification (ICV) result for batch 310-475370 was above the upper control limit. The affected analytes are: thallium. Sample results were non-detects, and have been reported as qualified data.</p> <p>Method 6020B: The initial calibration verification (ICV) result for batch 310-475370 was above the upper control limit. The affected analytes are: thallium. Sample results were non-detects, and have been reported as qualified data.</p> <p>Method 8260D: The continuing calibration verification (CCV) associated with batch 310-473929 recovered above the upper control limit for Dichlorodifluoromethane (21%D) and Bromomethane (76%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data has been reported. The associated sample is:(CCV 310-473929/4).</p>
LCS/LCSD		X		<p>Method 8260D: The laboratory control sample (LCS) for analytical batch 310-473929 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data has been reported.</p> <p>Method 6020B: The laboratory control sample (LCS) for preparation batch 310-474157 and analytical batch 310-474547 recovered outside control limits for the following analytes: Silver. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.</p>
MS/MSD	X			
Surrogates (organics only)	X			
Other QA QC samples	X			
Precision				
QA/QC Sample RPDs	X			

Completed by: Semir Omerovic
 Date of Sampling: 11/12/2025
 Lab Report Date: 12/5/2025
 Site Name: Des Moines County Regional Landfill
 Project Type: 2nd 2025 Semi-Annual HMSP Sampling Event
 Lab Report Number: 310-320687-1

Field Duplicates

OK	NO	N/A	NOTES
X			Concentrations for sample MW-43 and duplicate MW-D1 and concentrations for sample MW-45R and MW-D2 had less than 50% RPD for analyzed parameters, with the exception of Acetone in MW-43 and Antimony and Vanadium in MW-45R.



Appendix C
Summary of Groundwater Chemistry

Appendix I VOC Constituents	Sample Date	MW4-89 DNG	MW41 DNG	GW4ag-C1W DNG	MW1-99 DNG	MW2-93 DNG	MW4-90 DNG	MW4-93 DNG	MW5-90 DNG	MW7-90R DNG	MW7-93 DNG	MW-37 DNG	MW-38 DNG	MW-39R DNG	MW-40R DNG	MW-43 DNG	MW-44 DNG	MW-45R DNG	MW-46R DNG	MW-47 DNG	MW-48 DNG	MW-49 DNG	PZ-10 DNG	PZ-11 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	0.66	<1	N/A	<1	<1	N/A	0.56	<1	<1	N/A	<1	<1	0.94	0.8	<1	0.97*	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	0.45	<1	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	1.44	<1	<1	<1	<1	0.48	0.17	<1	<1	N/A	<1	<1	1.83	41.6	<1	<1	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
1,1-Dichloroethane, ug/L (CAS NO - 75-35-4)	5/19/2025	<2	N/A	<2	<2	N/A	N/A	<2	<2	N/A	<2	2.74	<2	<2	<2	<2	N/A	<2	<2	0.56	<2	<2	<2	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	0.79	<2	<2	<2	<2	N/A	<2	<2	N/A	N/A	<2	<2	N/A
	11/11/2025	<2	<2	N/A	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	<2	<2	<2	<2	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	<2	<2	<2	<2	N/A	<2	<2	N/A	N/A	<2	<2	N/A
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	5/19/2025	<1.2	N/A	<1.2	<1.2	N/A	N/A	<1.2	<1.2	N/A	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	N/A
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1.2	<1.2	N/A	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	N/A
	11/11/2025	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1.2	<1.2	N/A	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	N/A	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	N/A
1,2-Dibromoethane [DEB], ug/L (CAS NO - 106-93-4)	5/19/2025	<0.34	N/A	<0.34	<0.34	N/A	N/A	<0.34	<0.34	N/A	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	<0.34	<0.34	N/A	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
	11/11/2025	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	<0.34	<0.34	N/A	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	N/A	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	0.99*	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	0.402*
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	0.377*
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	<1	0.313*	N/A	0.458*	<1	<1	N/A	<1	<1	<1	<1	<1	<1	0.328*
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	0.297*	N/A	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	11/11/2025	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	5/19/2025	<1	N/A	<1	<1	N/A	N/A	2.1	<1	N/A	<1	<1	N/A	0.467*	<1	<1	N/A	<1	<1	<1	<1	<1	<1	5.9
	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	0.278*	N/A	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	11/11/2025	<1	<1	N/A	<1	<1	<1	1.18	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	5.89
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
2-Butanone, ug/L (CAS NO - 78																								

SCS ENGINEERS

Summary of Groundwater Chemistry
Des Moines County Area Regional Sanitary Landfill - 29-SDP-01-76P - HMSP

Other Constituents	Sample Date	MW4-89 UPG	MW-41 UPG	GWLag-C-1W DNG	MW1-99 DNG	MW2-93 DNG	MW4-90 DNG	MW4-93 DNG	MW5-90 DNG	MW7-90R DNG	MW7-93 DNG	MW-37 DNG	MW-38 DNG	MW-39R DNG	MW-40R DNG	MW-43 DNG	MW-44 DNG	MW-45R DNG	MW-46R DNG	MW-47 DNG	MW-48 DNG	MW-49 DNG	PZ-10 DNG	PZ-11 DNG	
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-D [2C], ug/L (CAS NO - 94-75-7)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4'-DDT, ug/L (CAS NO - 50-29-3)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alpha-BHC, ug/L (CAS NO - 319-84-6)	5/19/2025	< 0.0902	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.09	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	< 0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0949	< 0.0911	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methoxychlor, ug/L (CAS NO - 72-43-5)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Phenol, ug/L (CAS NO - 108-95-2)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sulfide, mg/L (CAS NO - 18496-25-8)	5/19/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/11/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: * Indicates 'I flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.
Denotes Confirmed Outlier. Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.



Appendix D
Statistical Method and Output

STATISTICAL METHOD AND OUTPUT

Purpose

The purpose of this document is to provide the statistical evaluation of groundwater analytical data collected from the groundwater monitoring network of the Des Moines County Regional Sanitary Landfill (Landfill).

Statistical Method

Diagnostic and Exploratory Evaluations and Tests of Assumptions

Both the detection and assessment/post-assessment monitoring statistical programs include diagnostic and exploratory evaluations and statistical tests of assumptions, as appropriate, including the following:

- Time Series Plots
- Shapiro-Wilk test for normality
- Ohio Environmental Protection Agency (EPA) Method for identification of outliers
- Mann-Kendall/Sen's Slope trend test

Management of Non-Detect Data

Non-detect values in the dataset are managed using simple substitution or the Kaplan-Meier estimator. If less than 15% of the data are non-detects, simple substitution is used, where non-detect values are assigned a concentration of one-half of the practical quantification limit (PQL). If greater than 15% but less than 50% of the data are non-detects, the Kaplan-Meier estimator is used to define the distribution of the dataset. If non-detects comprise greater than 50% of the available data, non-parametric statistical methods are used.

Management of Outliers

Background datasets are evaluated for outliers using the Ohio EPA Method included in the Sanitas™ statistical software program and described below, which includes the use of Dixon's, Rosner's, and Tukey's outlier tests, as appropriate based on the diagnostic tests, for the datasets that contain less than 75% of the measured concentrations below the PQL. Outliers are not confirmed unless a physical cause or explanation for the outlier is determined.

Management of Data (ND data < 75%)

If less than 75% of the background dataset is below the PQL, outliers are statistically evaluated using the following guidelines.

- A parametric dataset with $n < 20$ is evaluated with the Dixon's outlier test.
- A parametric dataset with $n \geq 20$ is evaluated with the Rosner's outlier test.
- A non-parametric dataset is evaluated with the Tukey's outlier test.

In accordance with the Ohio EPA Method, if a statistically significant outlier is not found using the above tests, but the highest value data point exceeds the second highest data point by an order of magnitude, the highest point is considered an outlier.

Management of Data (ND data \geq 75%)

If greater than or equal to 75% of the background dataset is less than the PQL, outliers are statistically evaluated using the following guidelines.

- Single detection \geq the PQL:
 - If \geq 50% of the background dataset has detections \geq the method detection limit (MDL), any value \geq two times the PQL of background is considered an outlier.
 - If $<$ 50% of the background dataset has detections \geq the MDL, any value \geq the PQL of background is considered an outlier.
- Two or more detections \geq the PQL:
 - If \geq 50% of the background dataset has detections \geq the MDL, any value \geq three times the PQL of background is considered an outlier.
 - If $<$ 50% of the background dataset has detections \geq the MDL, any value \geq two times the PQL of background is considered an outlier.

Confirmed outliers, if any, are shown in the Summary of Groundwater Chemistry included in the Annual Water Quality Report.

Detection Monitoring Statistical Program

The detection monitoring statistical program for the Landfill is defined by Iowa Administrative Code (IAC) 567-113.10(4)"g". Interwell and intrawell prediction limits with retesting were selected as the appropriate statistical method for the determination of statistically significant increases (SSIs) over background for inorganic constituents with historic detections in background. Prediction limits were established using the processes below.

Interwell Prediction Limits with Retesting

Interwell prediction limits are completed on a majority of HMSP wells.

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point(s).
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, nonparametric interwell prediction limits are calculated if at least five datasets has been collected from the background monitoring point(s).
- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-2 retesting scheme are collected. If the retesting result exceeds the prediction limit, the SSI is confirmed, and the monitoring point is placed into the assessment monitoring program. If the retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

Intrawell Prediction Limits with Retesting

Intrawell prediction limits are completed on monitoring point GW-Lagoon-Cell 1W and monitoring well PZ-11, when a sample is obtained.

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric intrawell prediction limits are calculated if at least five datasets have been collected from the background dataset.
- If the dataset does not have a normal distribution (and can not be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, non-parametric intrawell prediction limits are calculated if at least five datasets have been collected from the background dataset.
- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-2 retesting scheme is collected prior to the next regularly scheduled sampling event with temporal sample spacing consideration to provide samples with greater independence. If the retesting results exceeds the prediction limit, the SSI is confirmed, and the monitoring point is placed into the assessment monitoring program. If the retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

Updating the Background Dataset for Intrawell Prediction Limits

Following the collection of the fifth background sample, if no SSI is confirmed for any two-year period, the intrawell background dataset will be updated using the following procedure:

- Test the new dataset for normal distribution either outright or through a transformation using Ladder of Powers using the Shapiro-Wilk test.
- Test the new dataset for statistically significant outliers using the Ohio EPA Method, and remove the confirmed outliers (see the “Management of Outliers” section).
- Test the new dataset for statistically significant trends using the Mann-Kendall/Sen’s Slope trend test. If a statistically significantly increasing trend is detected, the monitoring point will be placed into the assessment monitoring program or treated with the leachate, whichever is appropriate.
- If the dataset has a normal distribution and no statistically significant increasing trend is present, a two-sample Welch’s t-test at a 0.01 significance level is performed to compare current background to the most recent two years of detection monitoring data. If the Welch’s t-test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.
- If the dataset does not have a normal distribution and no statistically significant increasing trend is present, a two-sample non-parametric Wilcoxon rank-sum test (also known as the Mann-Whitney test) at a 0.01 significance level is performed to compare current background to the most recent two years of detection monitoring data. If the Wilcoxon rank-sum test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.

- If the Welch's t-test or the Wilcoxon rank-sum tests are not significant, the most recent two years of detection data will be added to the intrawell background dataset.

The process will repeat every two years (4 sampling events) in which an SSI is not confirmed.

Double Quantification Method

The quasi-statistical "double quantification" method is used for constituents not detected in the background monitoring points. If a constituent is detected in the compliance dataset that has not been historically detected in the background dataset, that constituent must be retested before the next regularly scheduled sampling event. If the retesting results confirm the original detection with a quantifiable detection, the SSI is confirmed, and the monitoring point must be placed into the assessment monitoring program.

Assessment Monitoring/ Corrective Action Statistical Program

Confidence intervals or confidence bands, as appropriate, were selected as the appropriate statistical methods for comparison of the groundwater analytical data against a fixed groundwater protection standard (GWPS). The assessment/corrective action monitoring statistical evaluations are performed using the most recent eight samples or all samples if less than eight samples are available. The confidence intervals or confidence bands used for the assessment/corrective action monitoring statistical evaluation are established using the process below. Transformation of the distribution is not considered.

Confidence Intervals or Confidence Bands

- A parametric confidence interval around a normal mean is calculated if the dataset has a normal distribution and no statistically significant trend is present.
- A non-parametric confidence interval around a median is calculated if the dataset does not have a normal distribution and no statistically significant trend is present.
- Non-parametric confidence bands around a Theil-Sen trend line are calculated if the dataset has a statistically significant trend.

In the event that the lower confidence limit or any part of the lower confidence band, as appropriate, exceeds the GWPS, then the monitoring point is declared out of compliance, and an assessment of corrective measures (ACM) is required.

Statistical Software Output

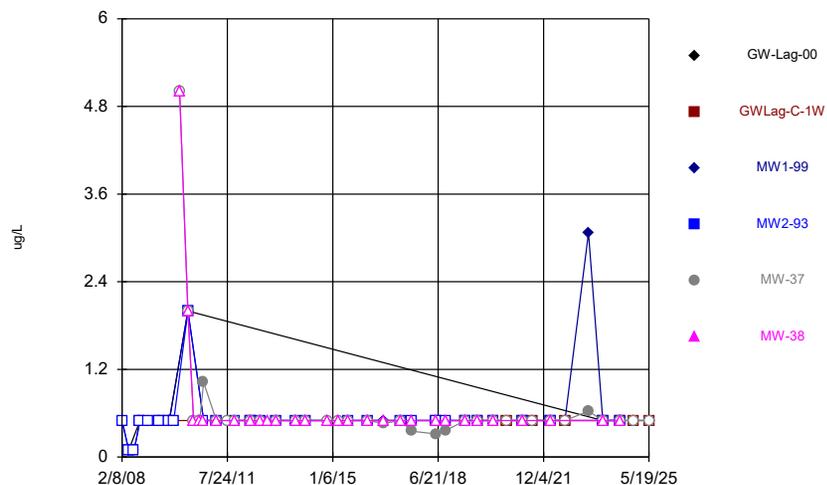
Sanitas™ statistical software is used to perform the statistical evaluations. Graphical output for the 1st and 2nd 2025 statistical evaluations is included in Attachments A and B of this appendix, respectively.

Attachment A

1st 2025 Semi-Annual Statistical Output

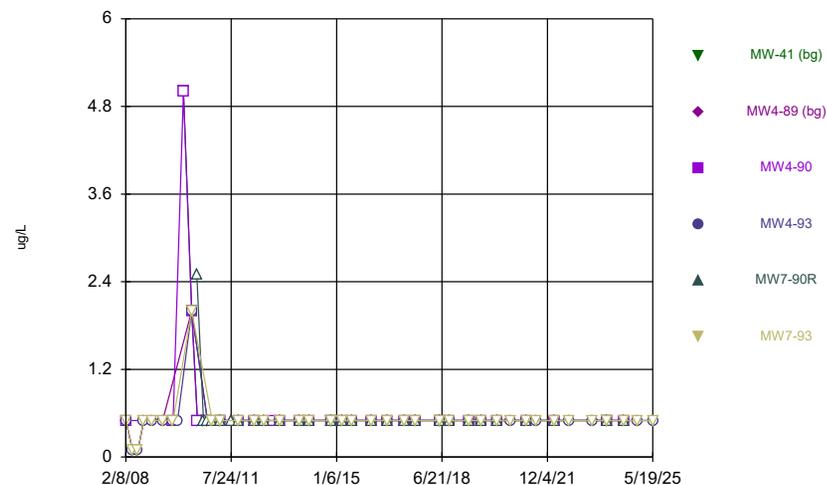
Timeseries Tables and Graphs

Time Series



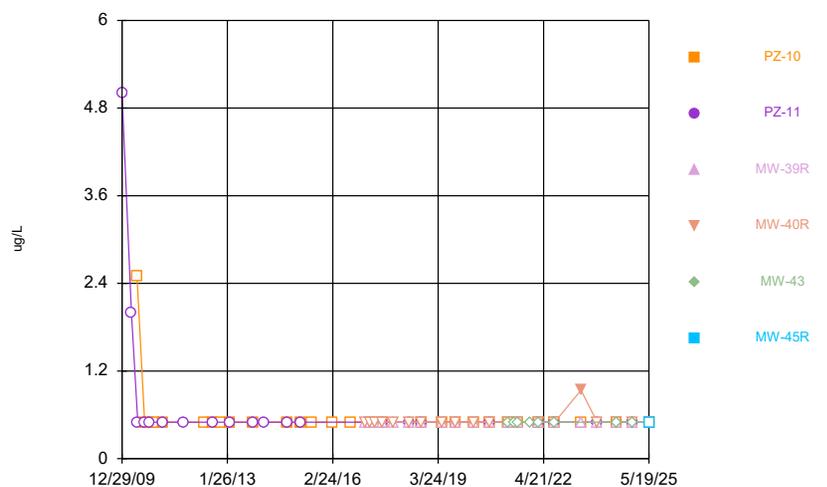
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Time Series



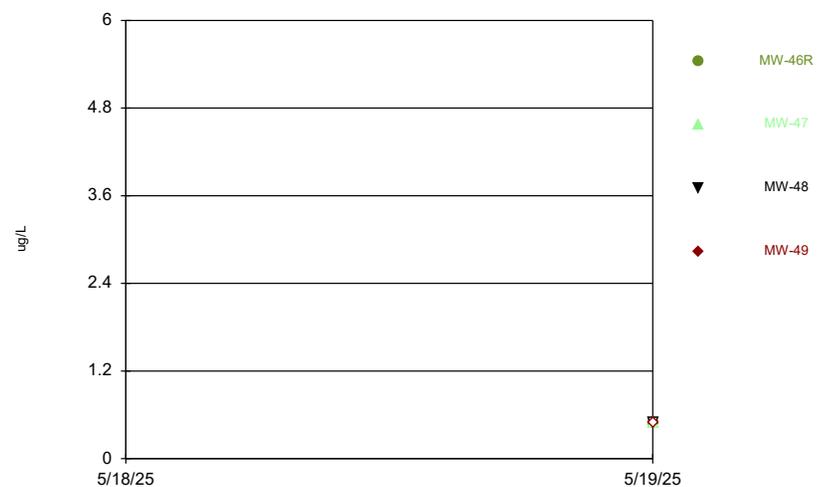
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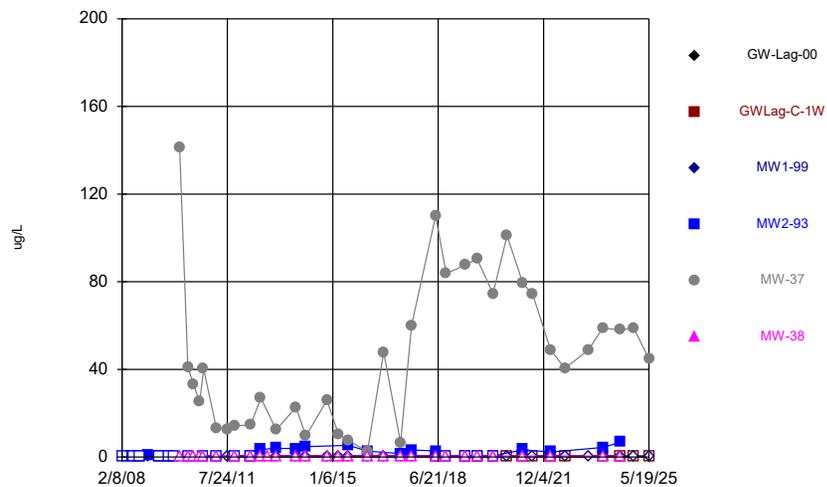
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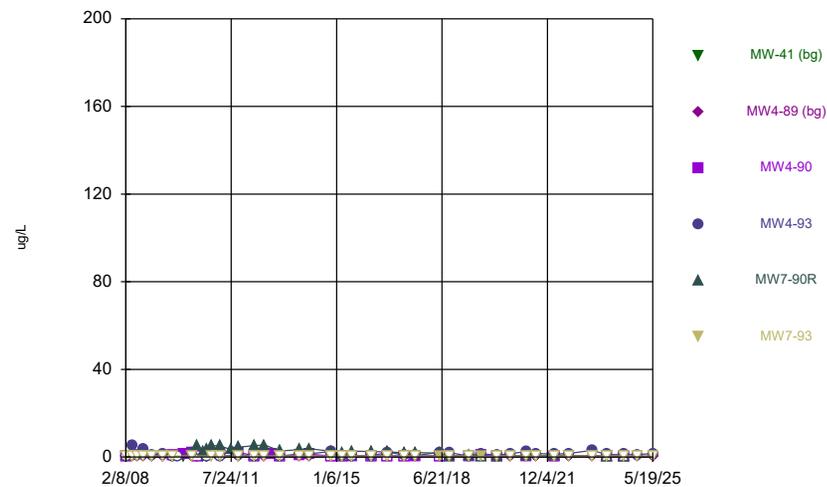
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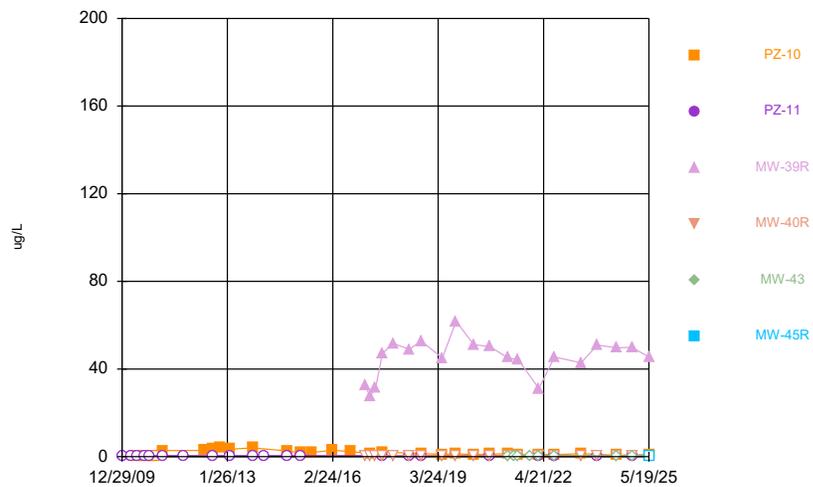
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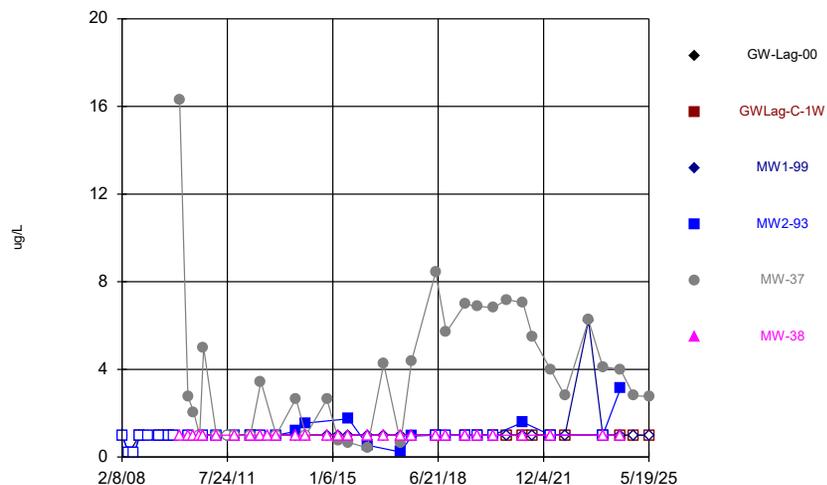
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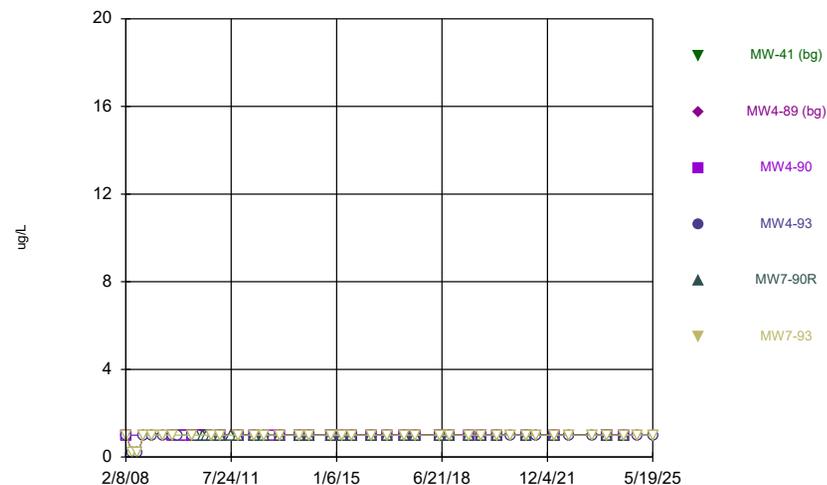
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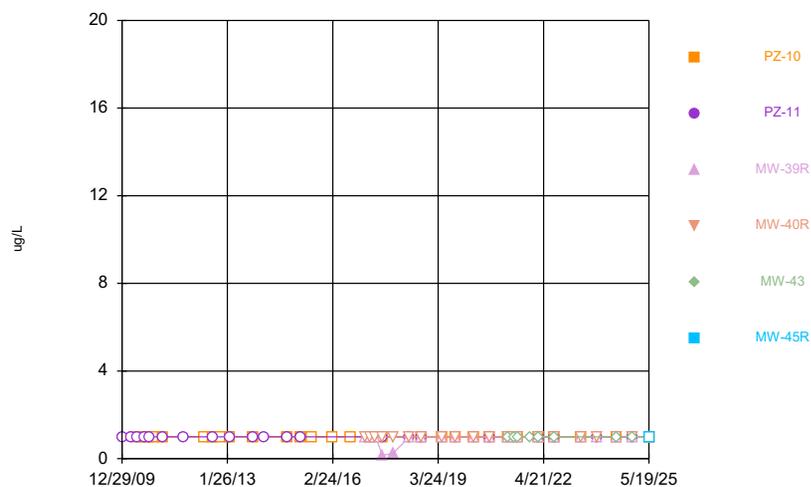
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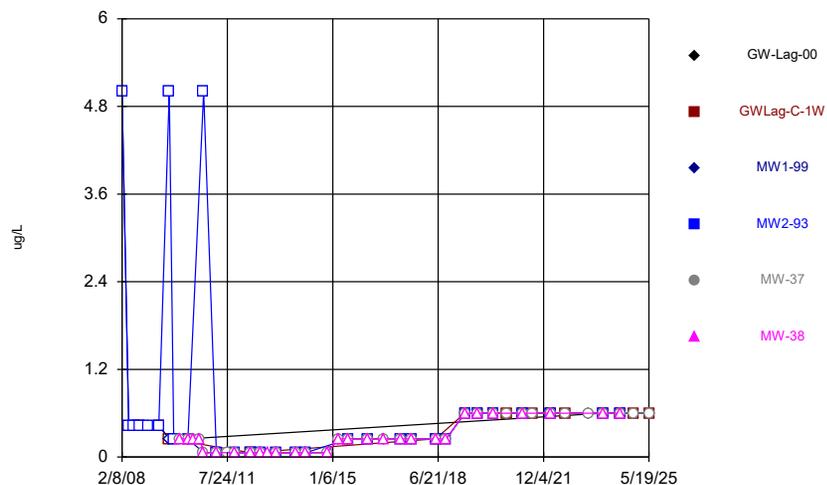
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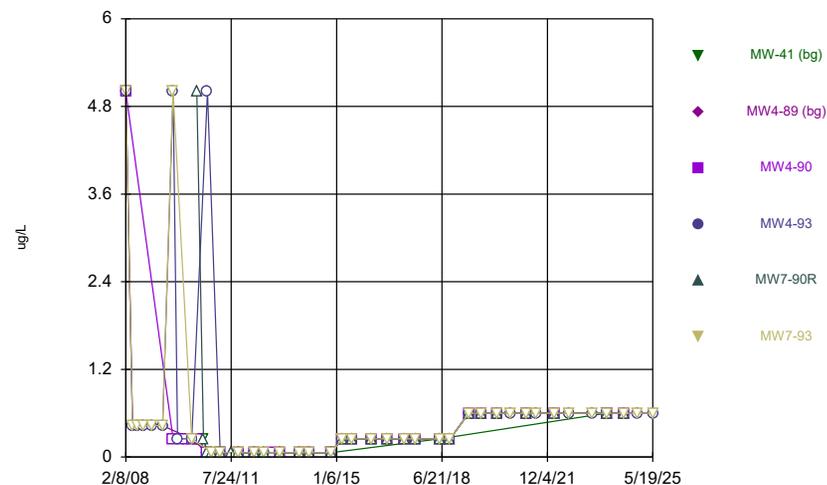
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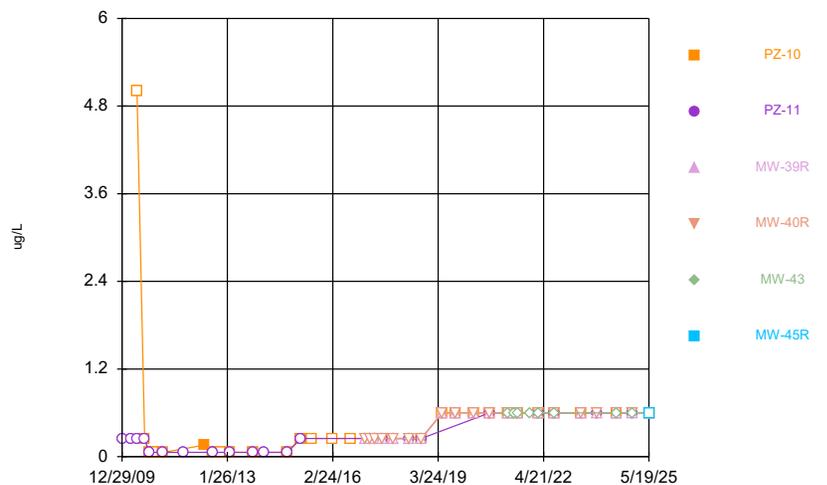
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Time Series



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Time Series



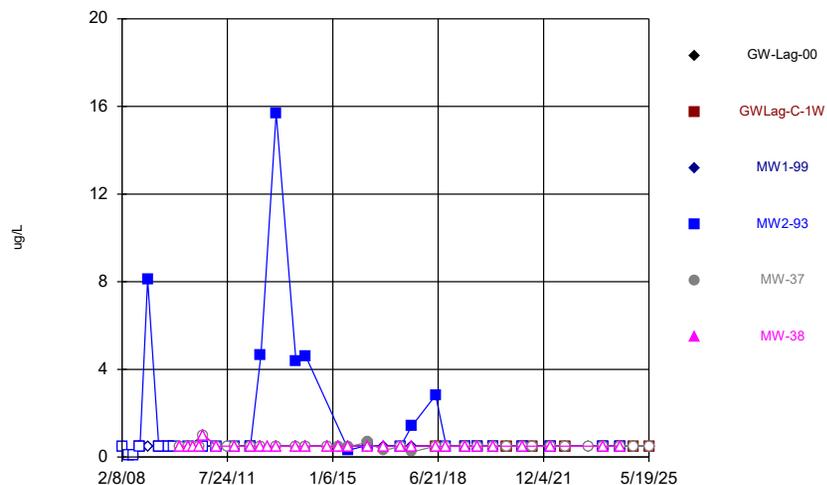
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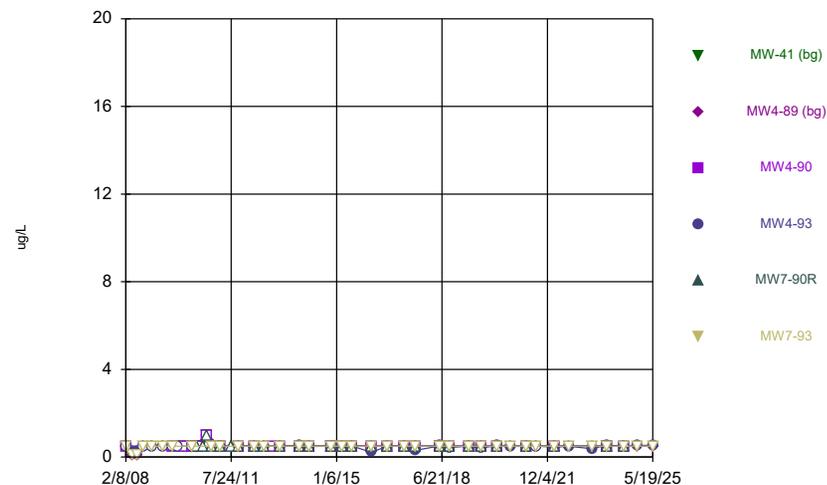
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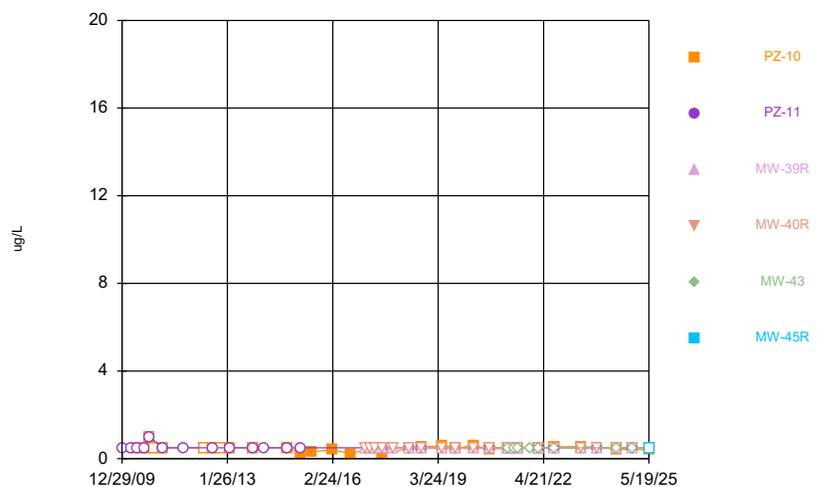
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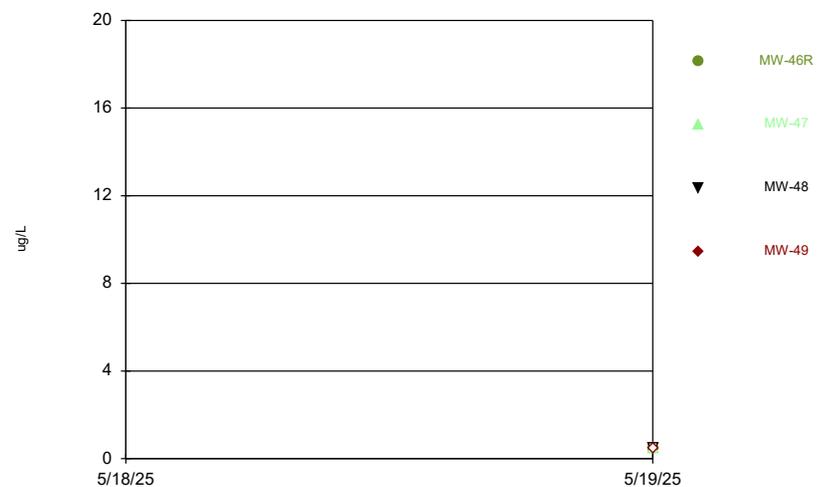
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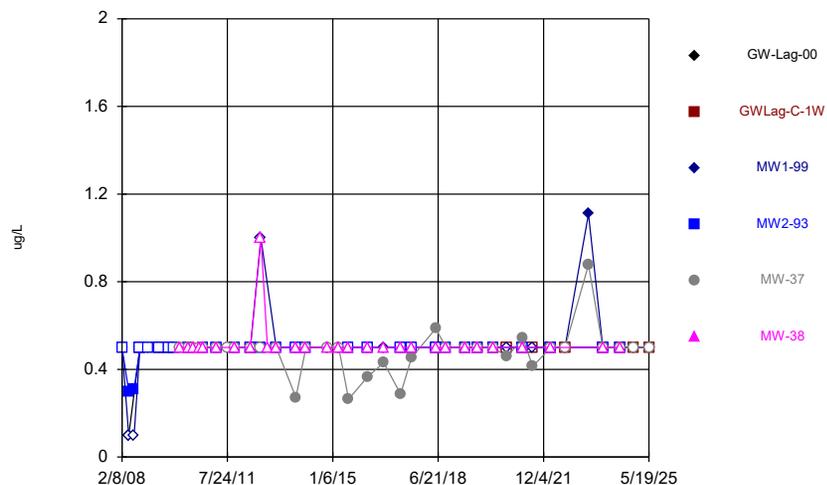
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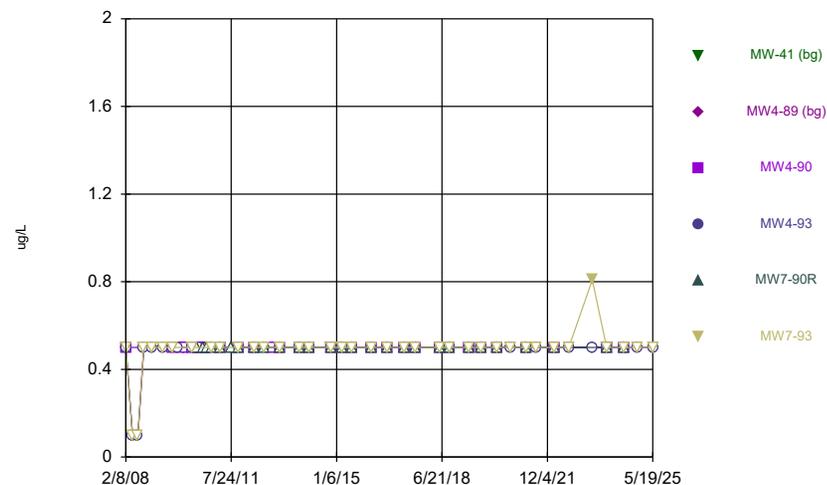
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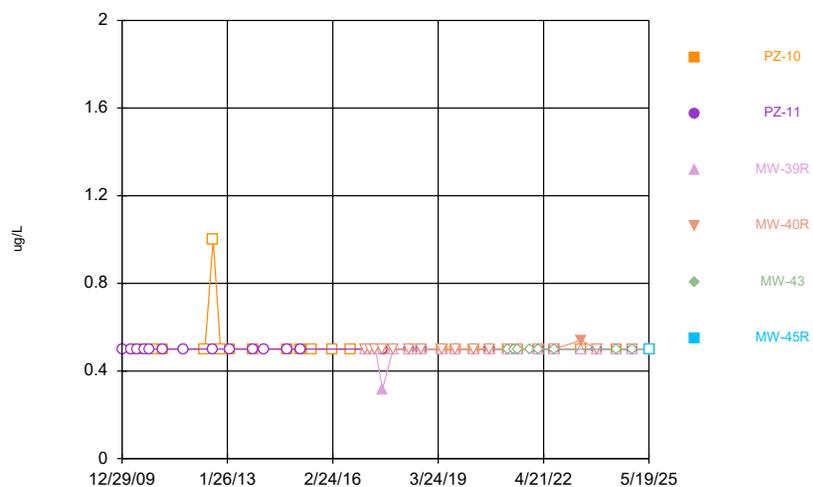
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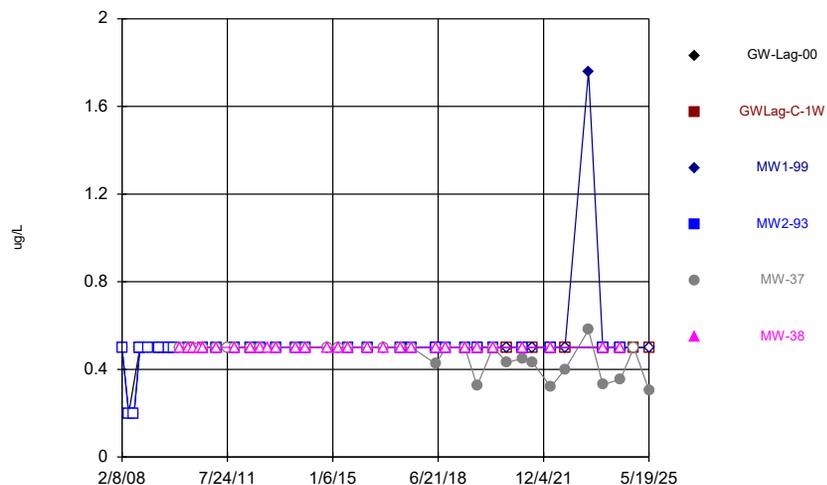
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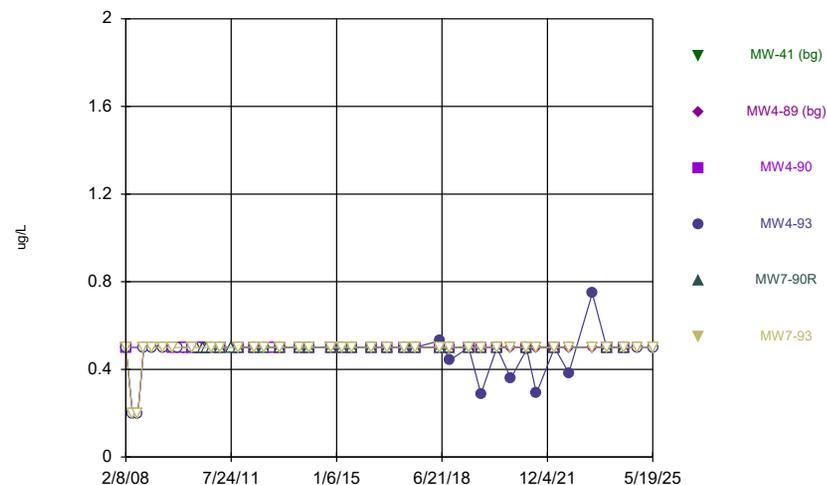
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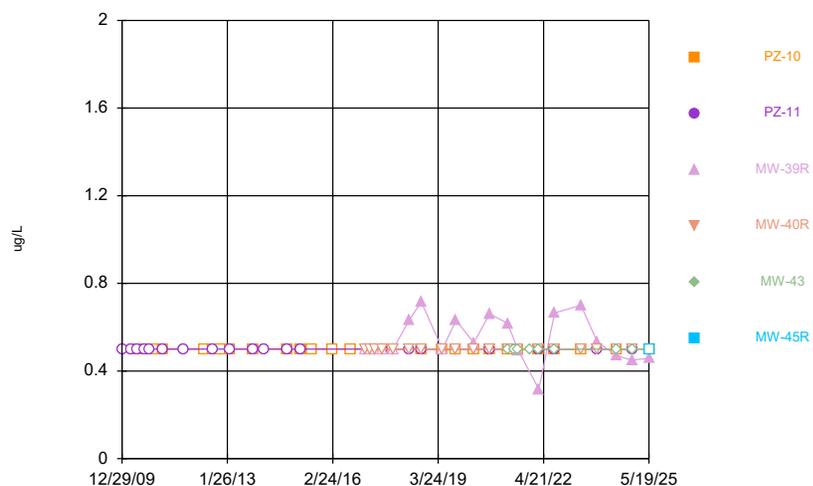
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Time Series



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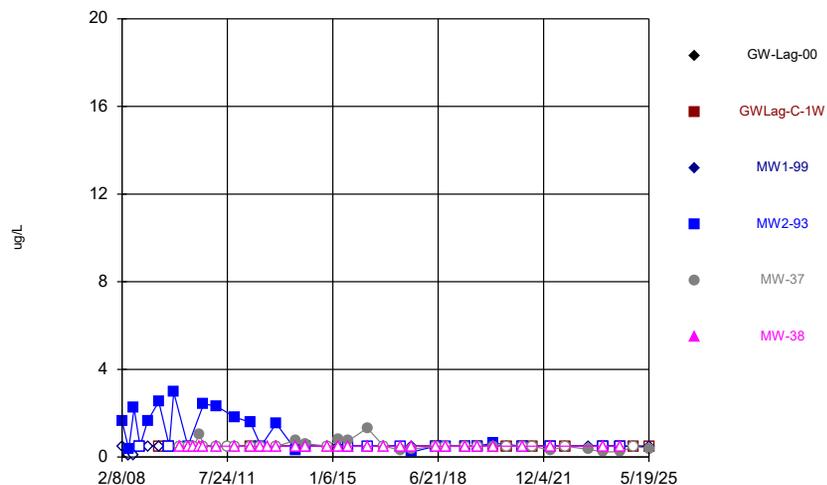
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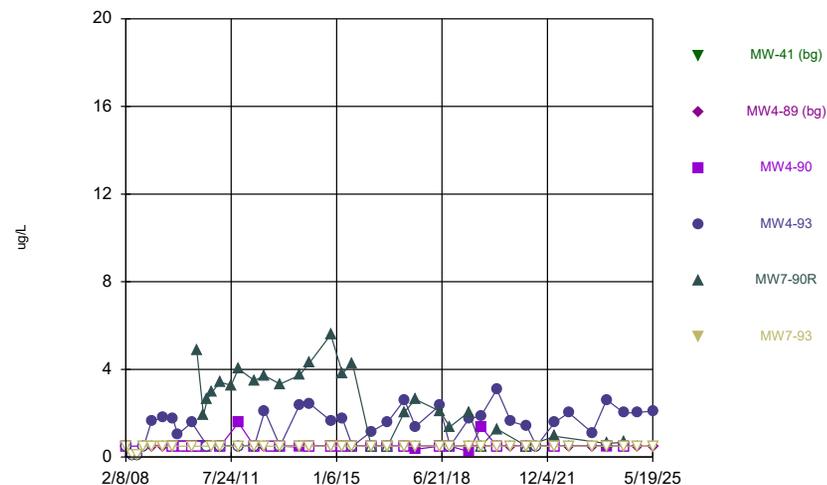
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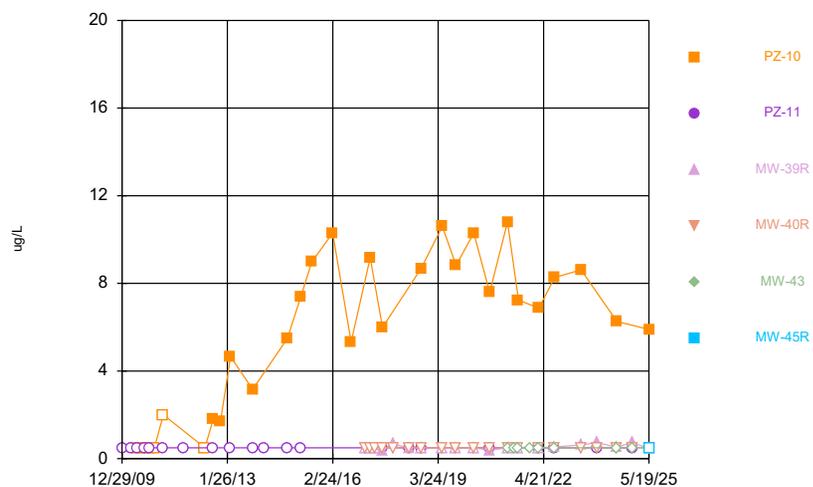
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Time Series



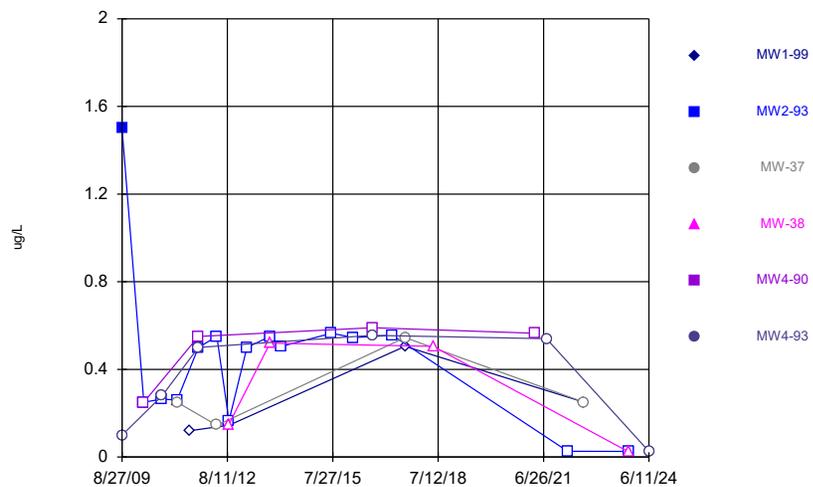
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Time Series



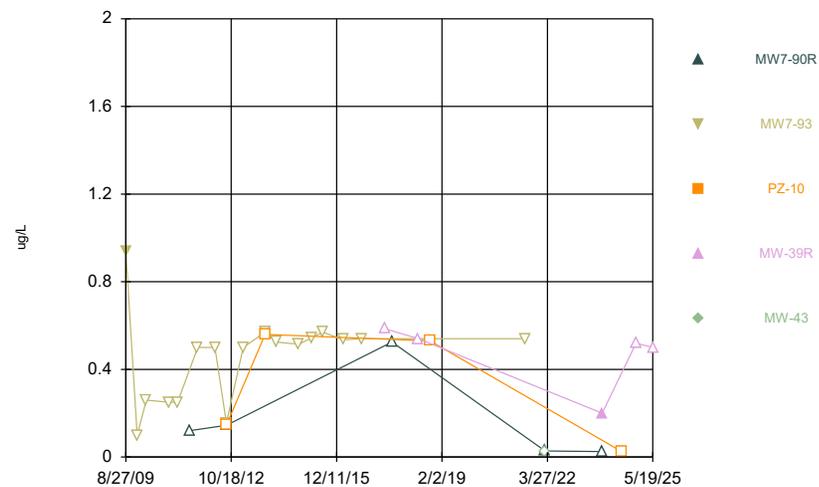
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Time Series



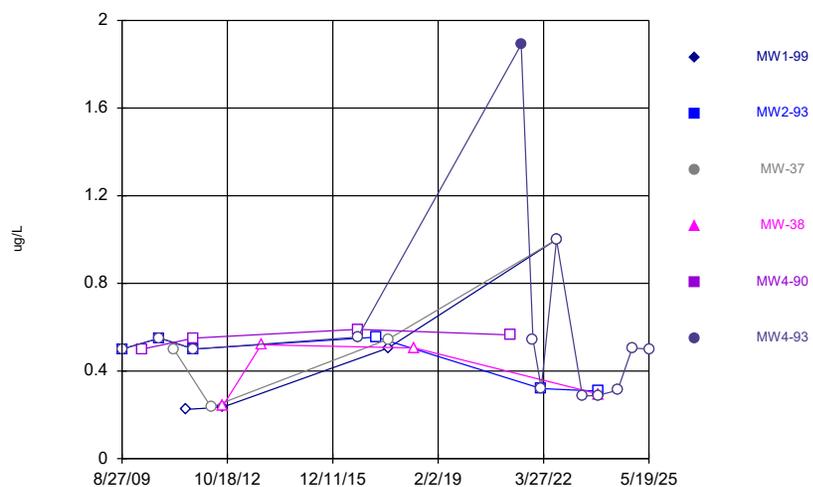
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Time Series



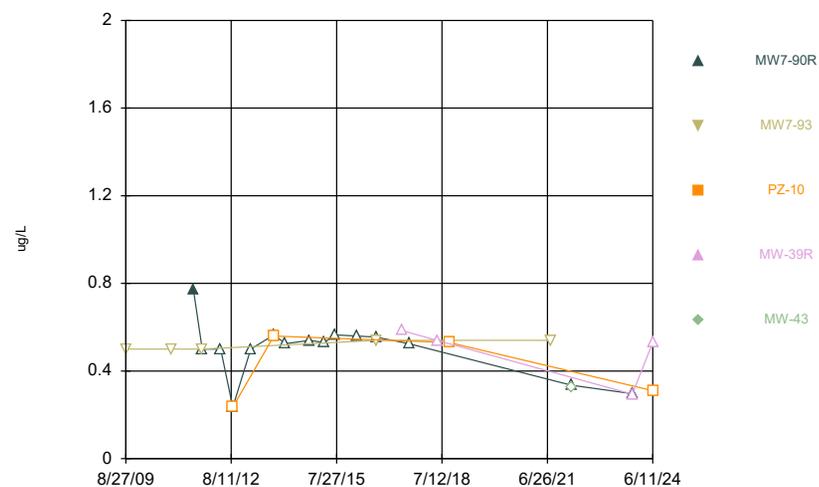
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



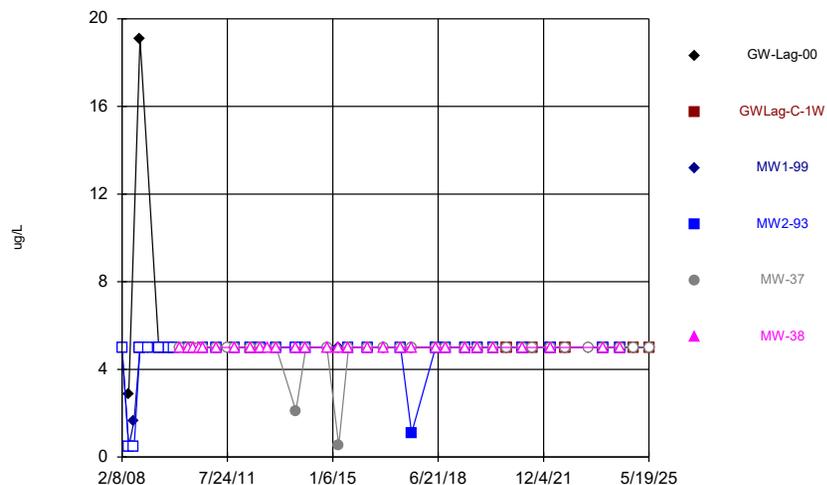
Constituent: 2,4-D [2C] Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



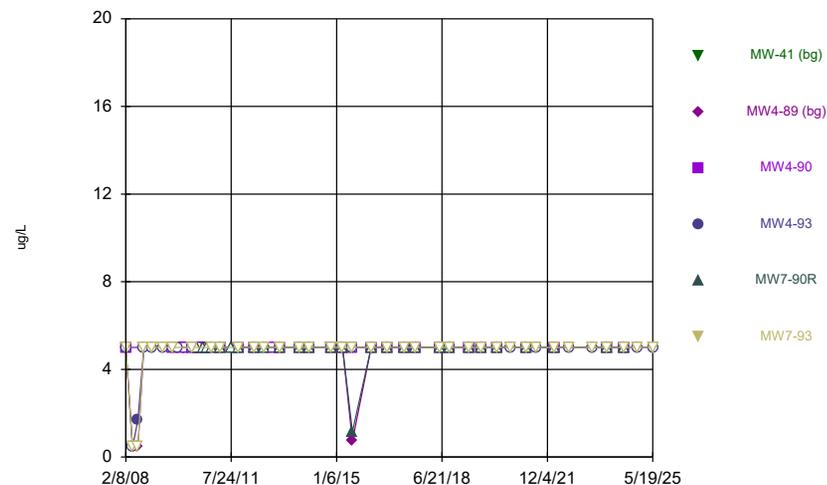
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



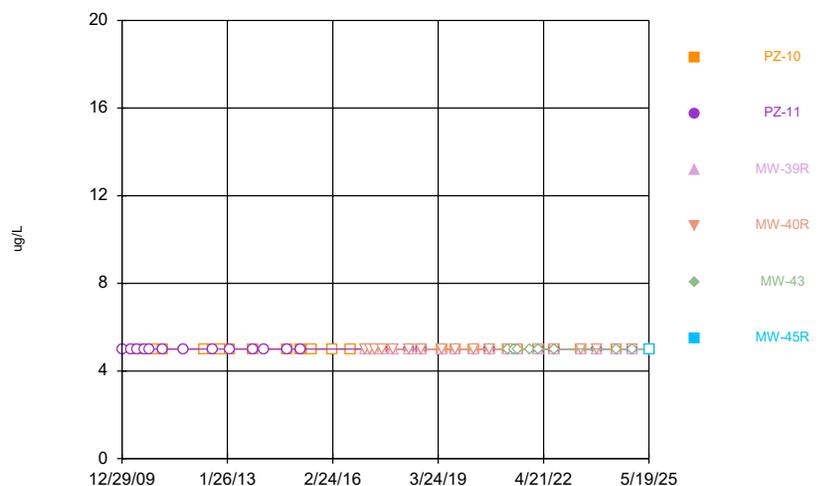
Constituent: 2-Butanone Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



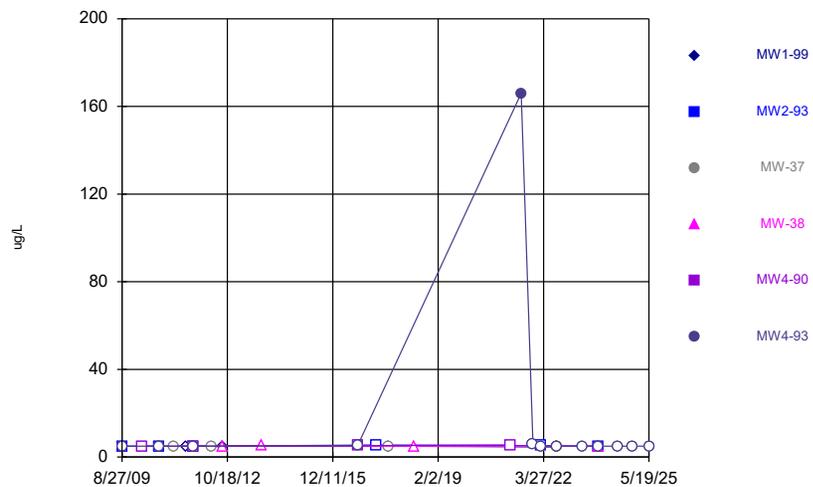
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



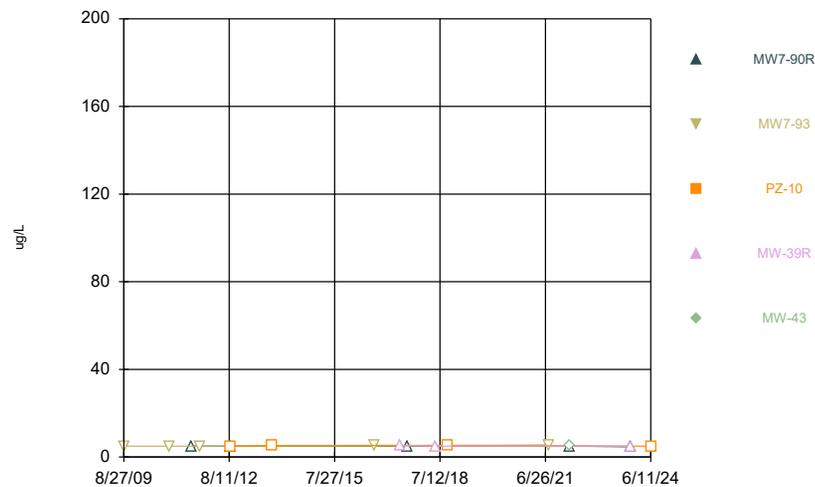
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



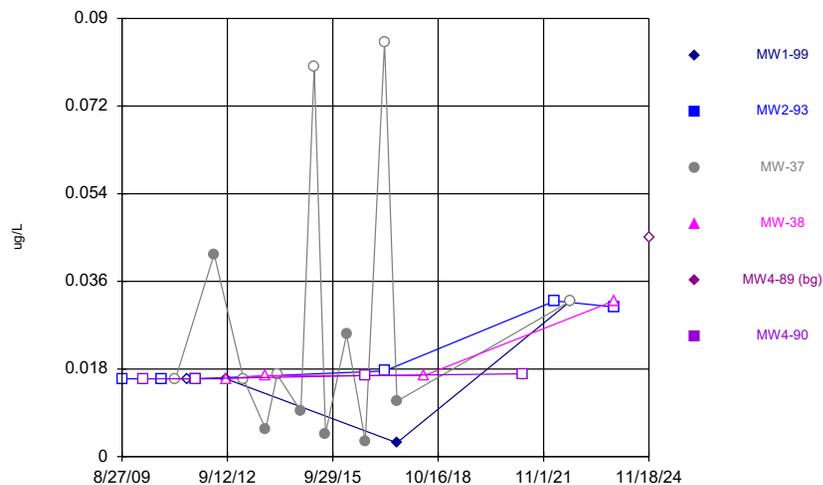
Constituent: 3/4-Methylphenol Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
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Time Series



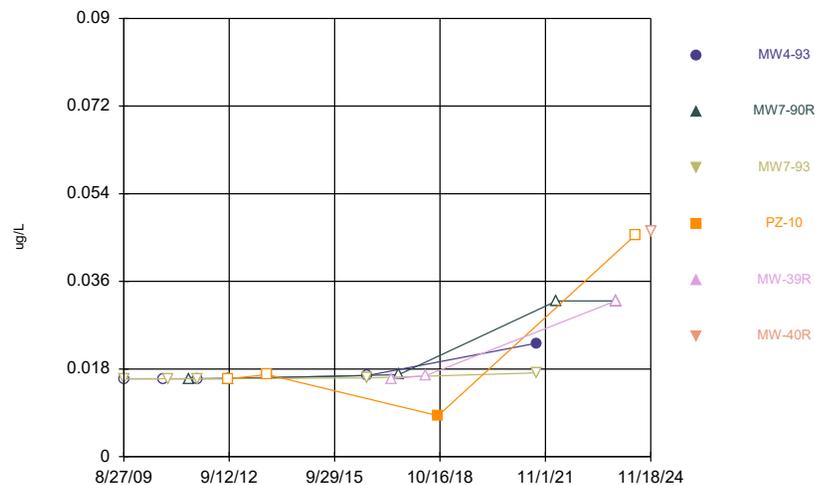
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: 4,4'-DDE Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
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Time Series



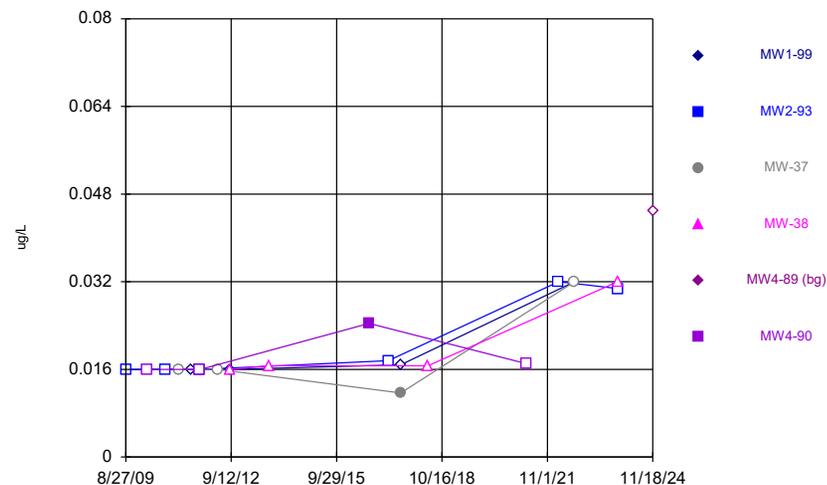
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



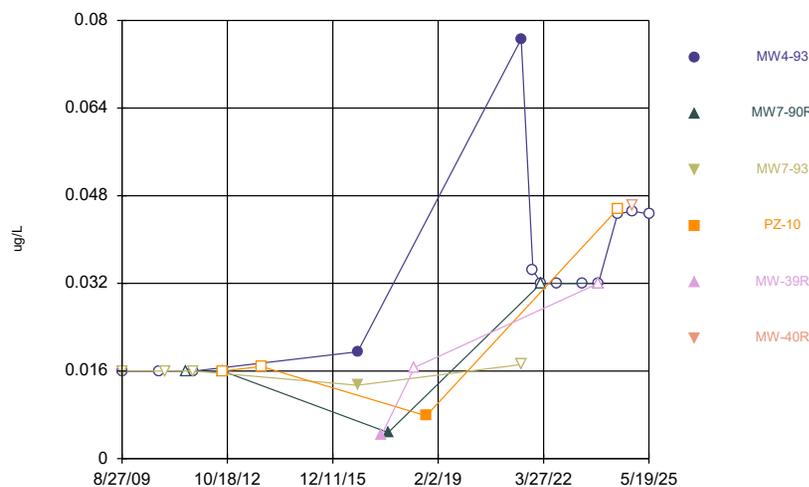
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



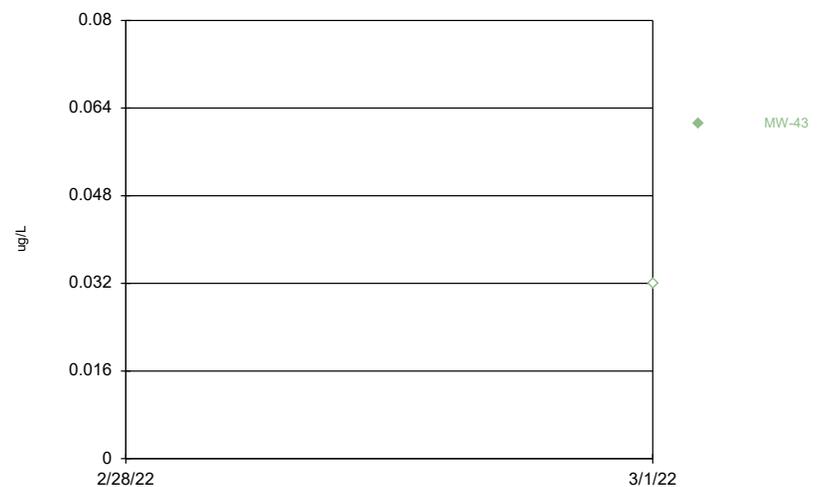
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



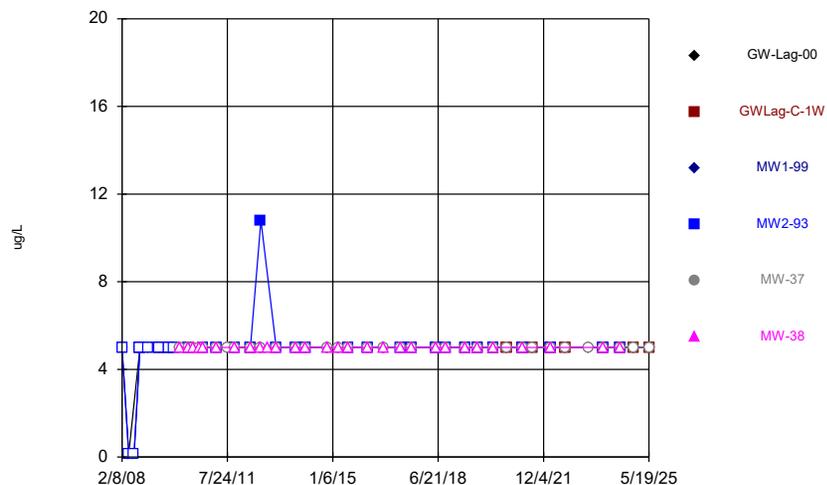
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



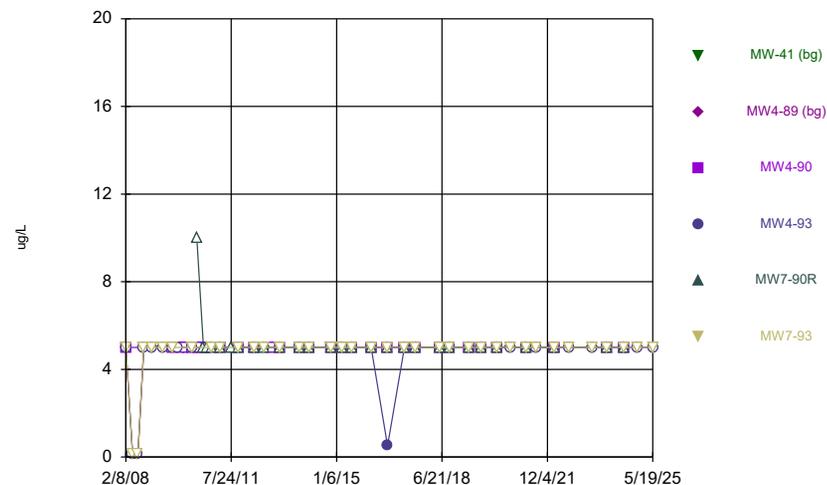
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



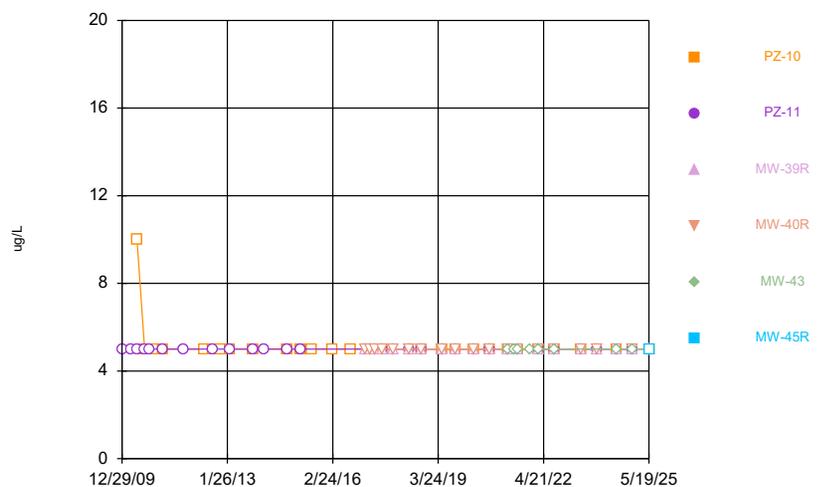
Constituent: 4-Methyl-2-Pentanone Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: 4-Methyl-2-Pentanone Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



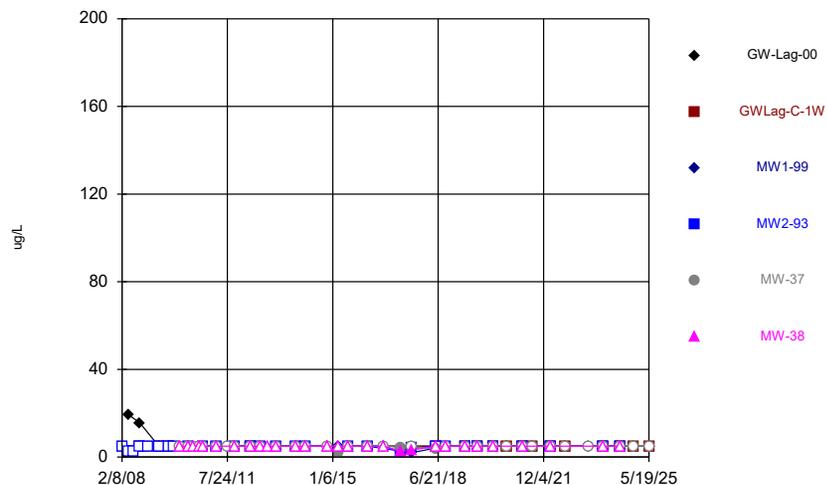
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



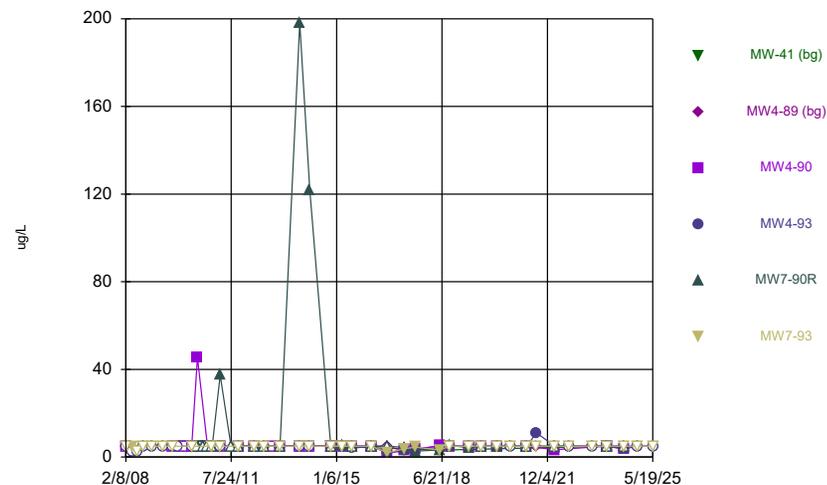
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



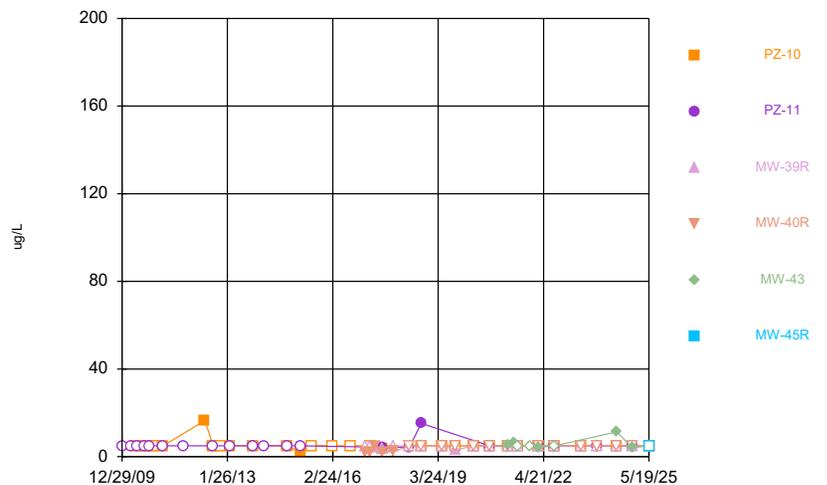
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



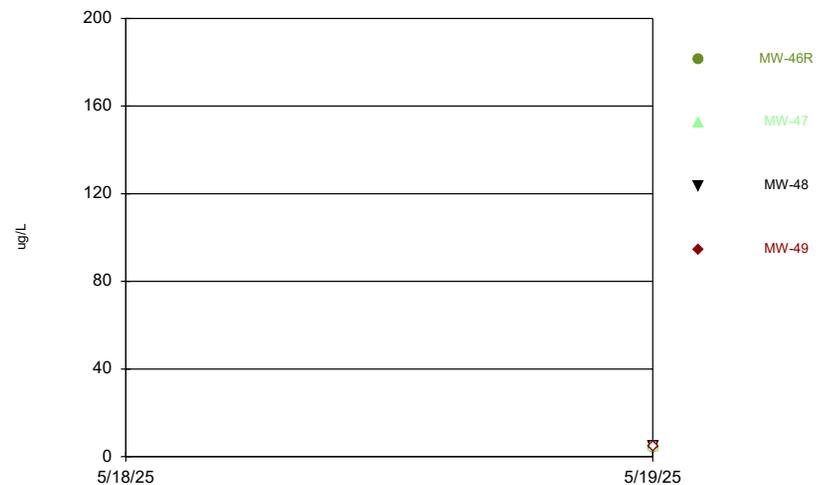
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



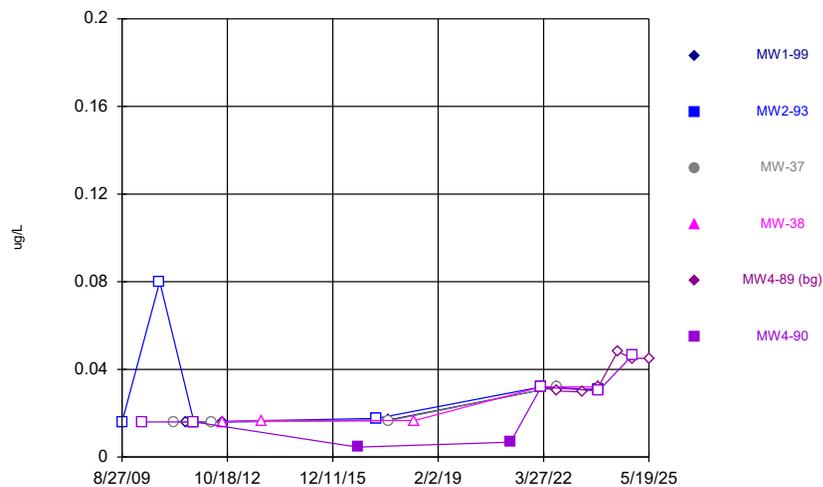
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



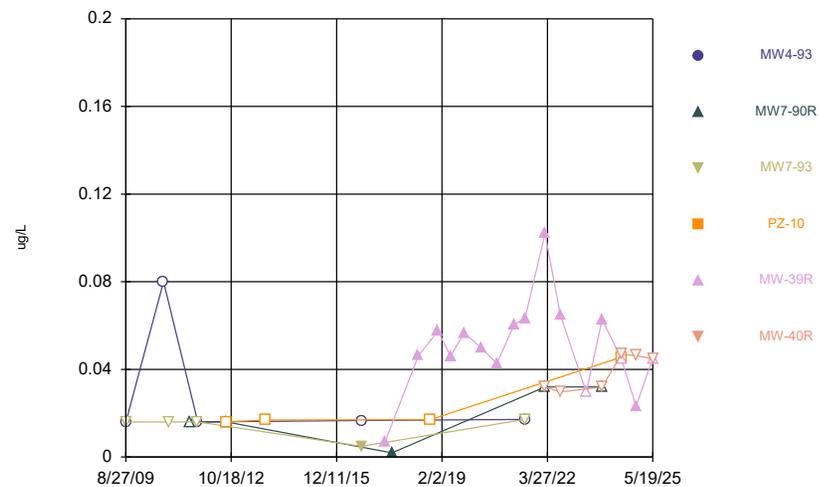
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: alpha-BHC Analysis Run 10/9/2025 9:48 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



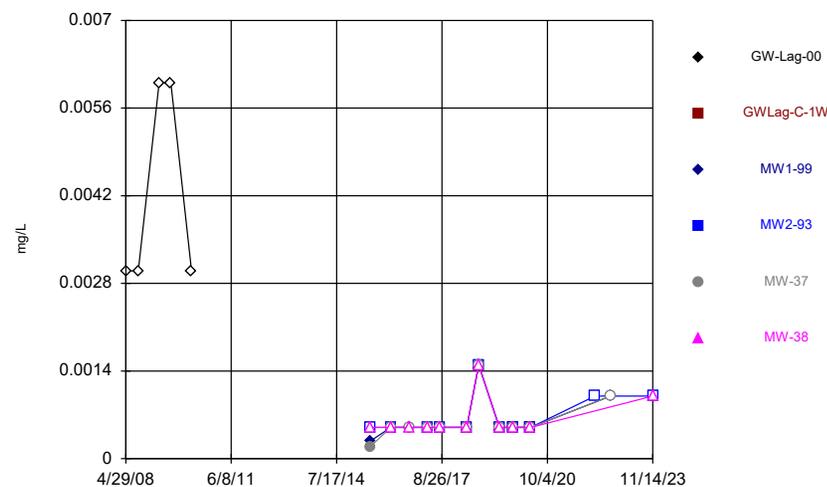
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Time Series



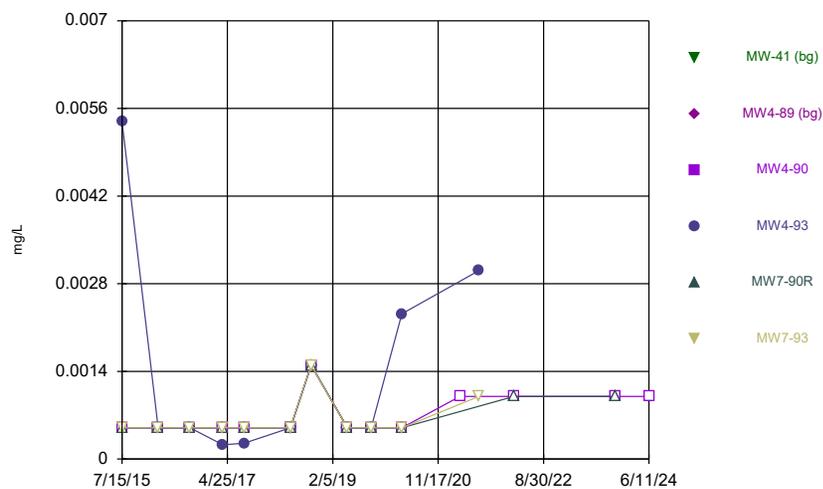
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



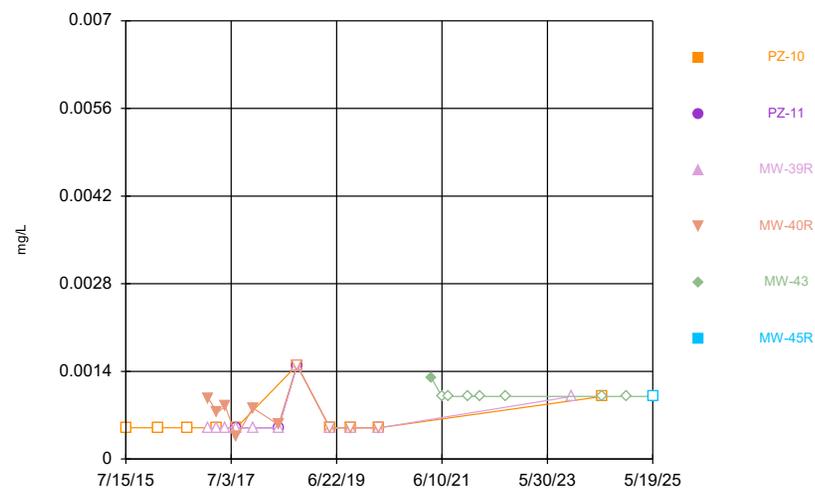
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



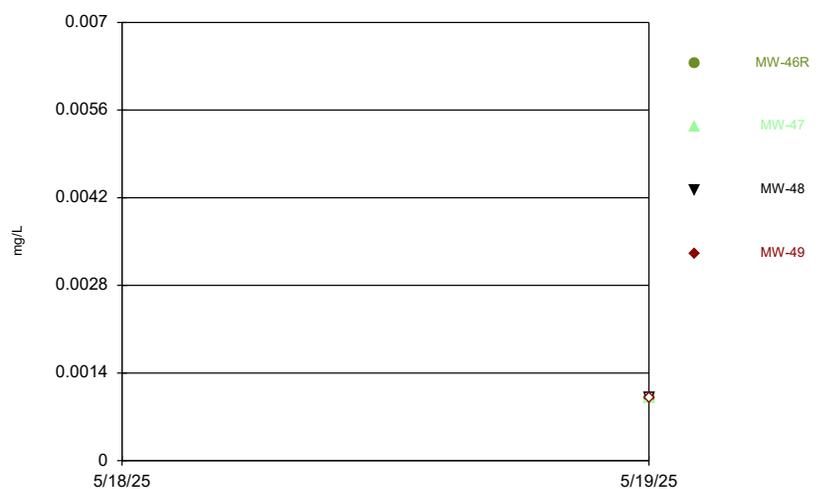
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Time Series



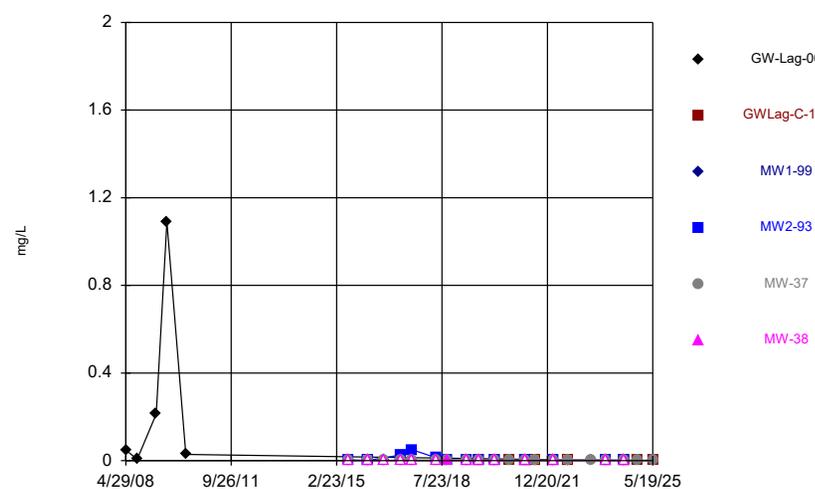
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



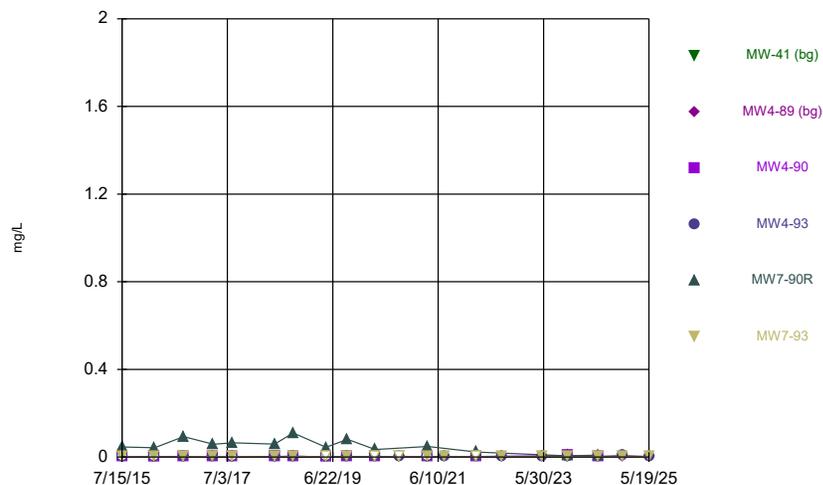
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



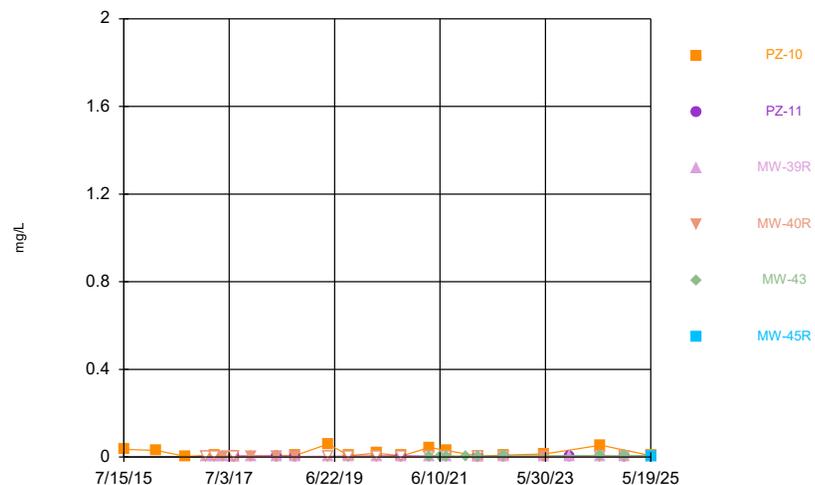
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



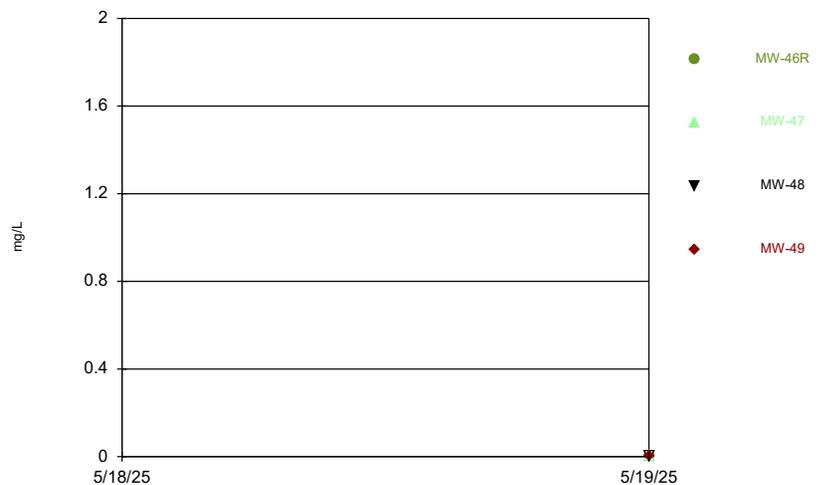
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



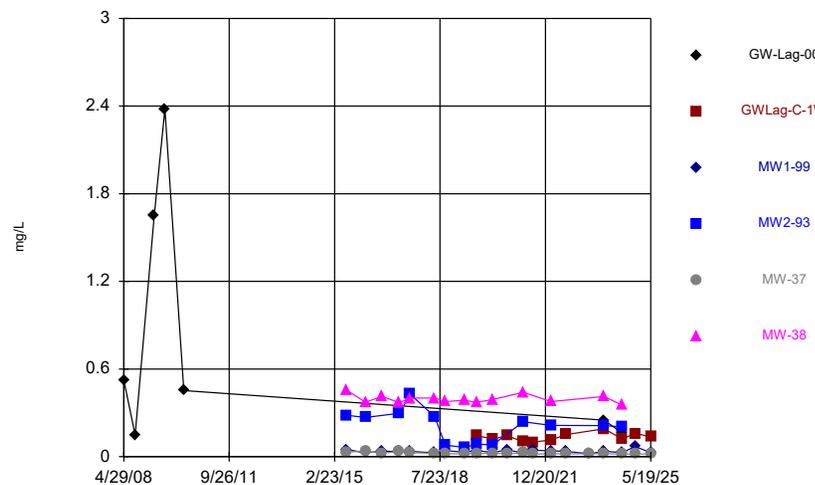
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



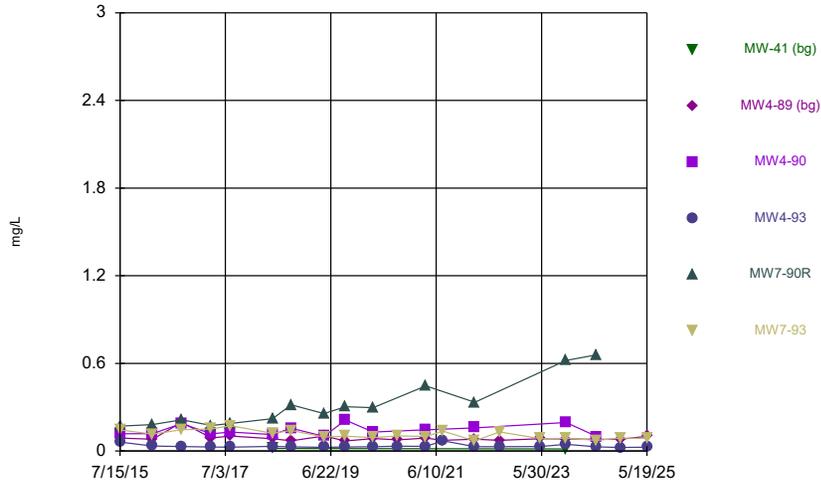
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



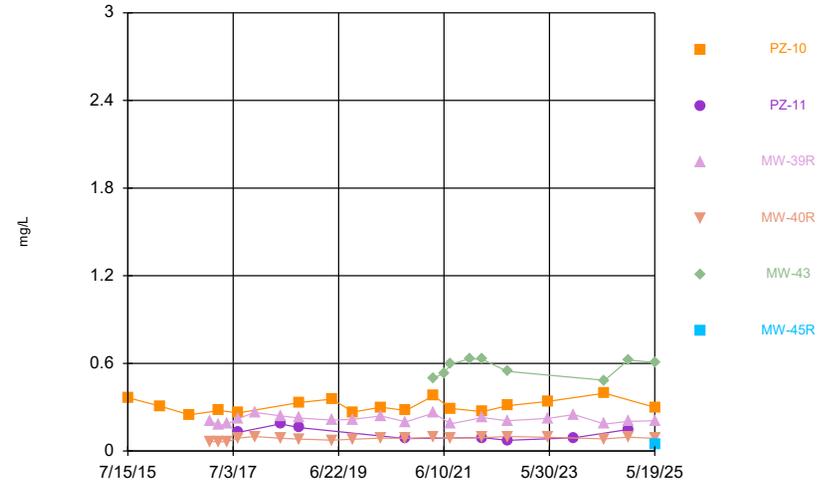
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



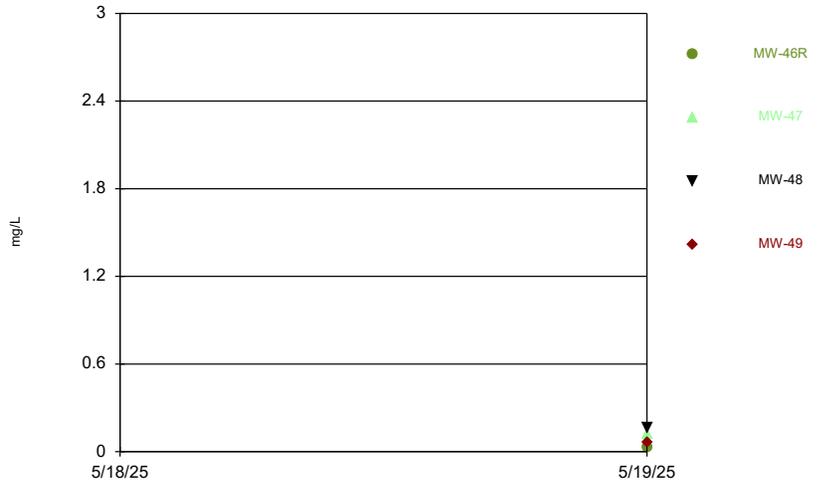
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Time Series



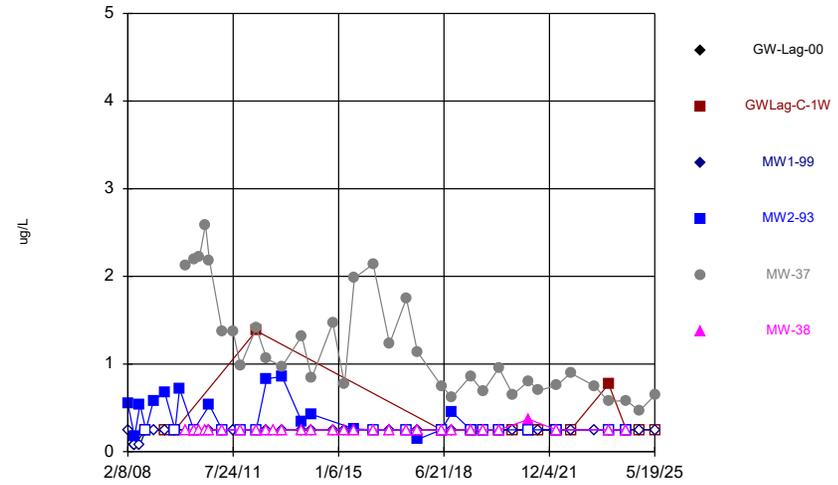
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



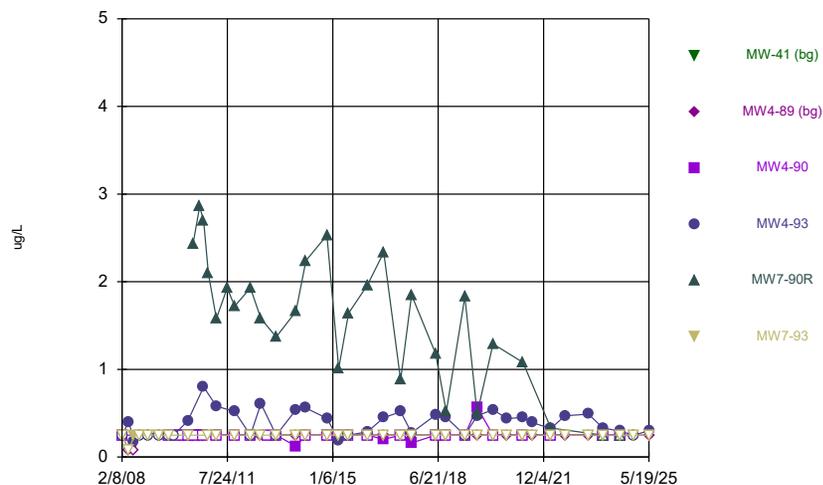
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Time Series



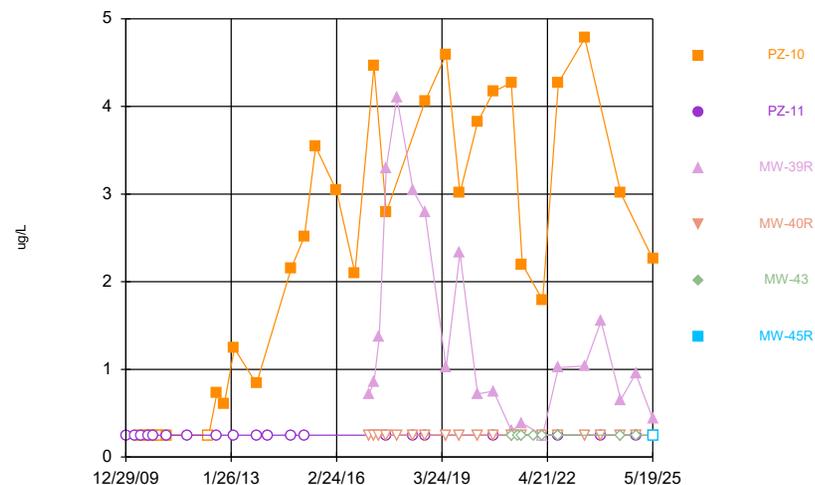
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



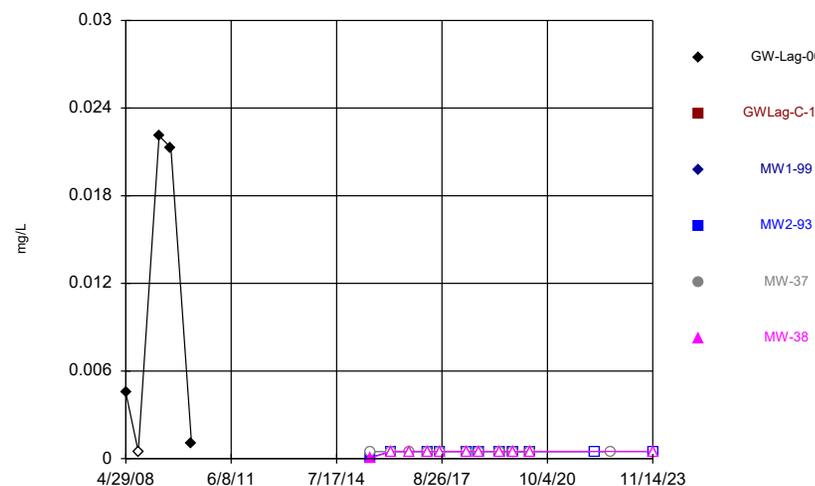
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Time Series



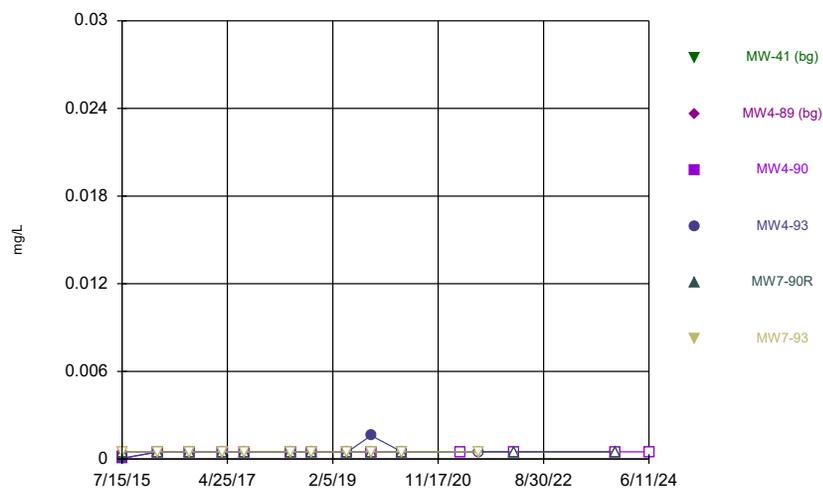
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



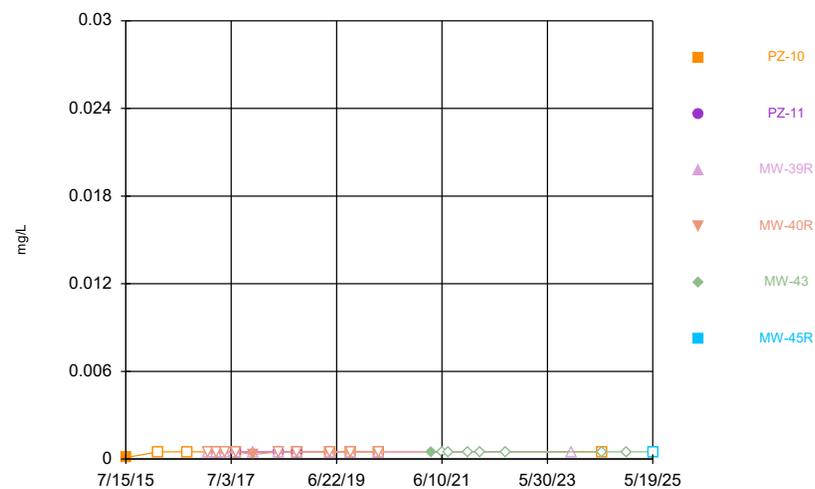
Constituent: Beryllium Analysis Run 10/9/2025 9:49 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Beryllium Analysis Run 10/9/2025 9:49 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



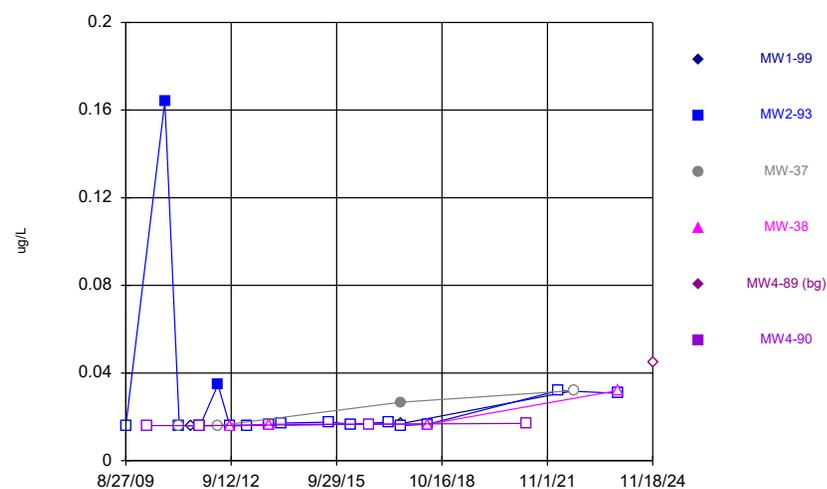
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



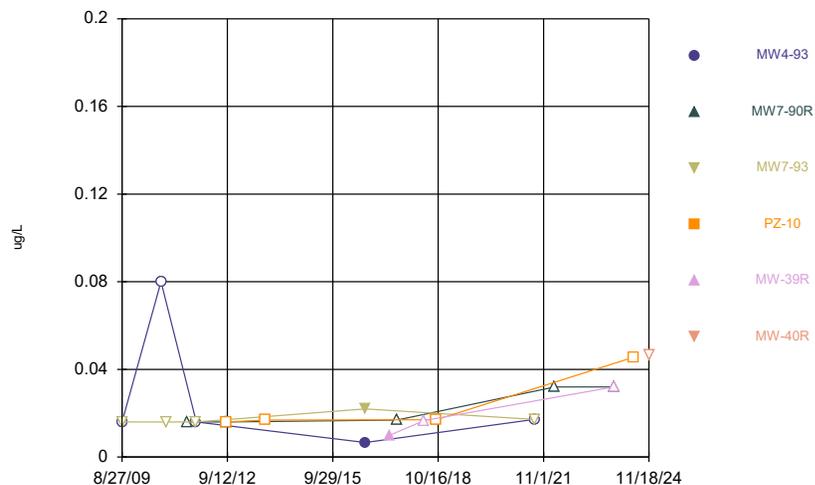
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



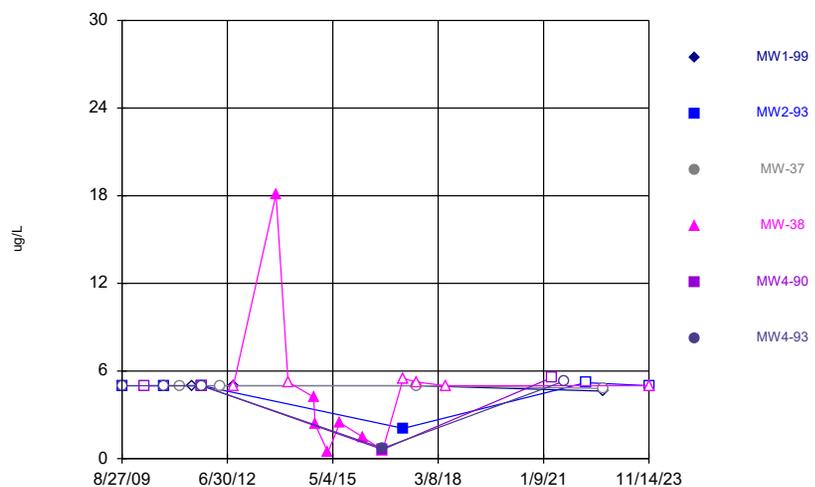
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Time Series



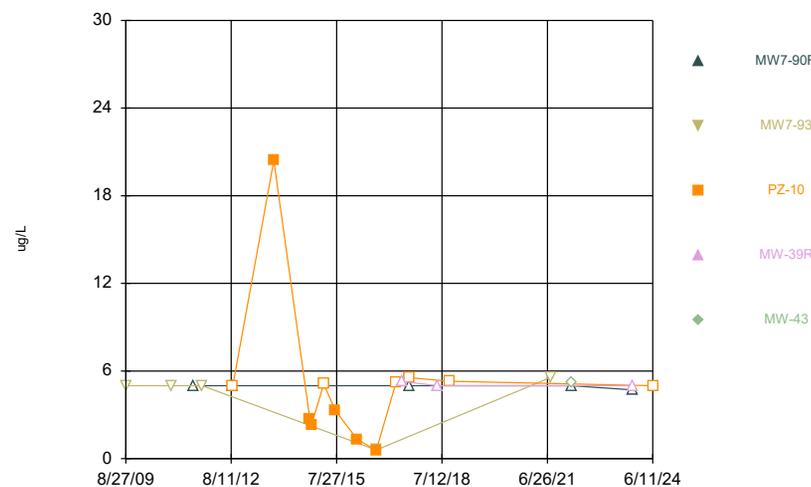
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Time Series



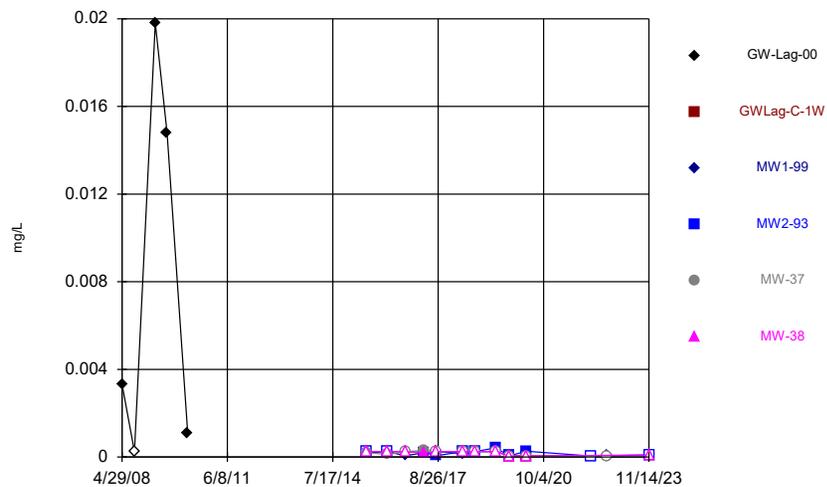
Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/9/2025 9:49 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



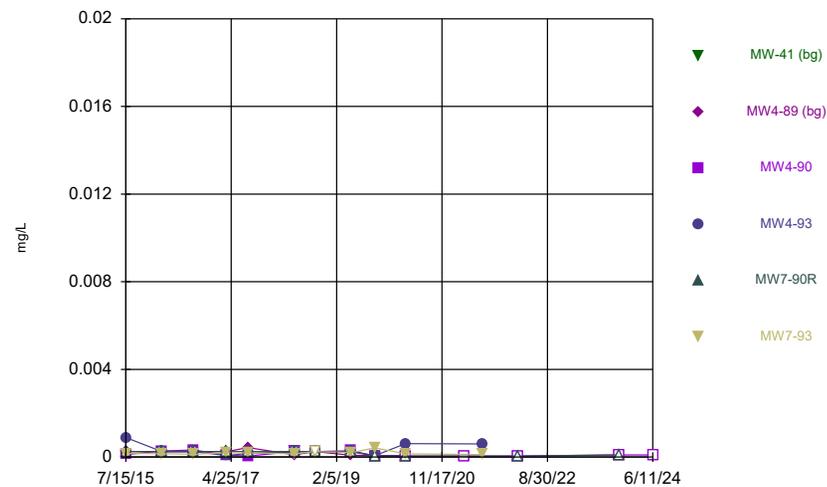
Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/9/2025 9:49 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



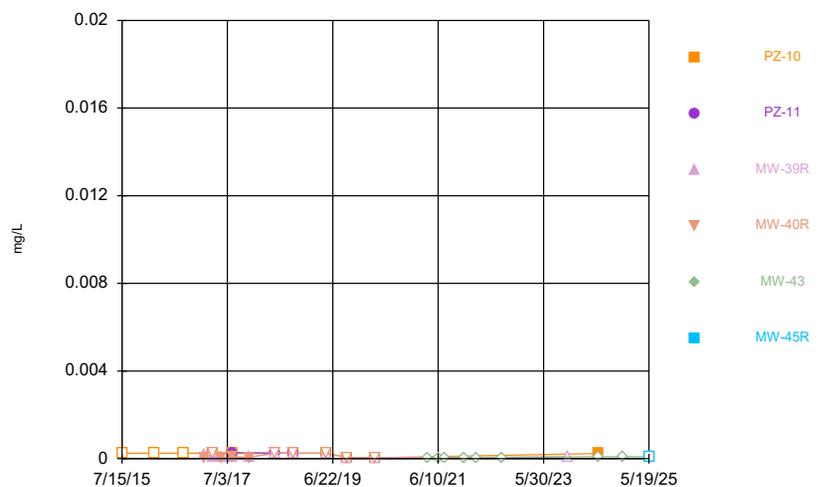
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



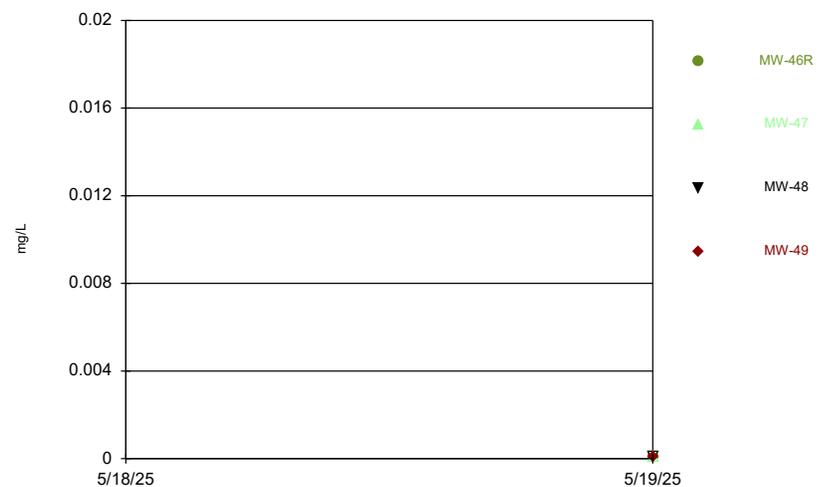
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



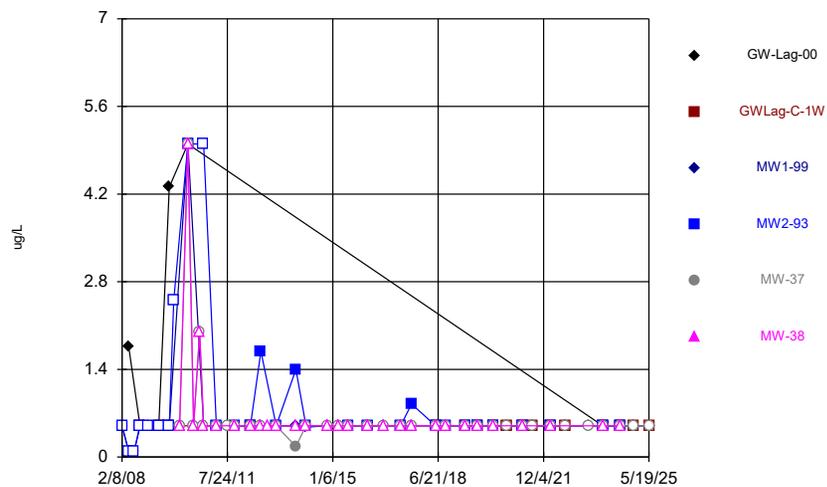
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



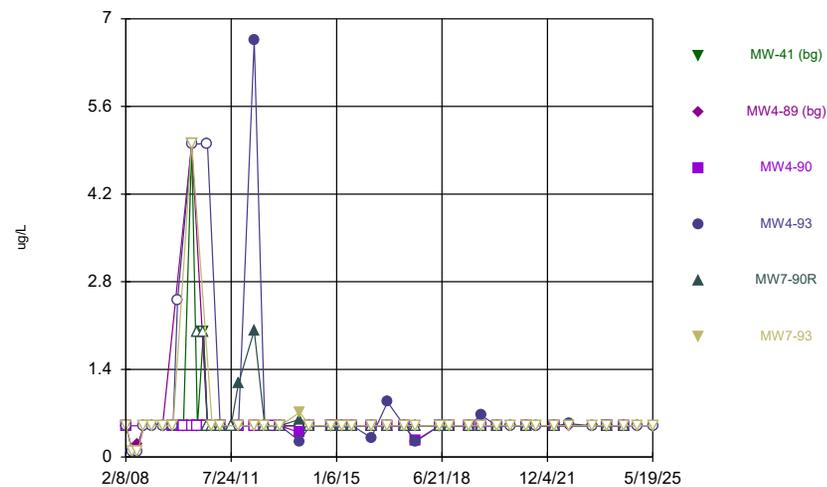
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



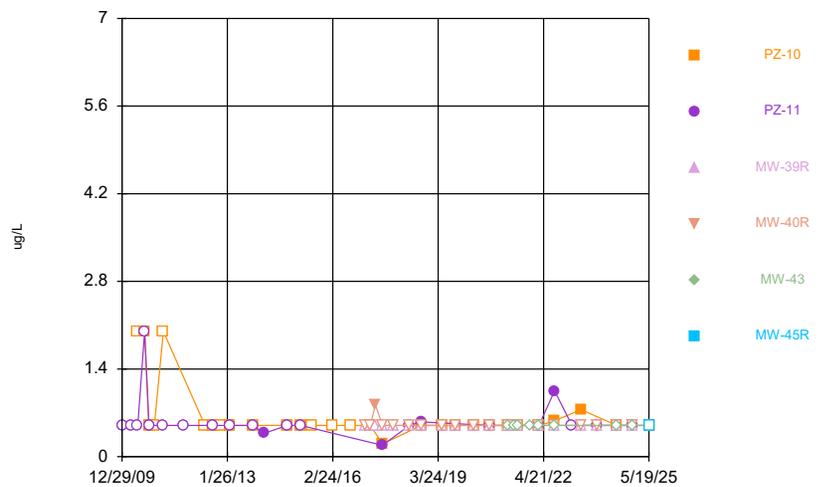
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Time Series



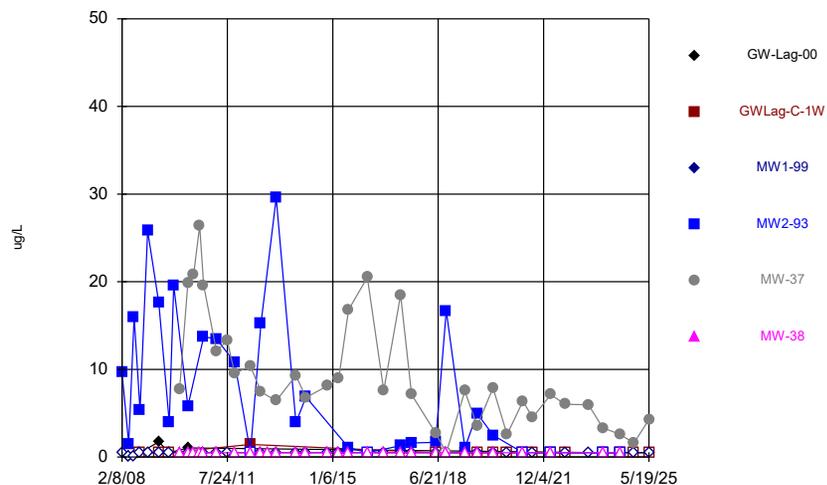
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



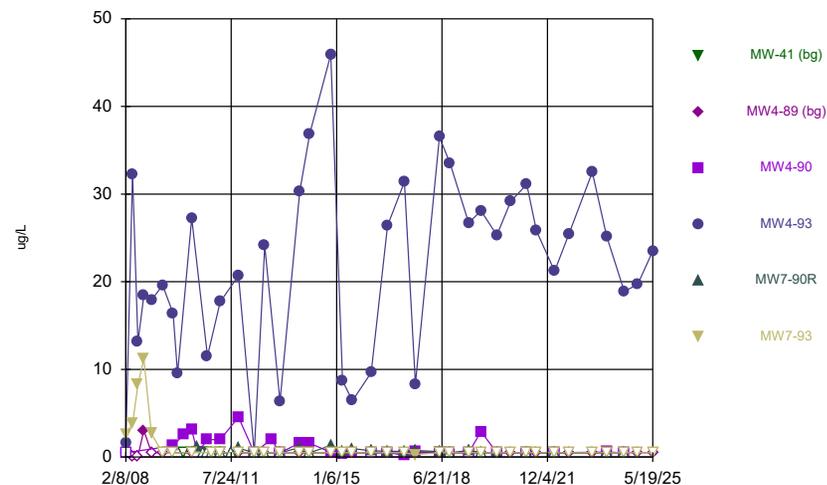
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



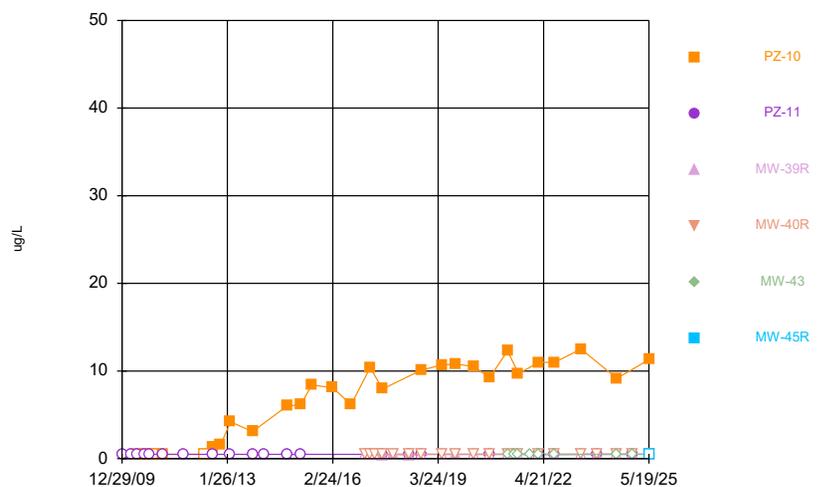
Constituent: Chlorobenzene Analysis Run 10/9/2025 9:49 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



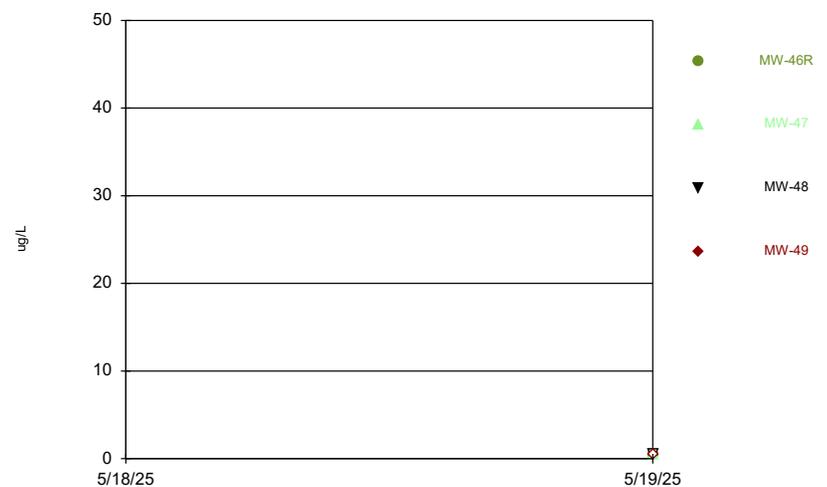
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



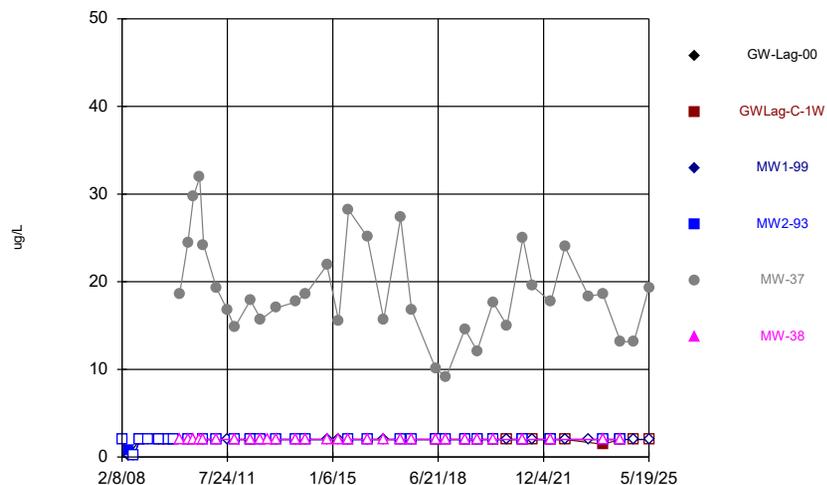
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Time Series



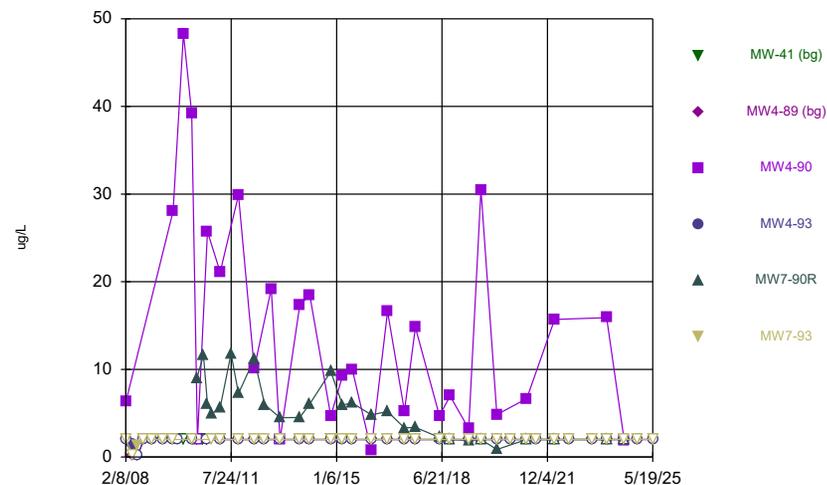
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Time Series



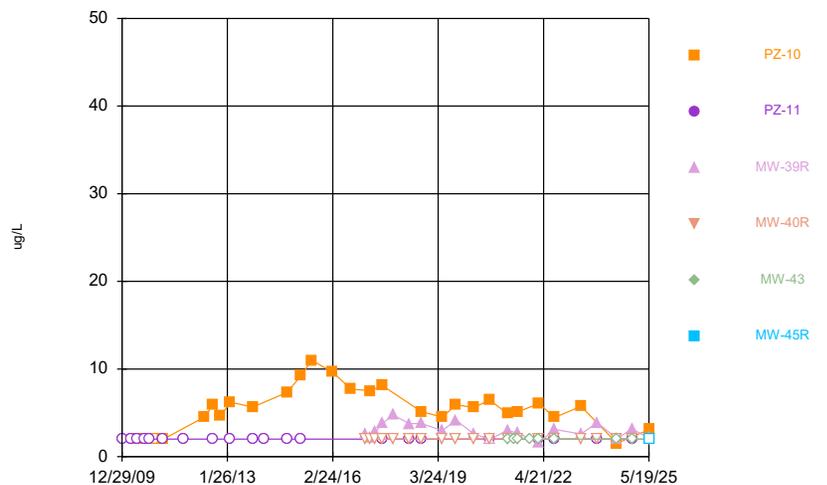
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Time Series



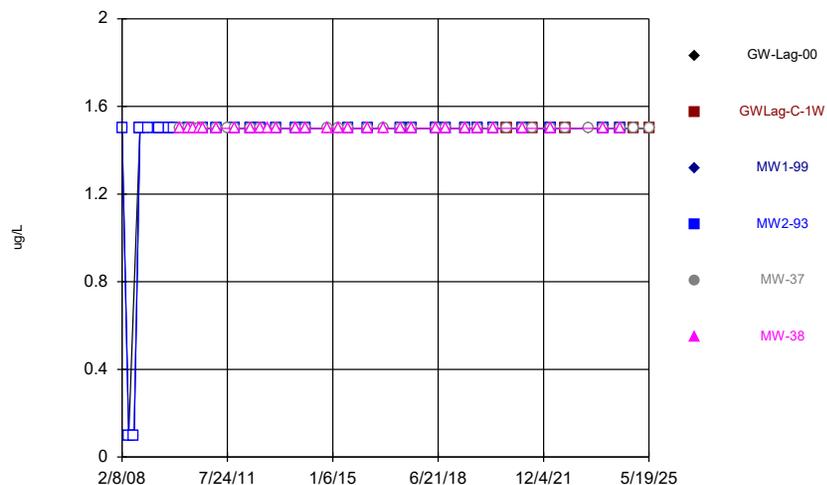
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Time Series



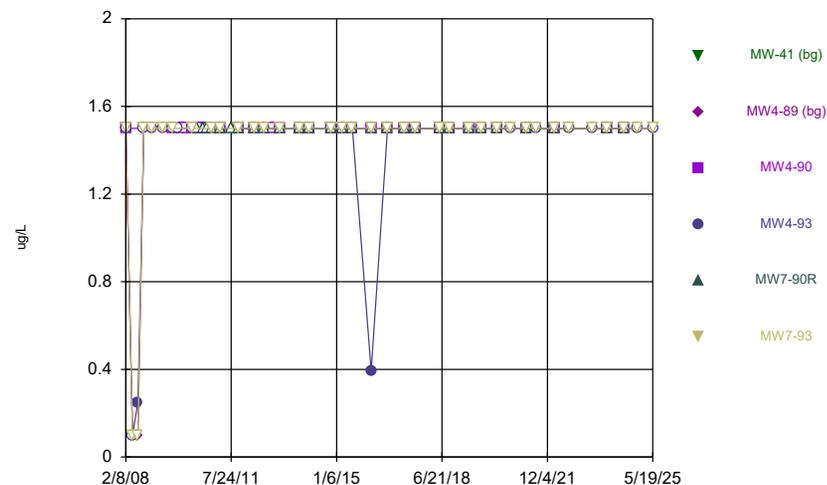
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Time Series



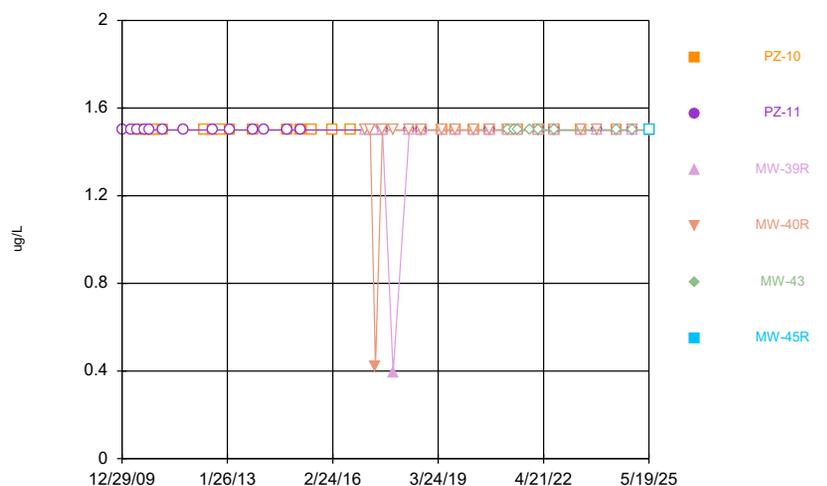
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Time Series



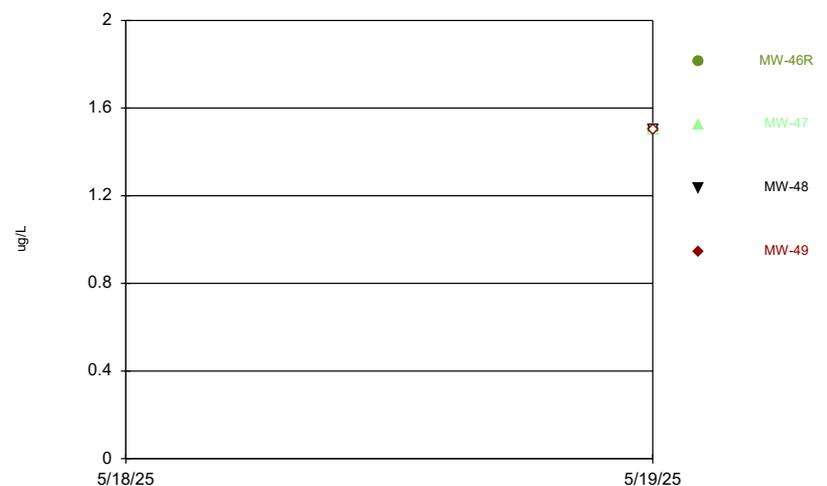
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



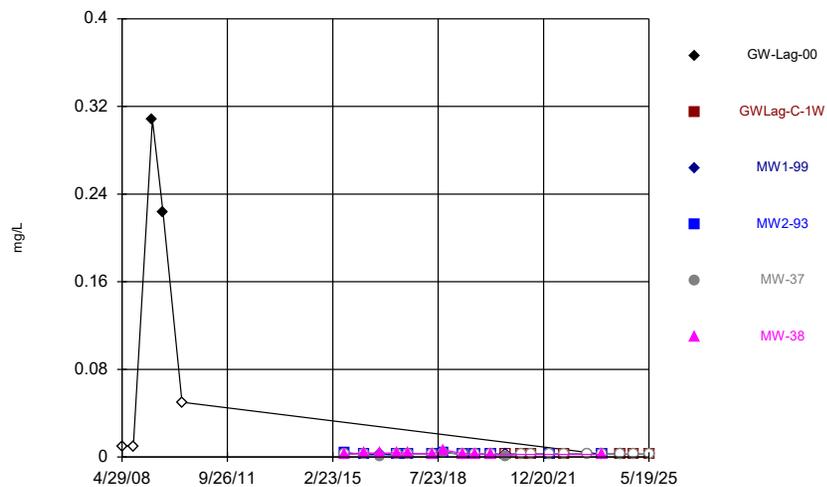
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Time Series



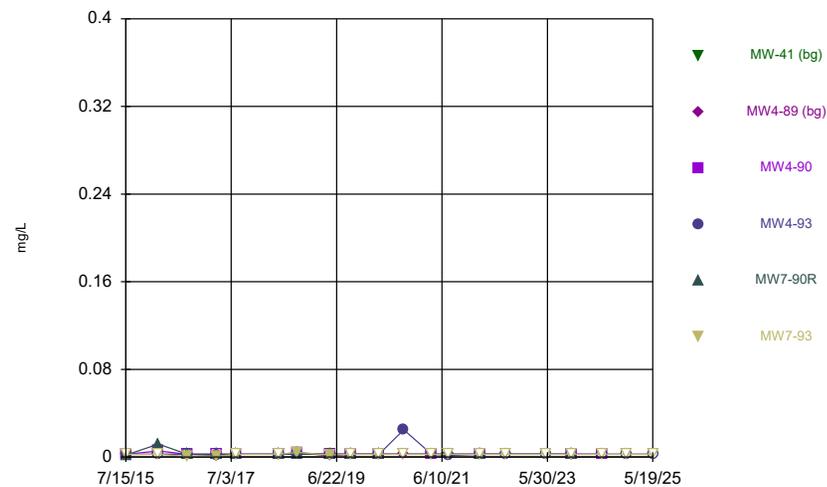
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



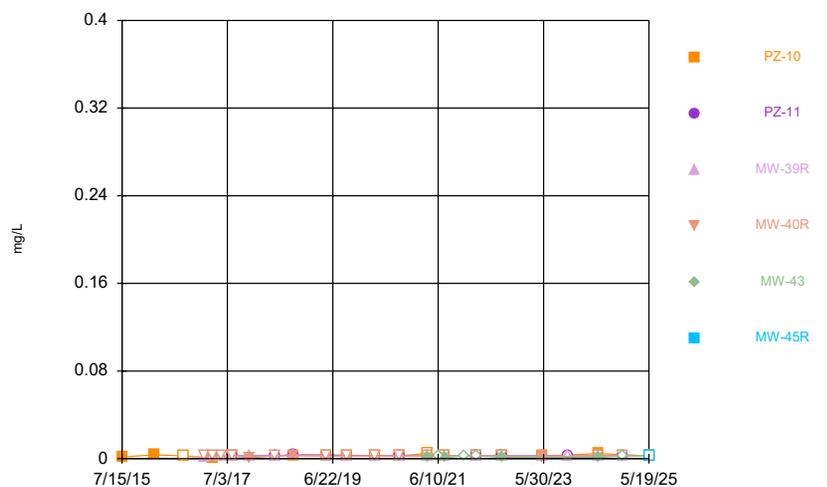
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



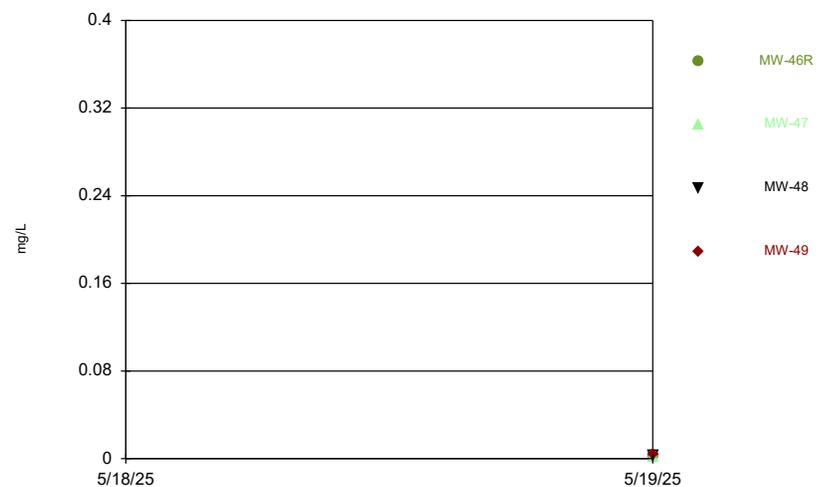
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



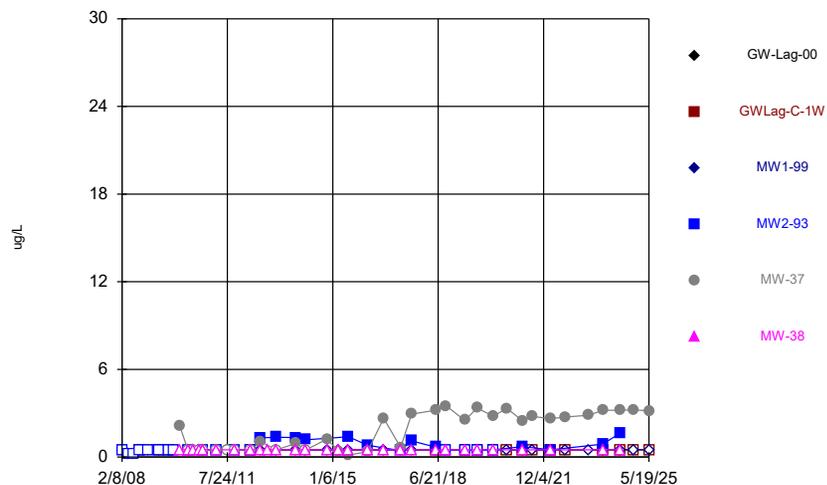
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



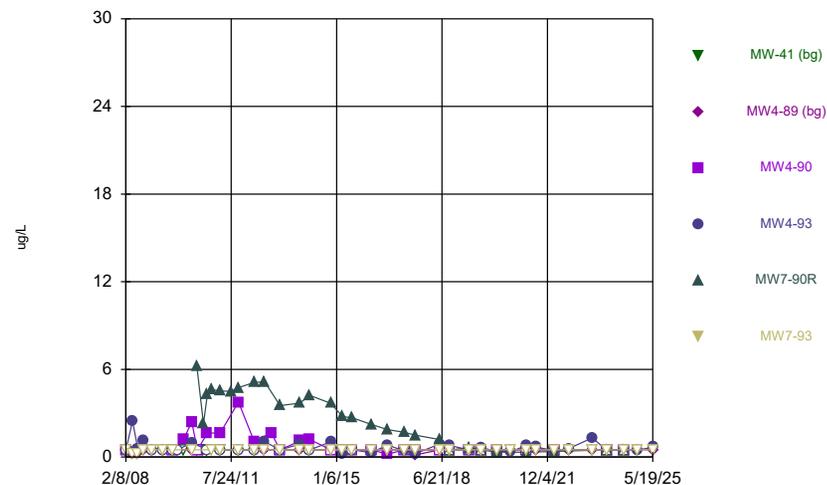
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Time Series



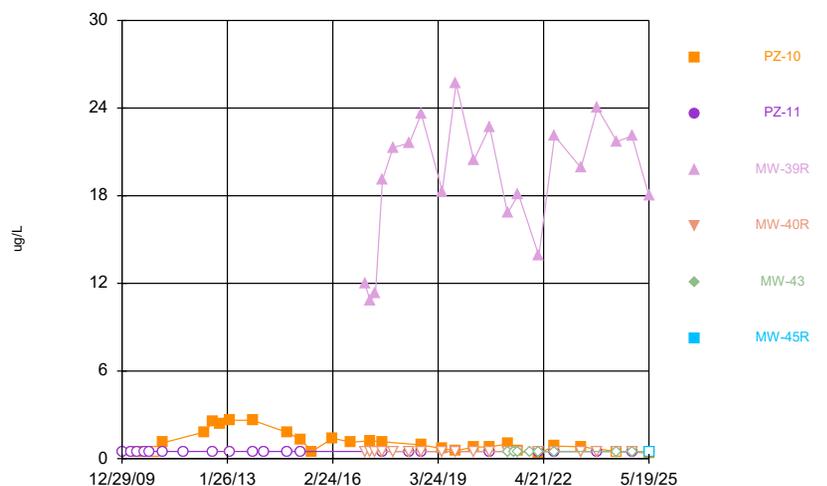
Constituent: cis-1,2-Dichloroethene Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
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Time Series



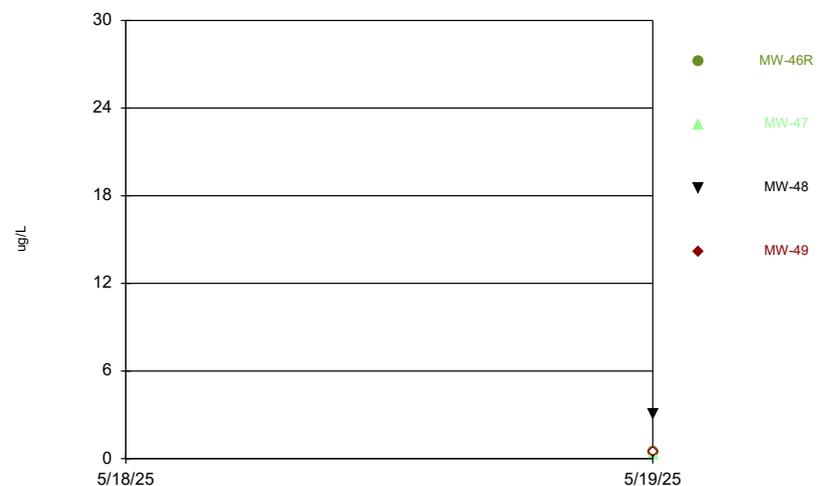
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



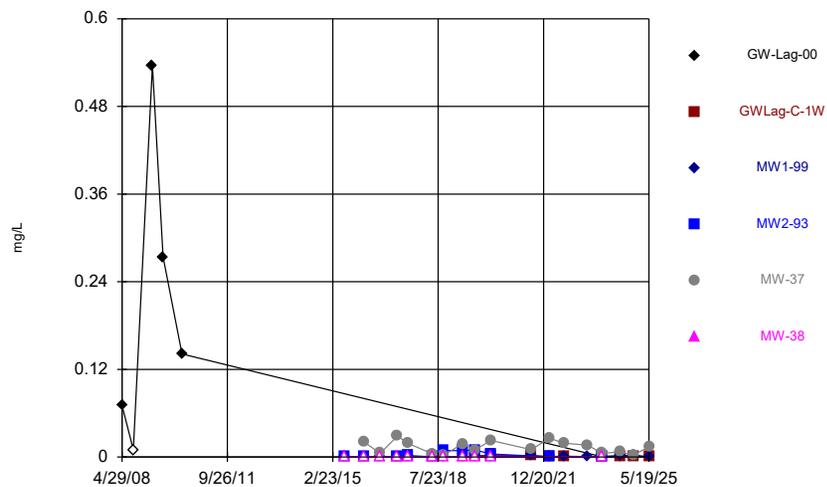
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Time Series



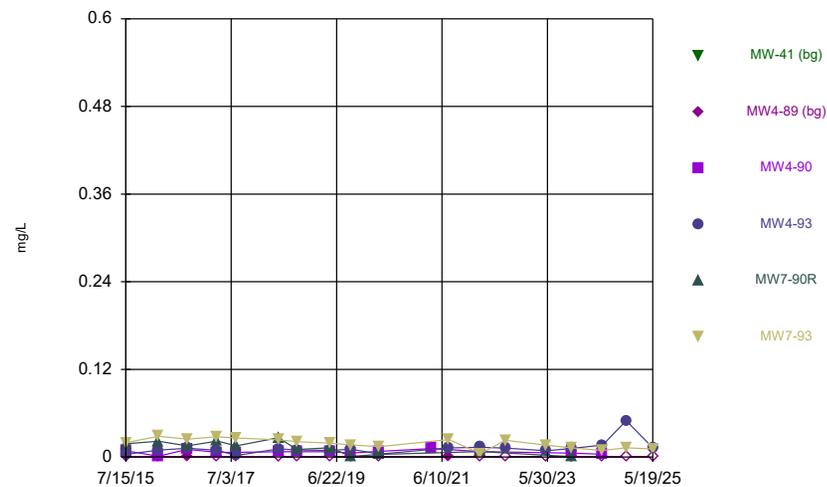
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



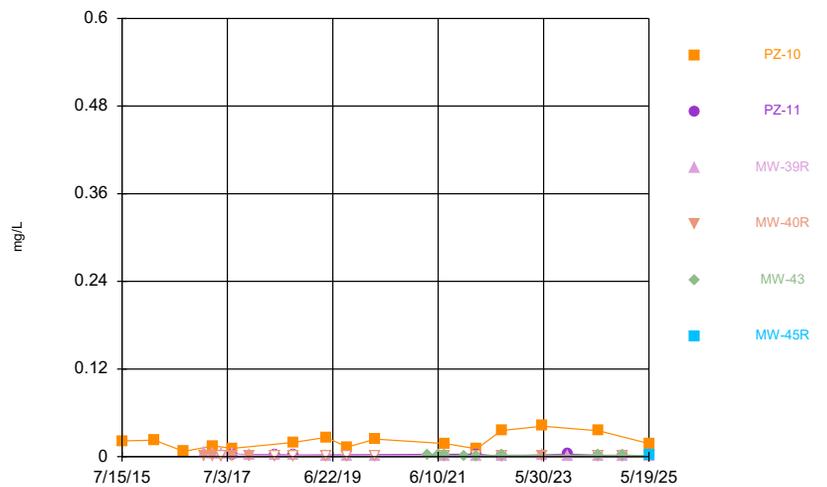
Constituent: Cobalt Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



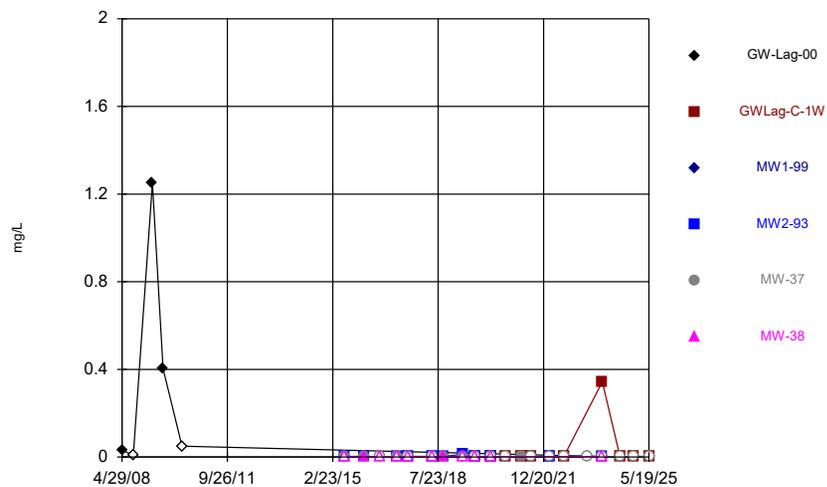
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



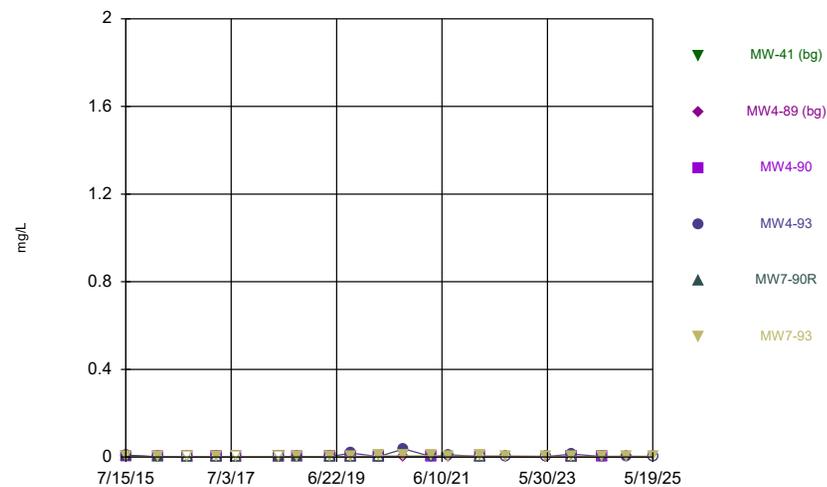
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



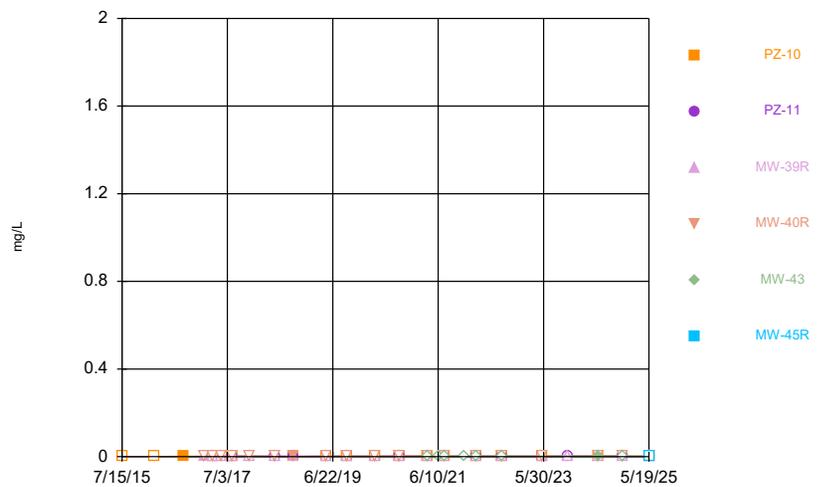
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



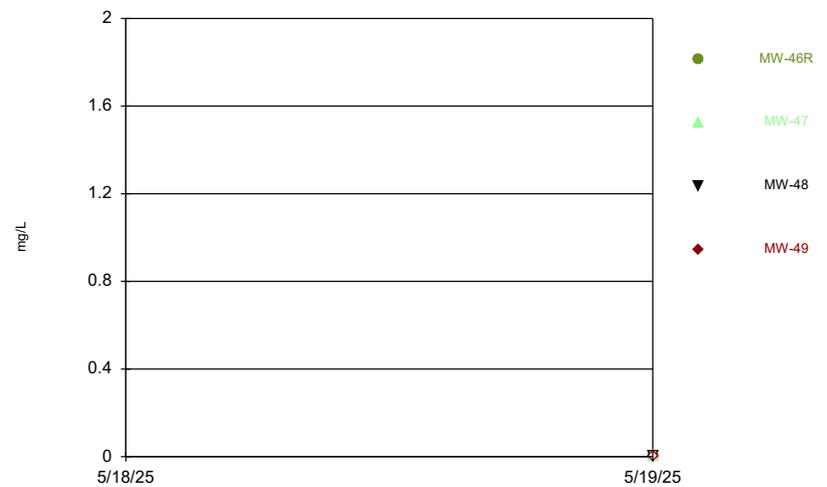
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



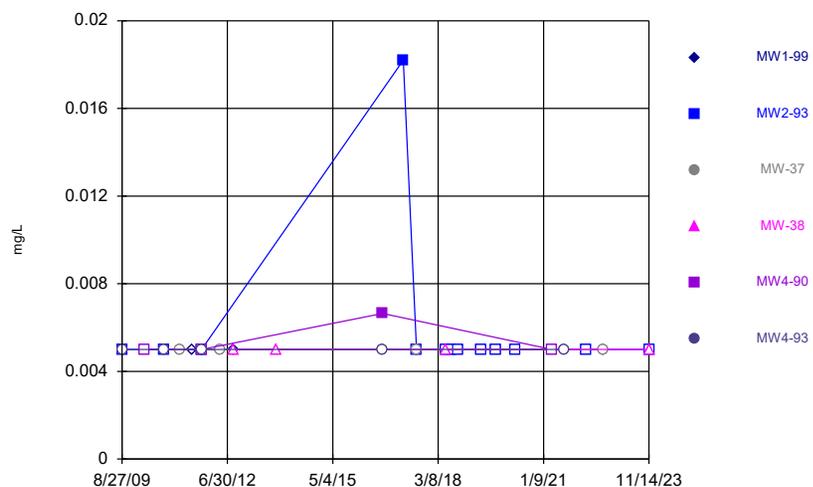
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Time Series



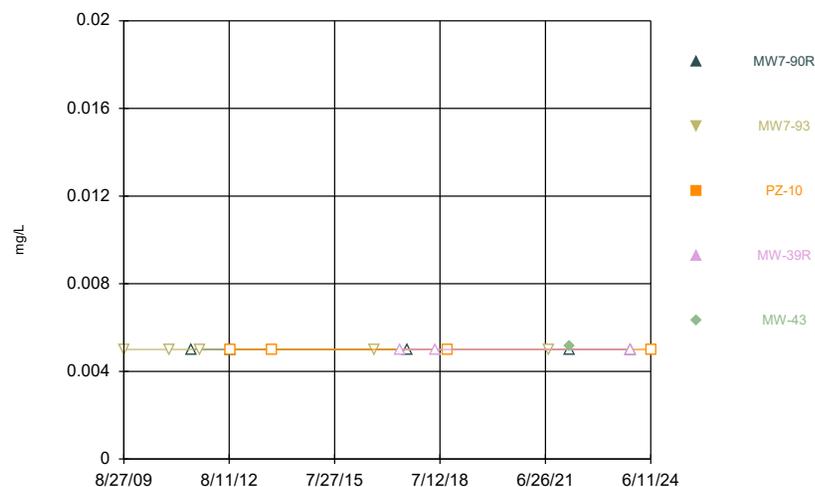
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



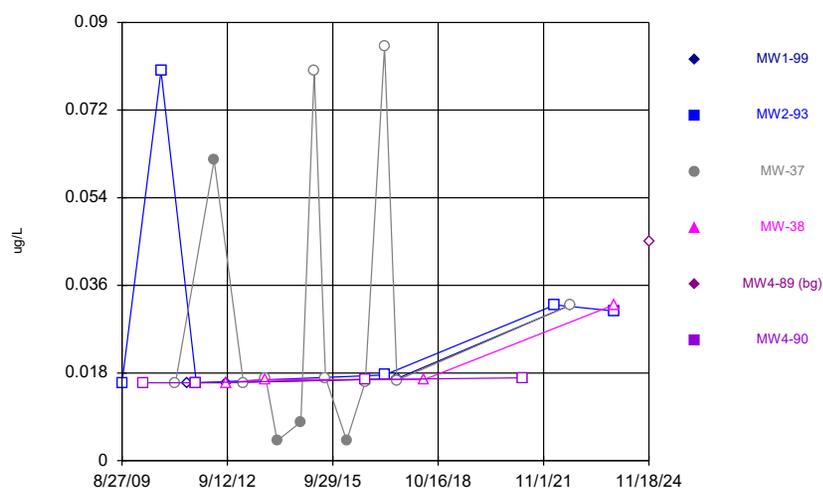
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



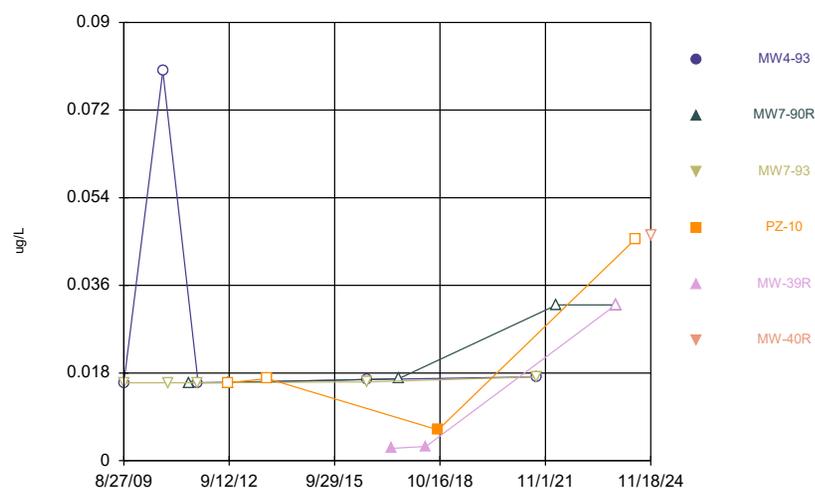
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: delta-BHC Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



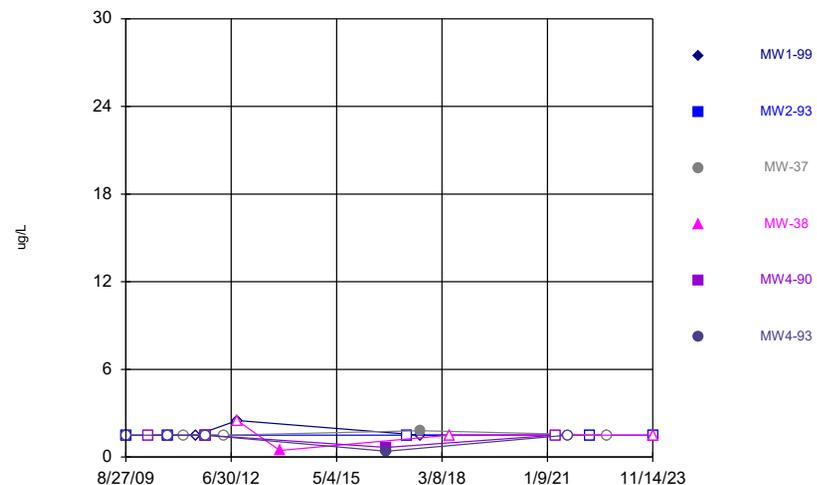
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



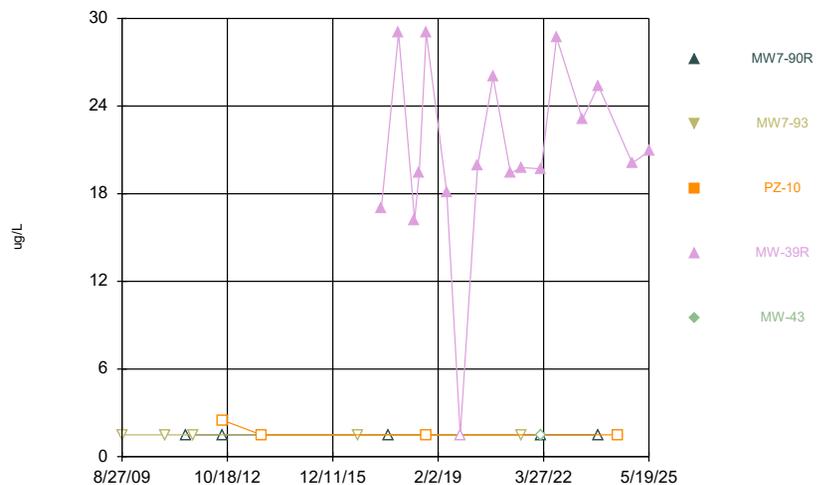
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Time Series



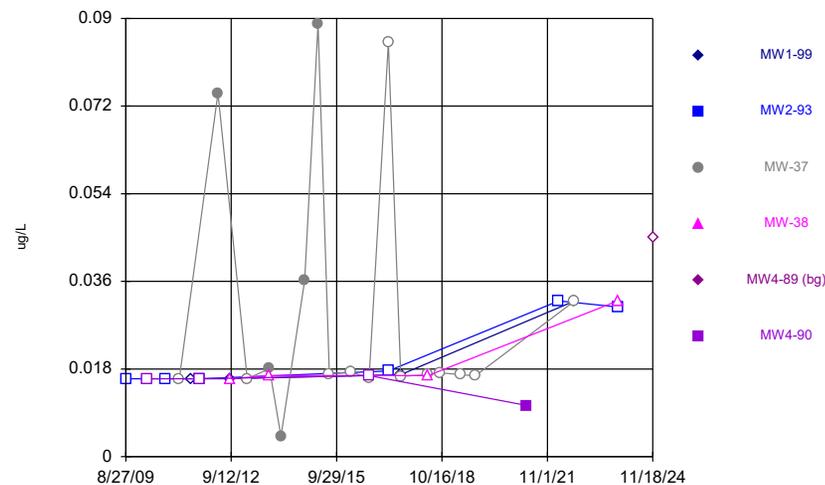
Constituent: Dichlorodifluoromethane Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



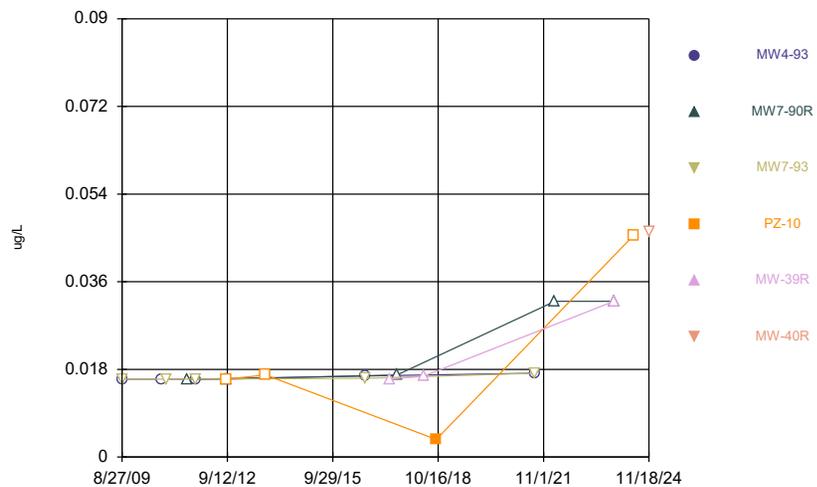
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Endosulfan II Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



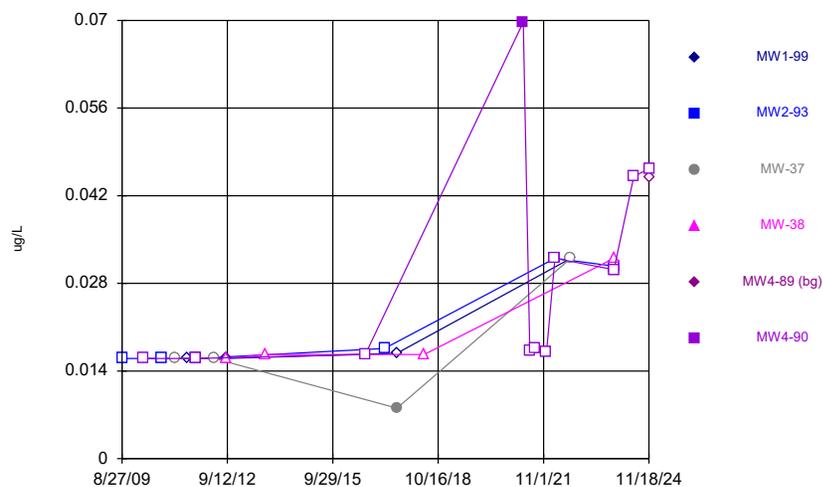
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



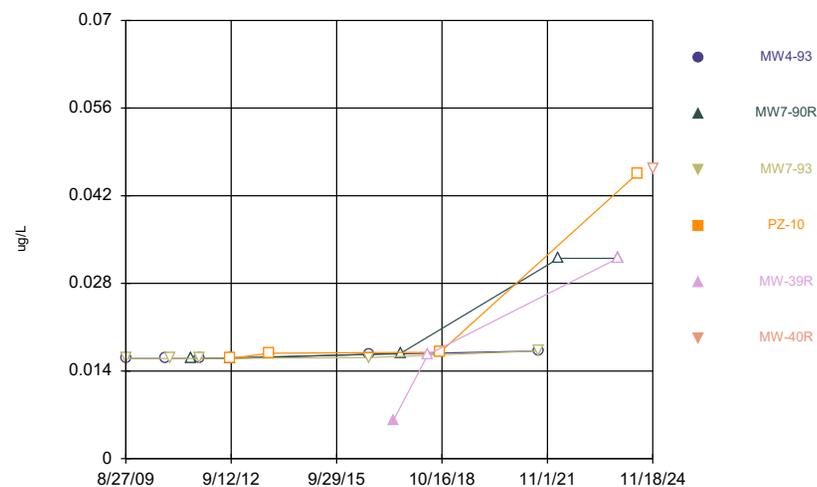
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Endosulfan sulfate Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
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Time Series



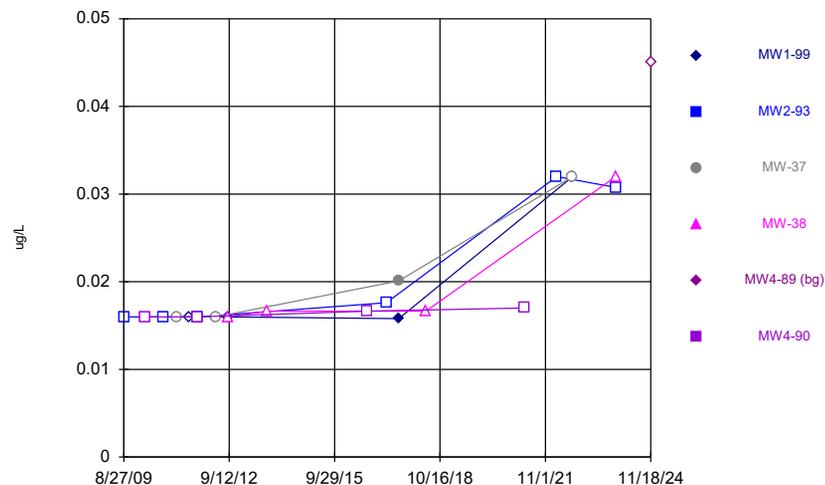
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Time Series



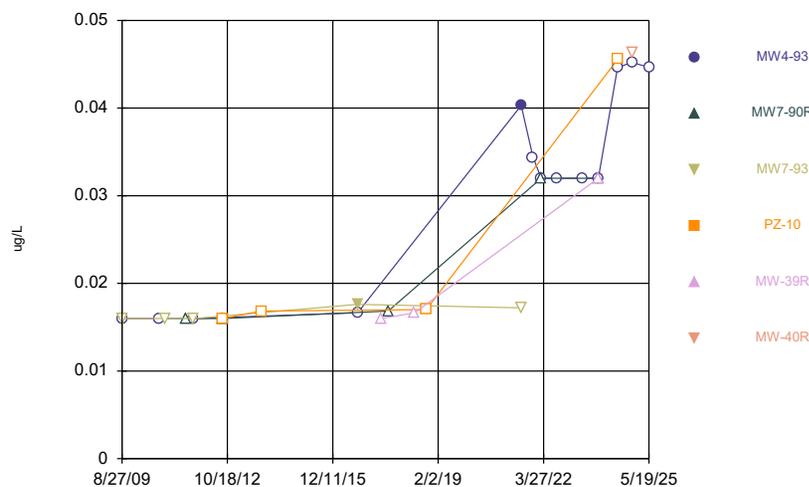
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Time Series



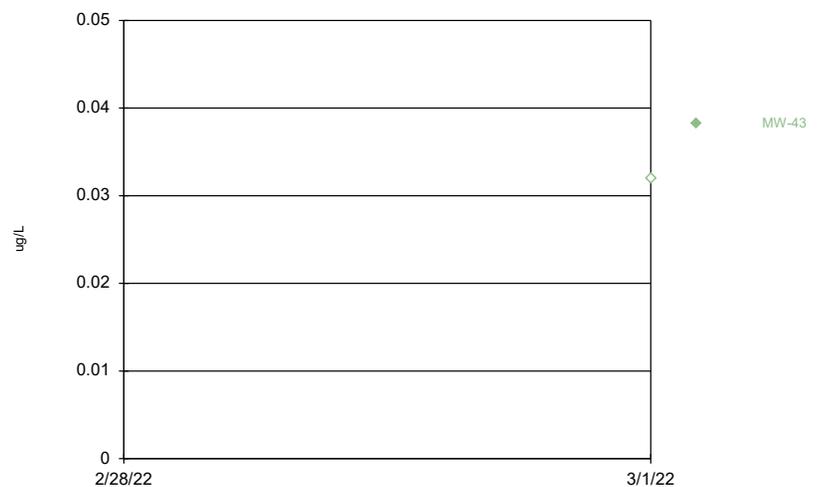
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Time Series



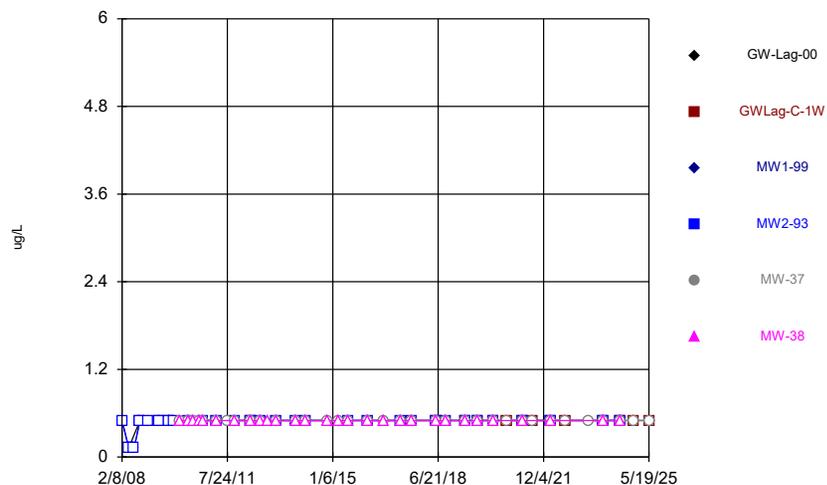
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



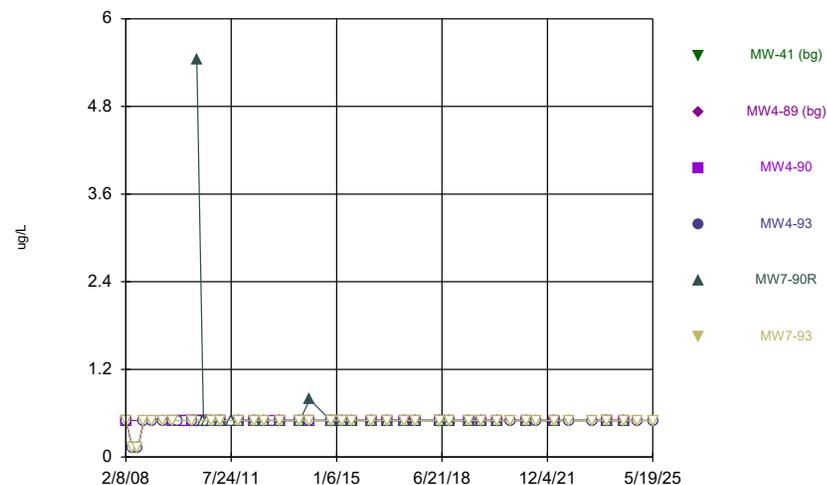
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Time Series



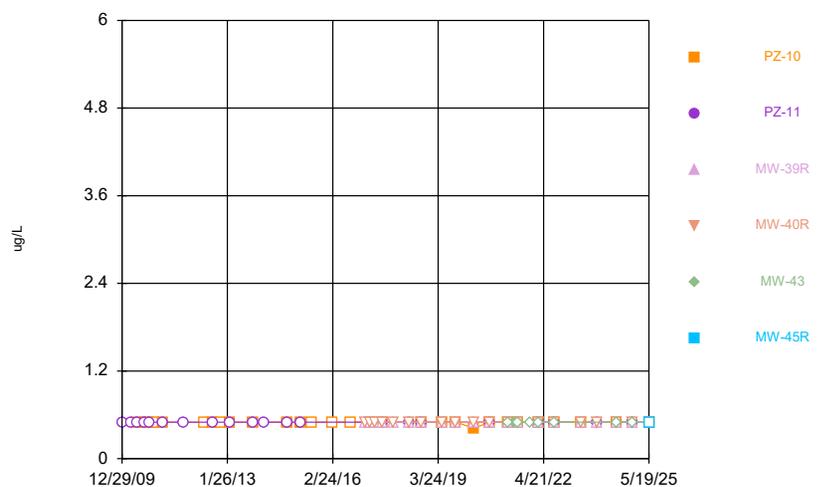
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Time Series



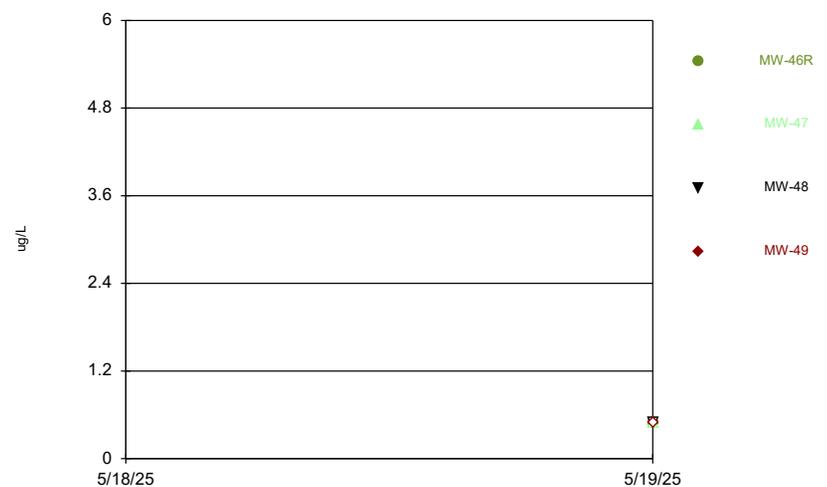
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Time Series



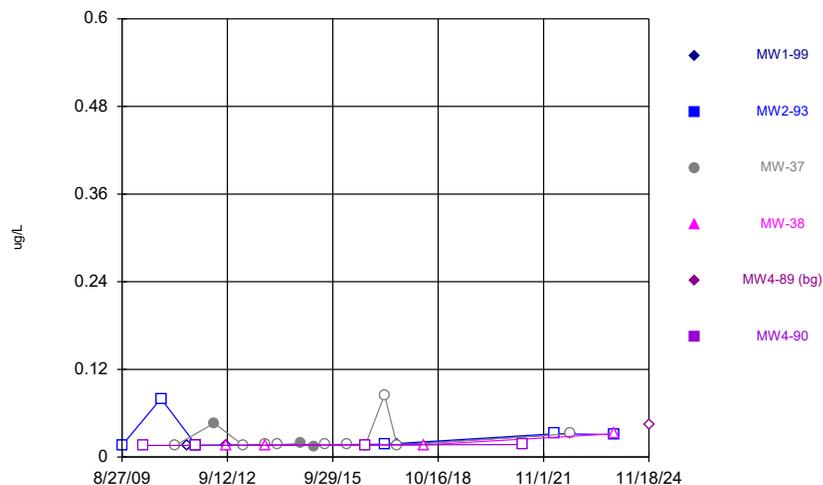
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Time Series



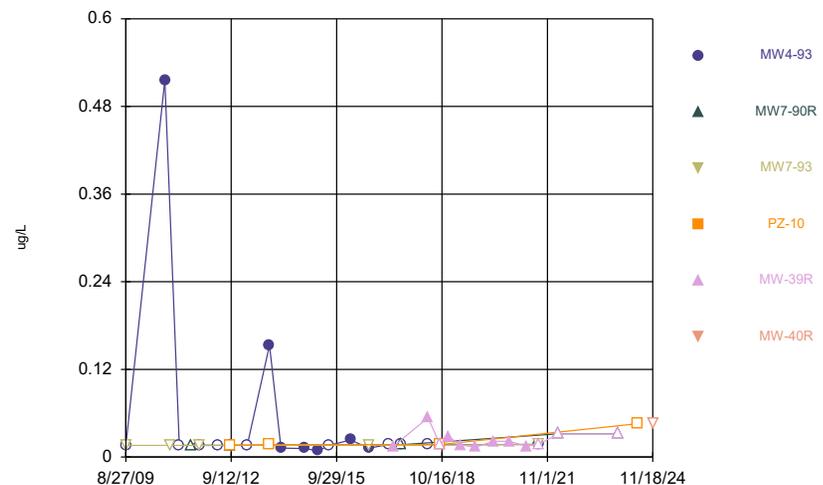
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Heptachlor Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



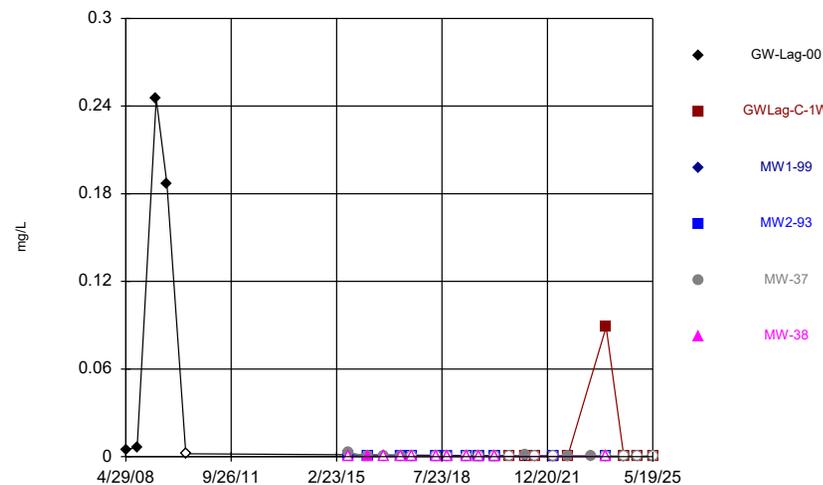
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



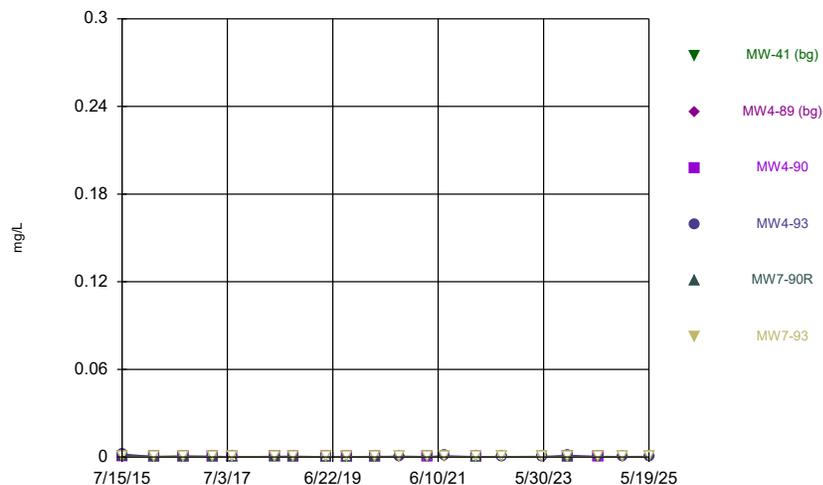
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



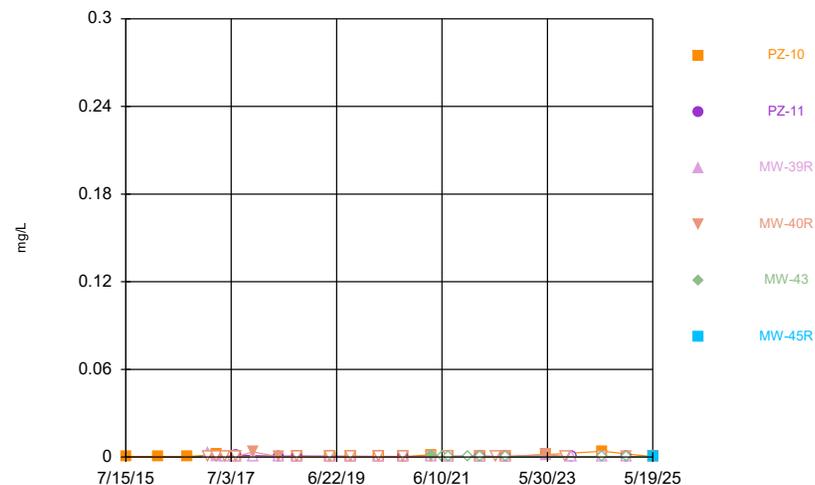
Constituent: Lead Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Lead Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



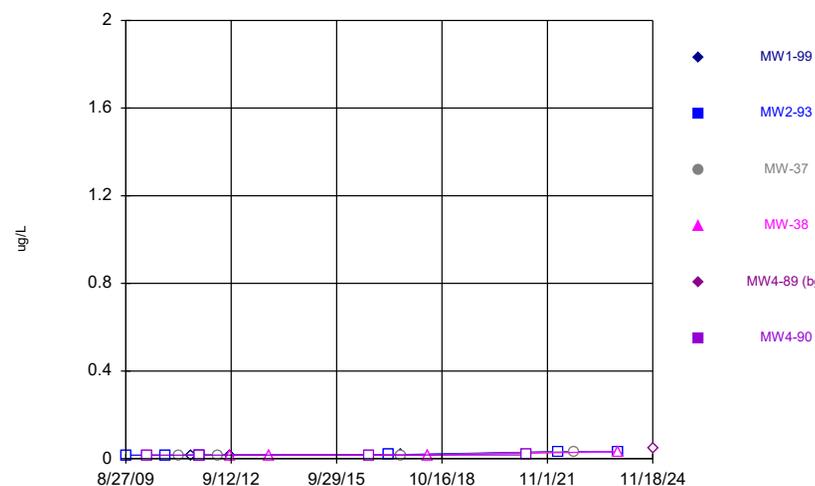
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



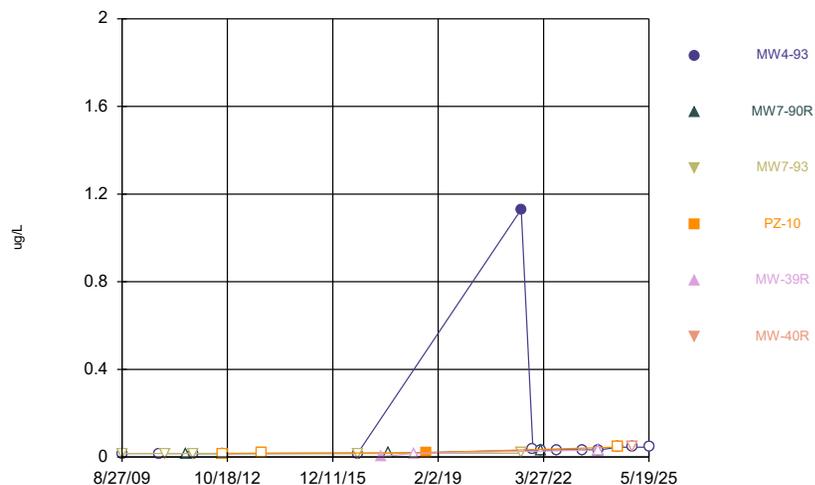
Constituent: Lead Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Methoxychlor Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



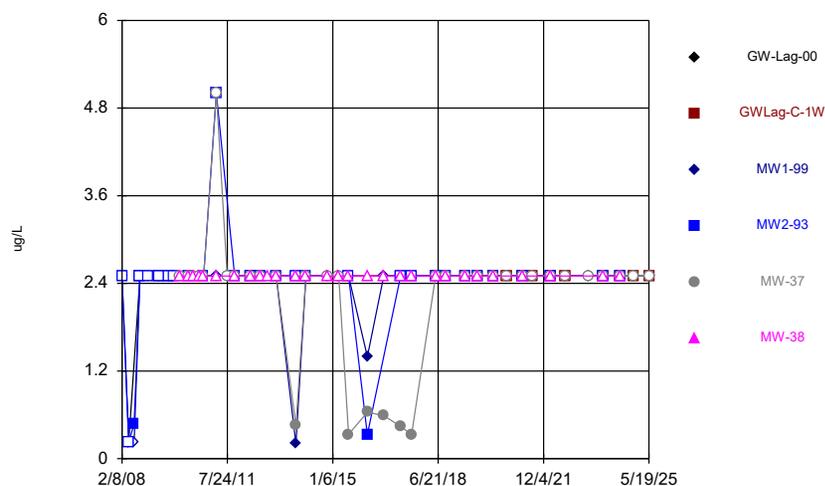
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



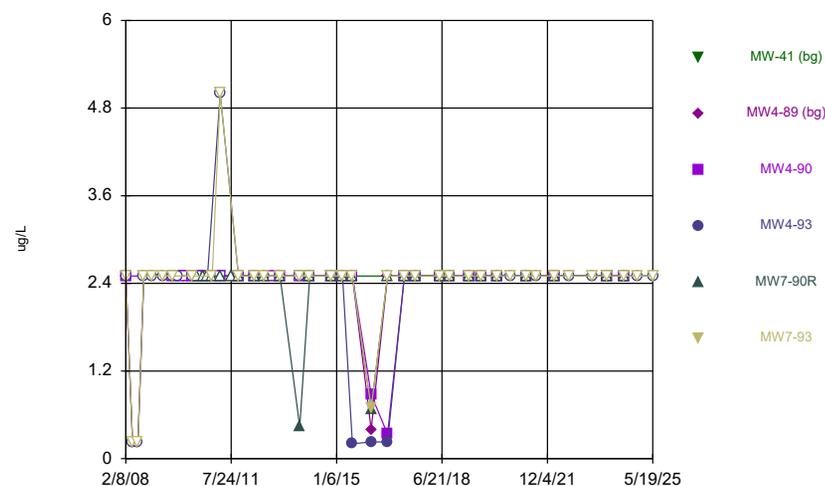
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Time Series



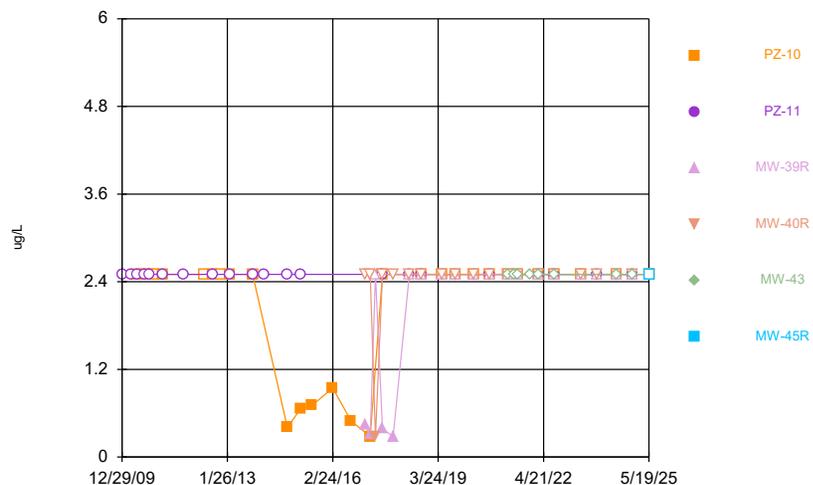
Constituent: Methylene Chloride Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



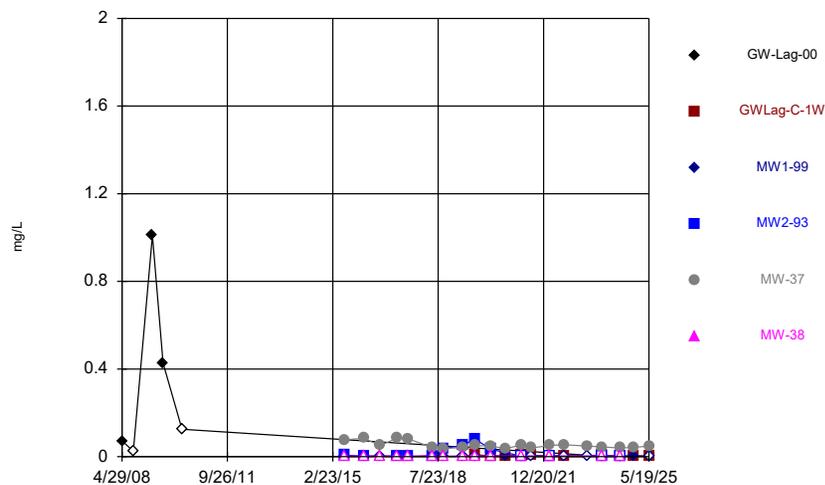
Constituent: Methylene Chloride Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



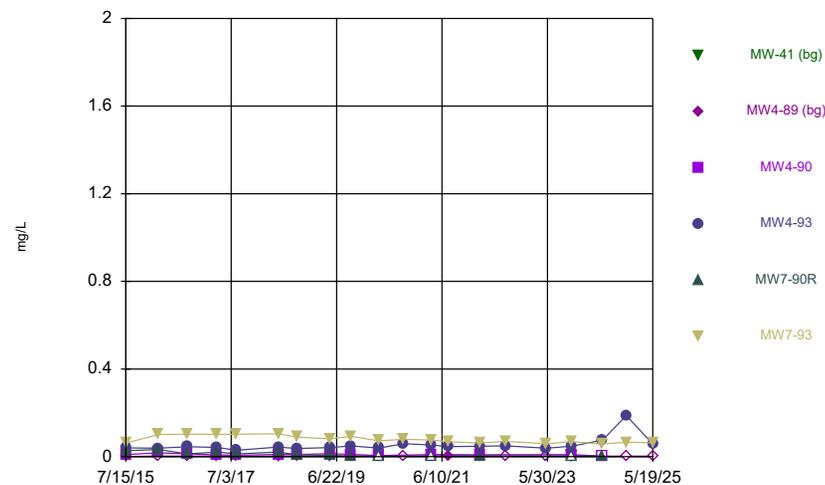
Constituent: Methylene Chloride Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



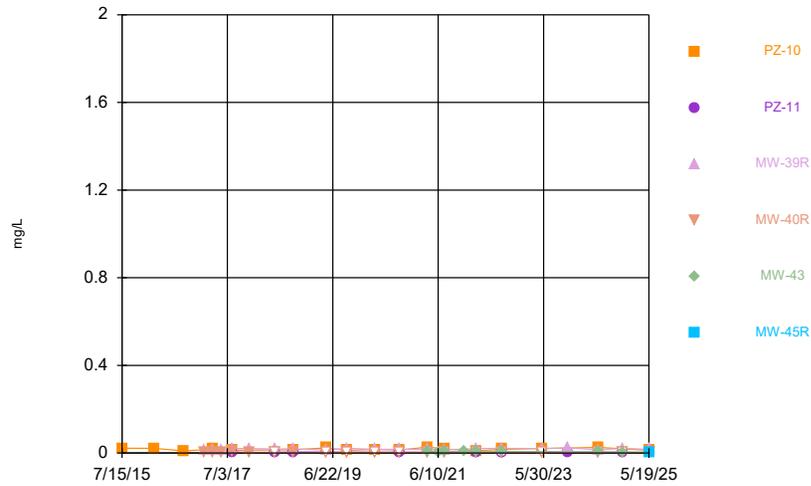
Constituent: Nickel Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Nickel Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



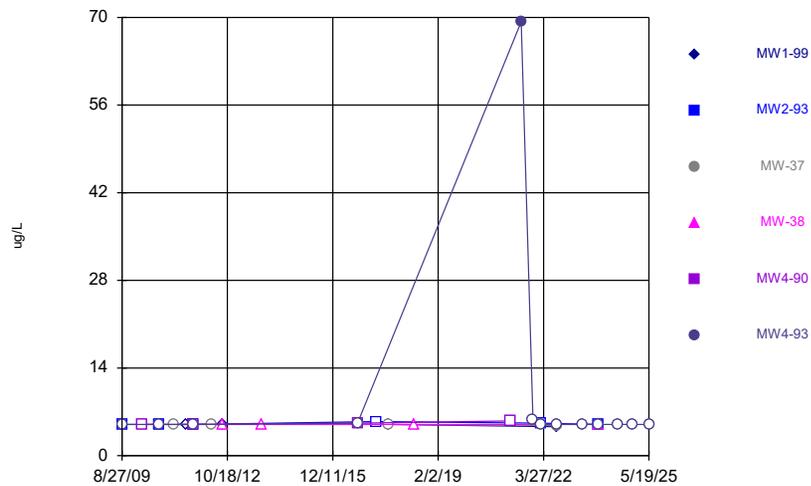
Constituent: Nickel Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



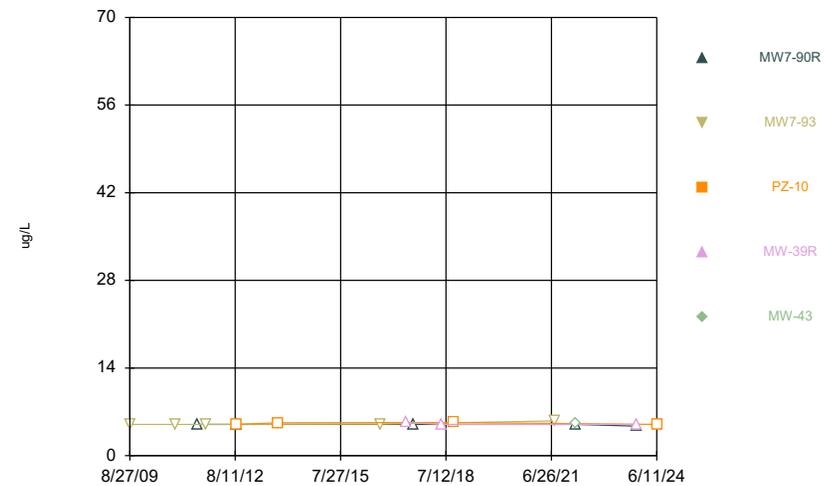
Constituent: Nickel Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



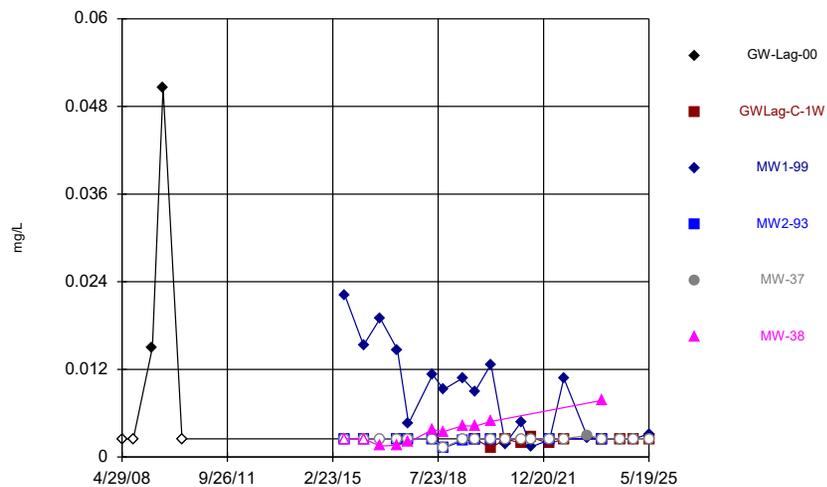
Constituent: Phenol Analysis Run 10/9/2025 9:50 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



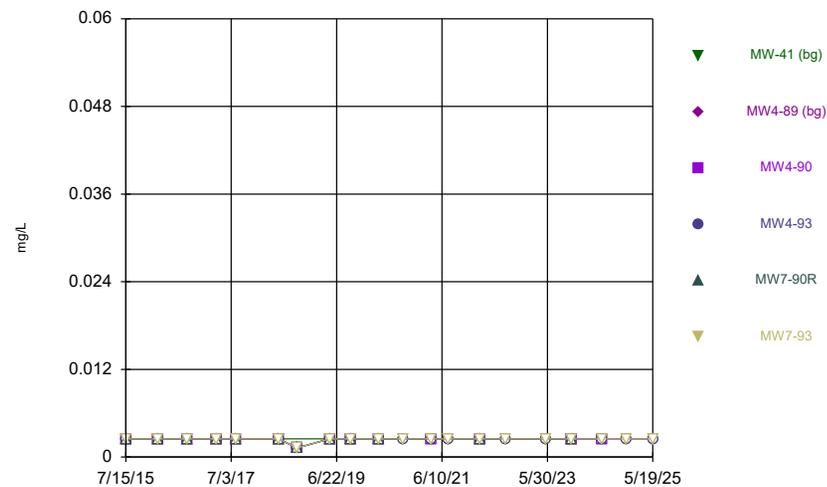
Constituent: Phenol Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



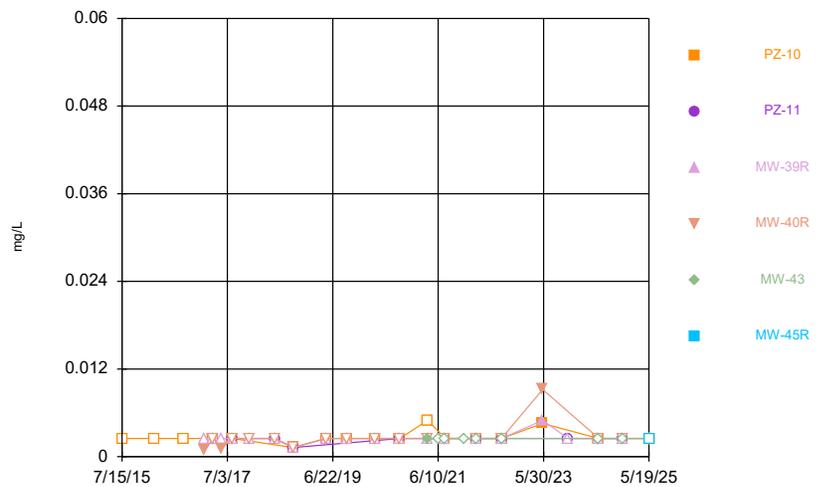
Constituent: Seleniun Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Seleniun Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



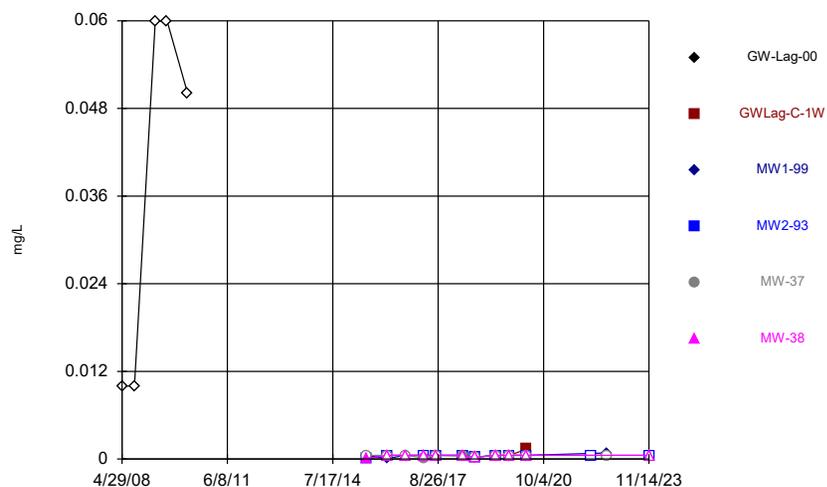
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



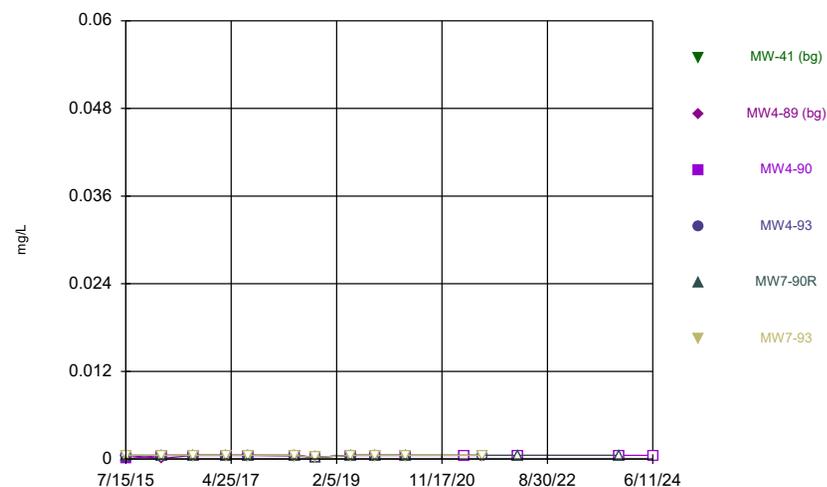
Constituent: Seleniun Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



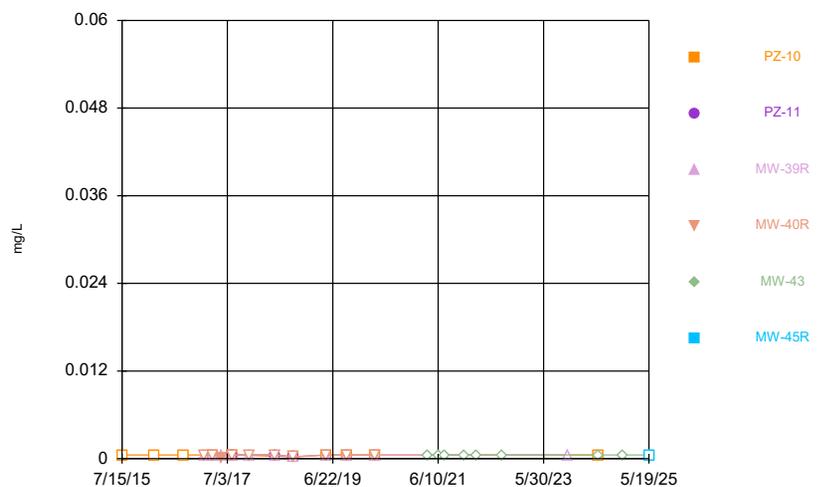
Constituent: Silver Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



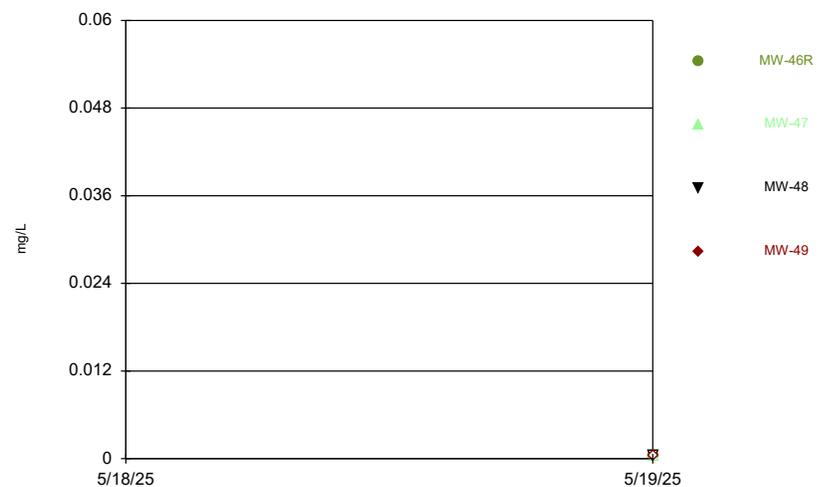
Constituent: Silver Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



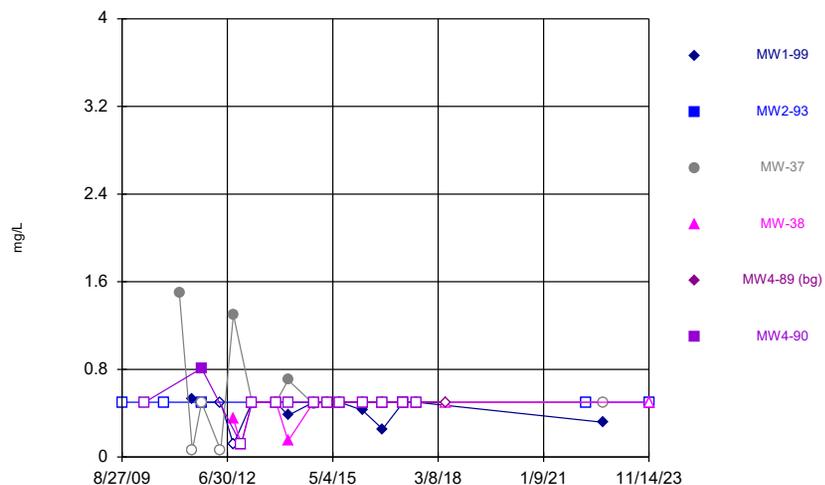
Constituent: Silver Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



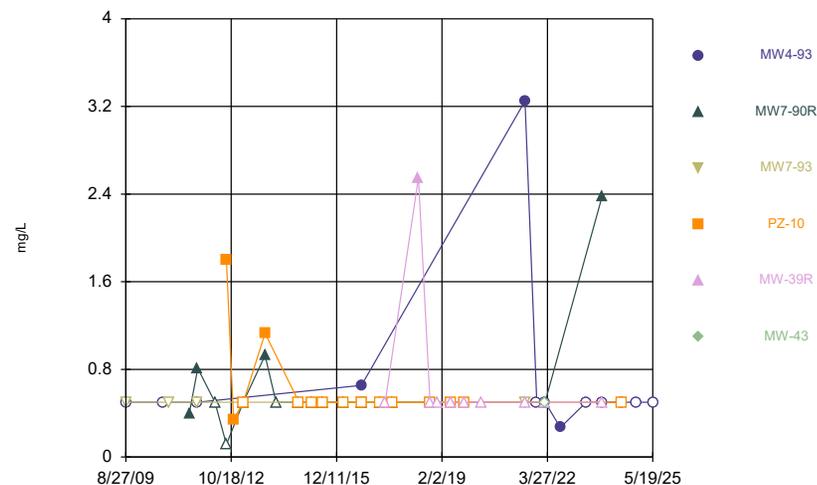
Constituent: Silver Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



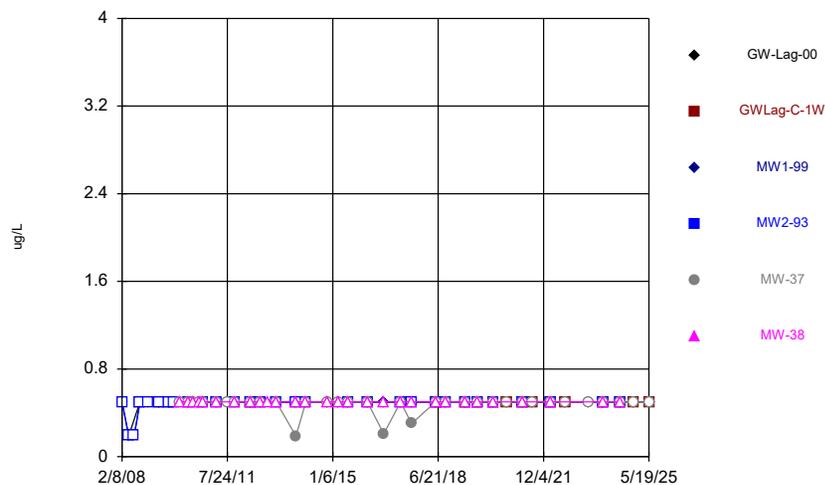
Constituent: Sulfide Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



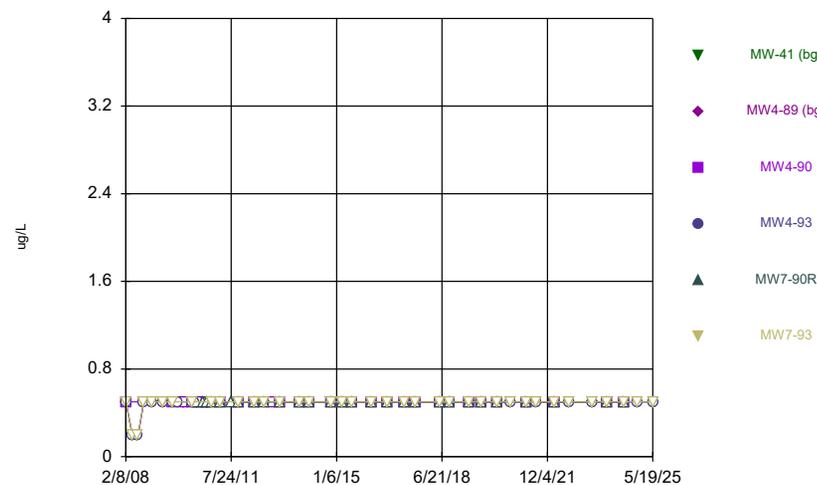
Constituent: Sulfide Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



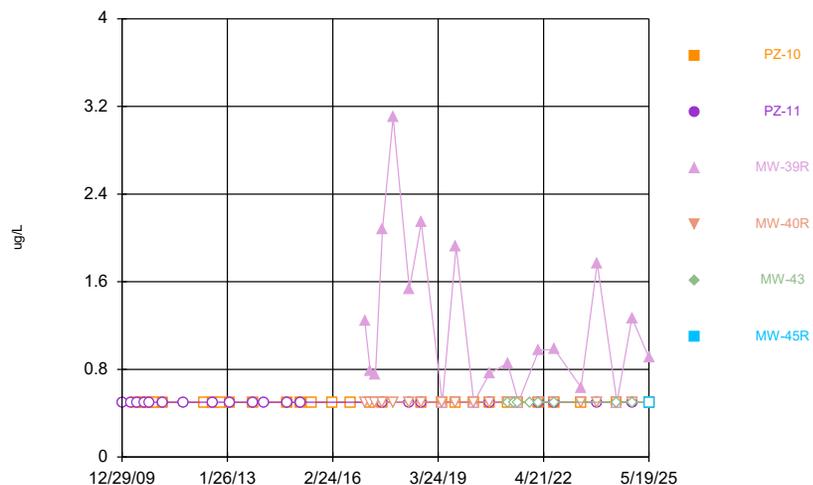
Constituent: Tetrachloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Tetrachloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



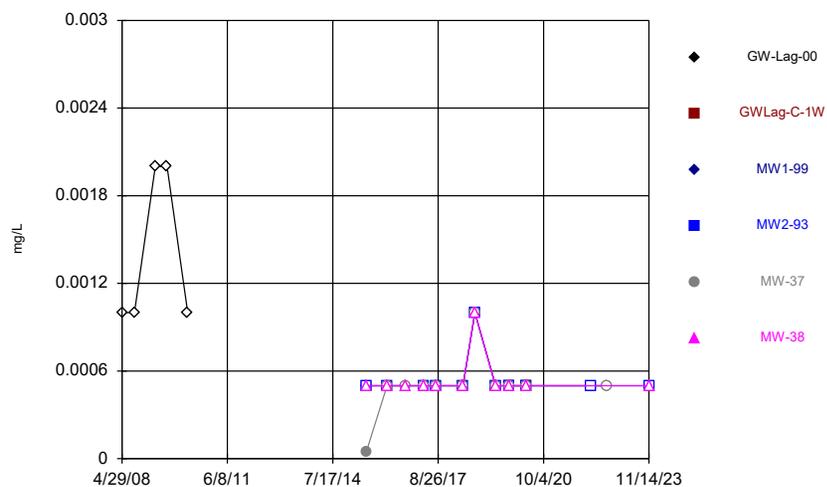
Constituent: Tetrachloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



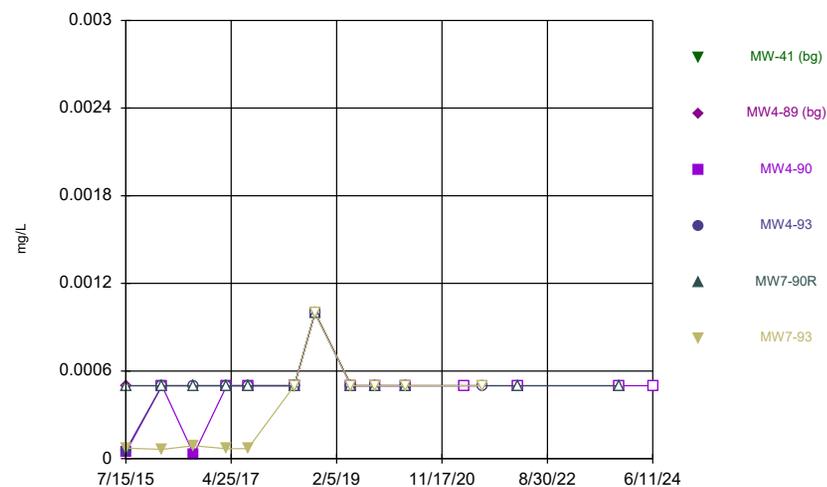
Constituent: Tetrachloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



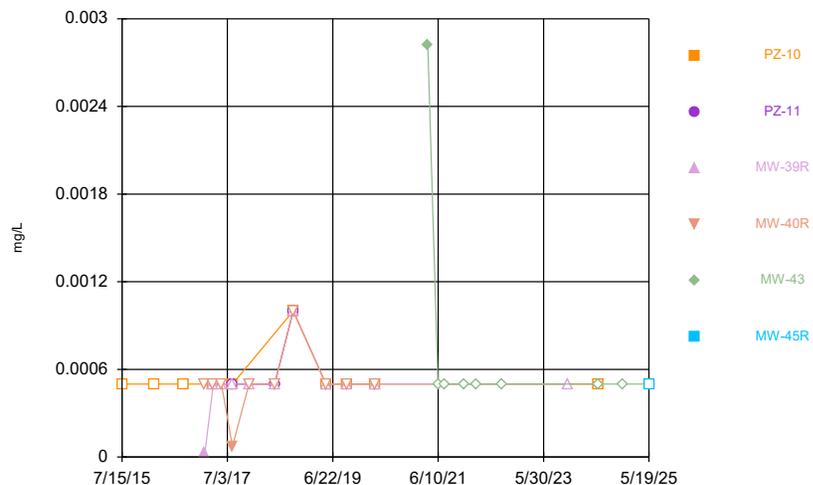
Constituent: Thallium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Thallium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



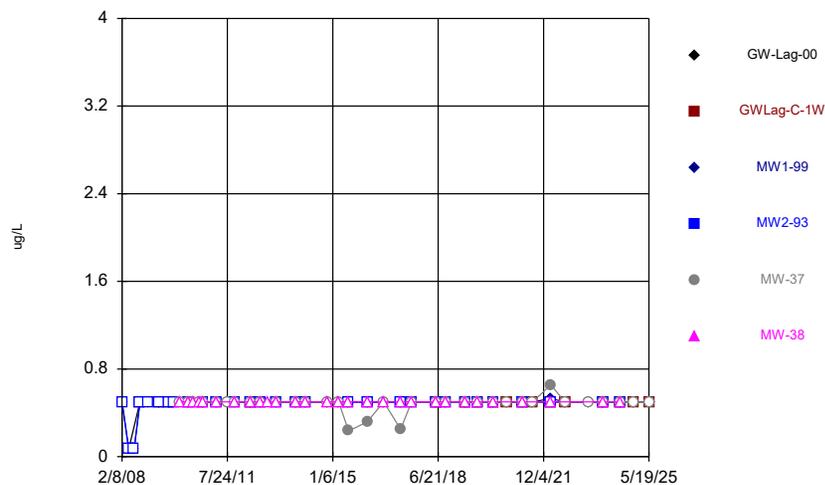
Constituent: Thallium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



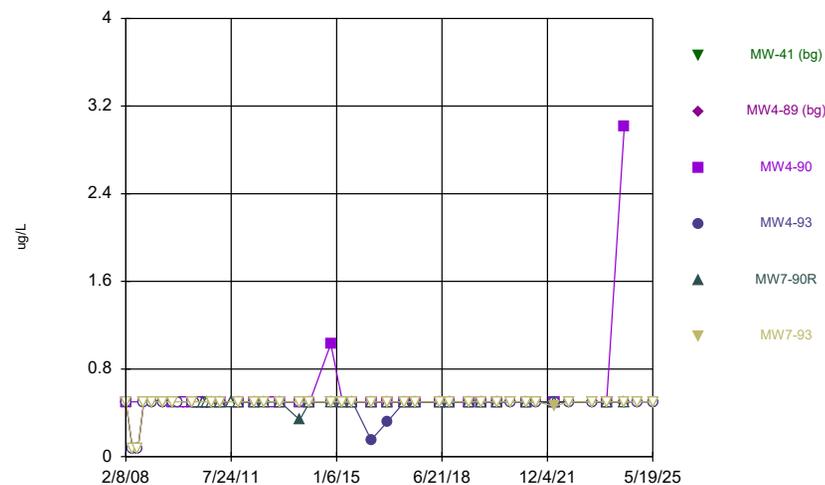
Constituent: Thallium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



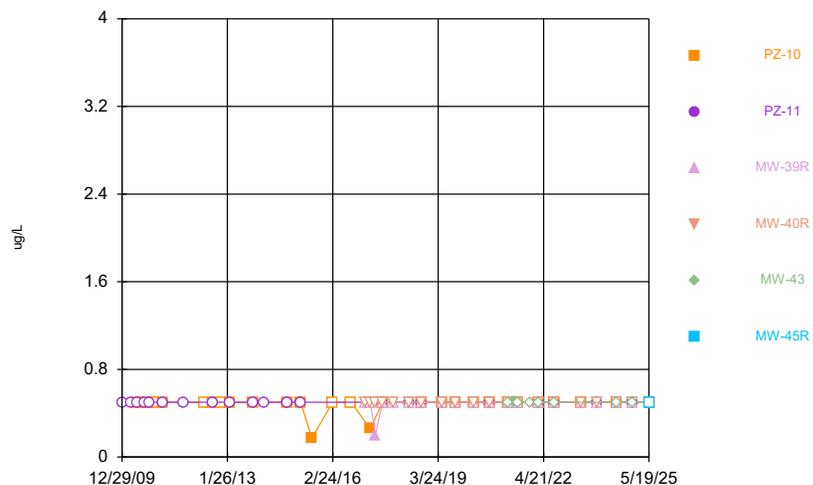
Constituent: Toluene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Toluene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



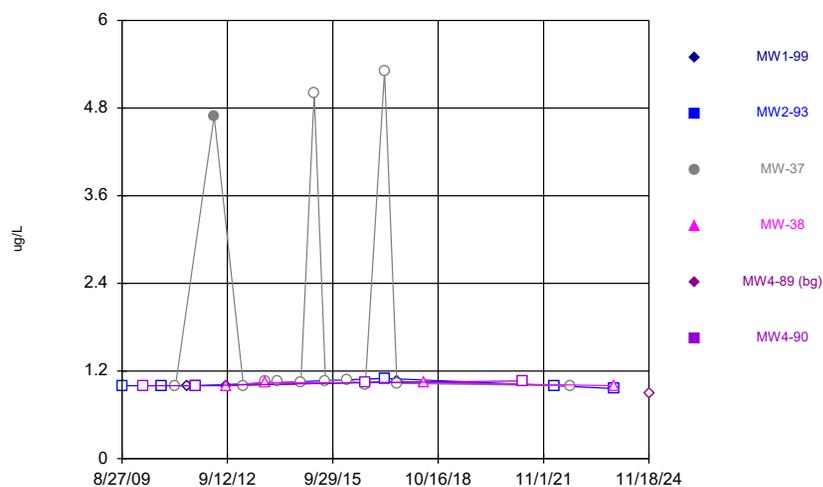
Constituent: Toluene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



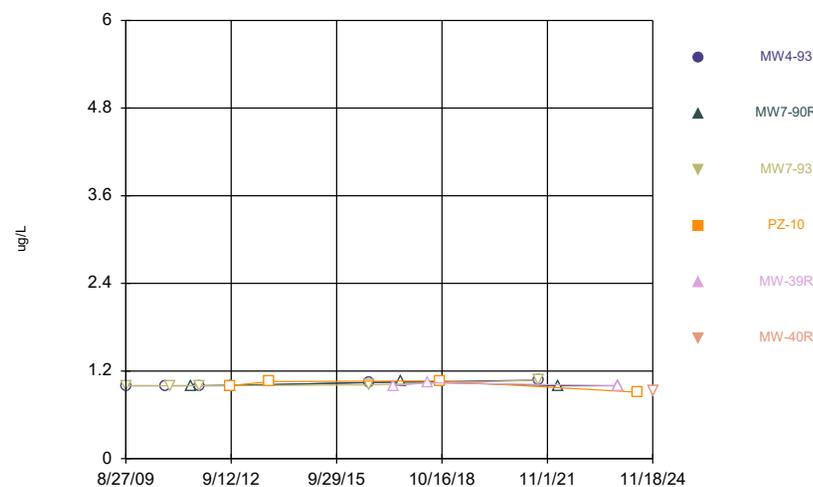
Constituent: Toluene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Toxaphene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



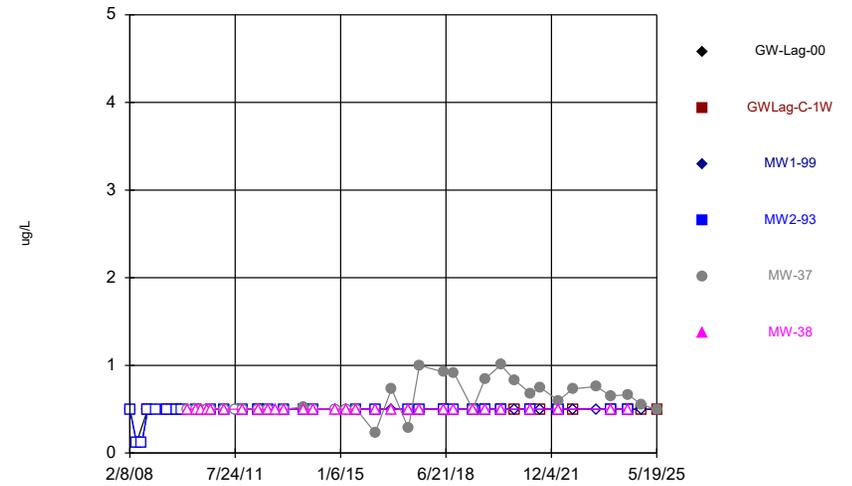
Constituent: Toxaphene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



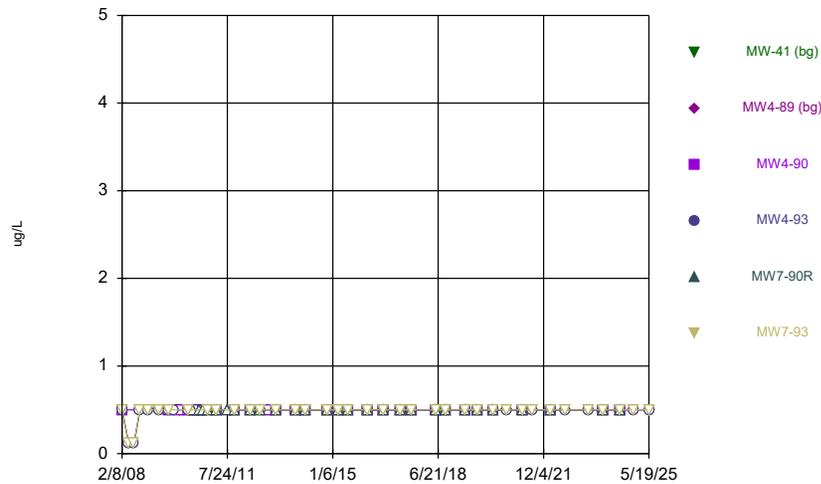
Constituent: Toxaphene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



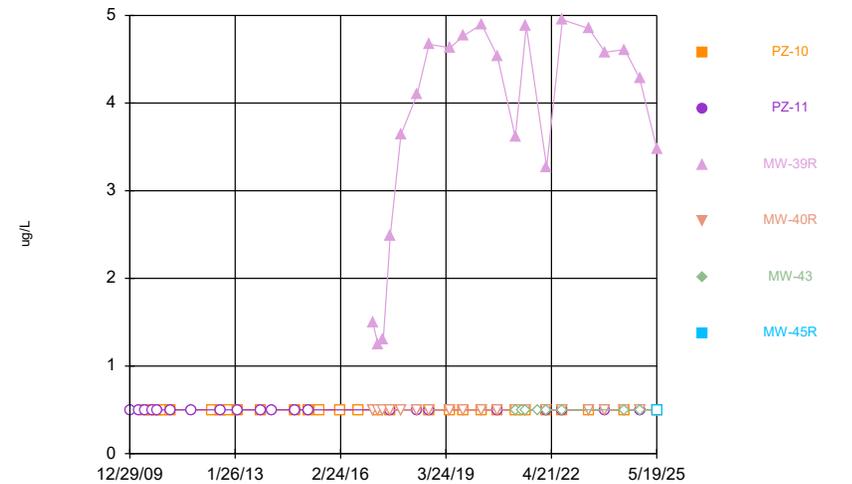
Constituent: Trichloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Trichloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



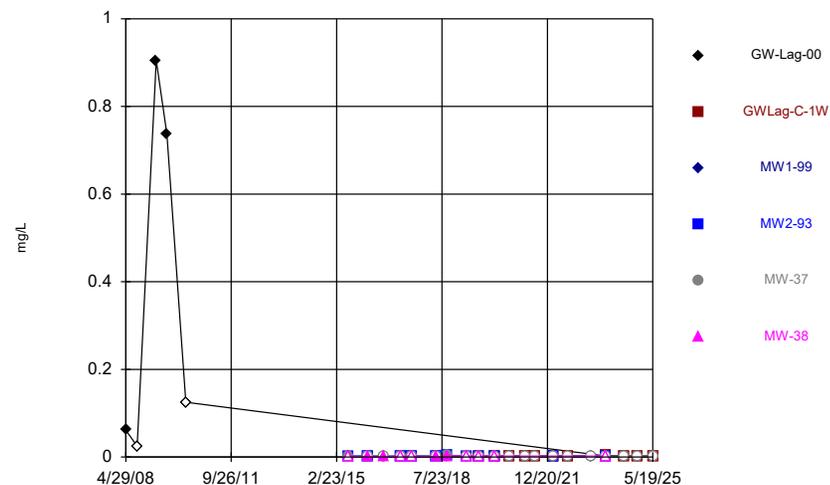
Constituent: Trichloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



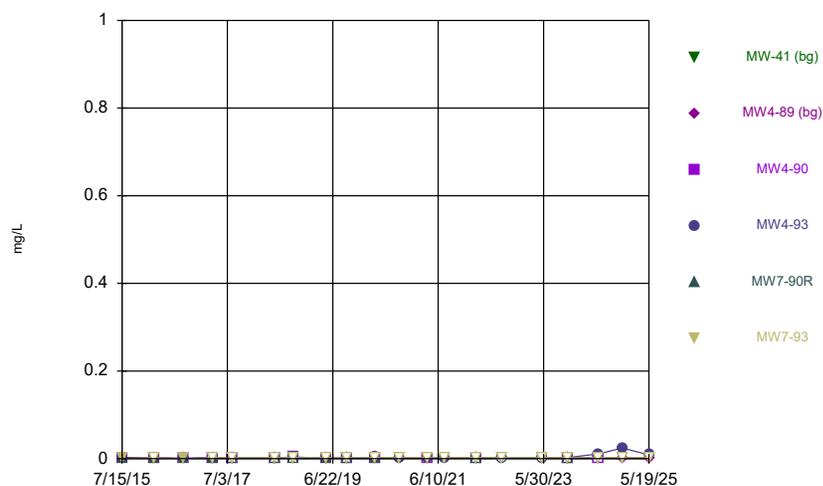
Constituent: Trichloroethene Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



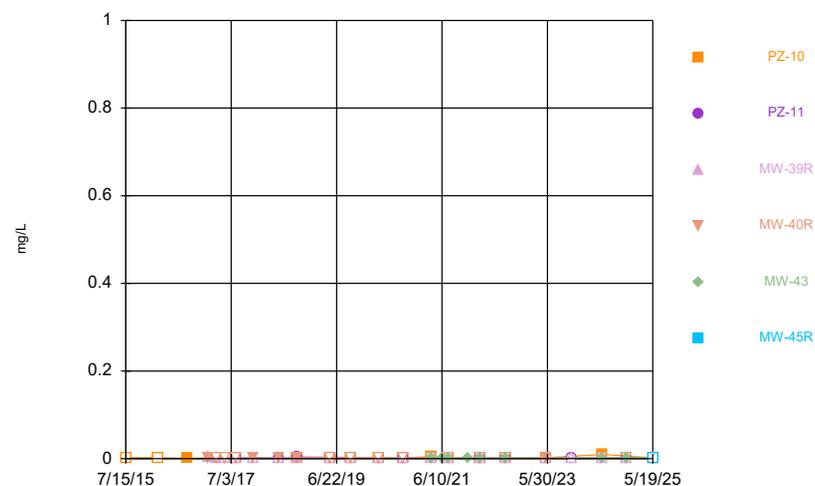
Constituent: Vanadium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



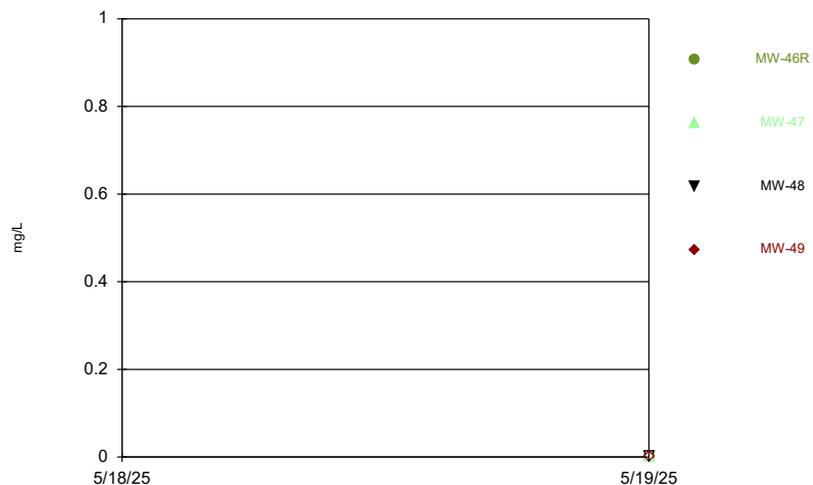
Constituent: Vanadium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



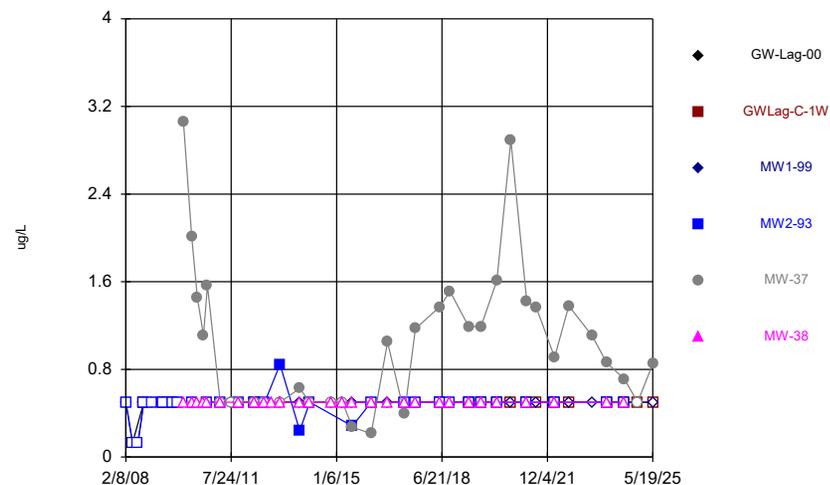
Constituent: Vanadium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



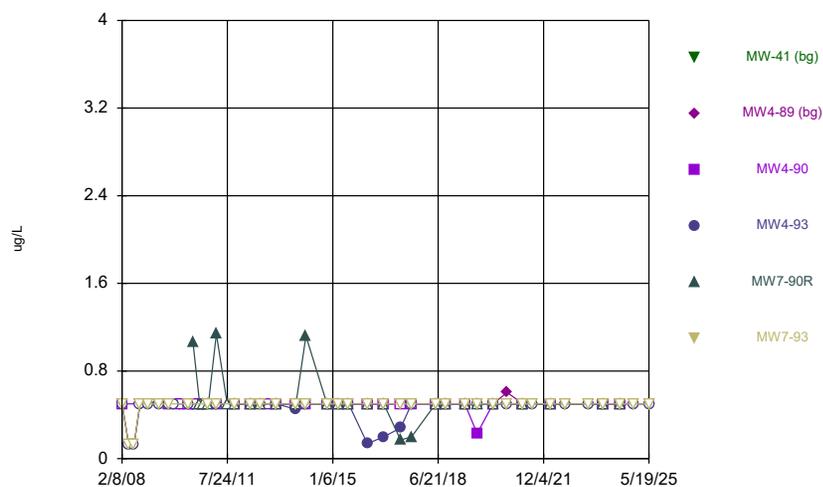
Constituent: Vanadium Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



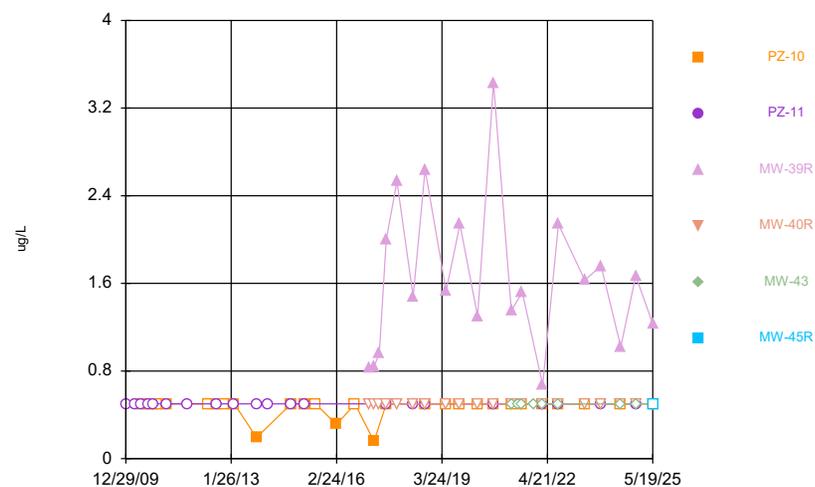
Constituent: Vinyl Chloride Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



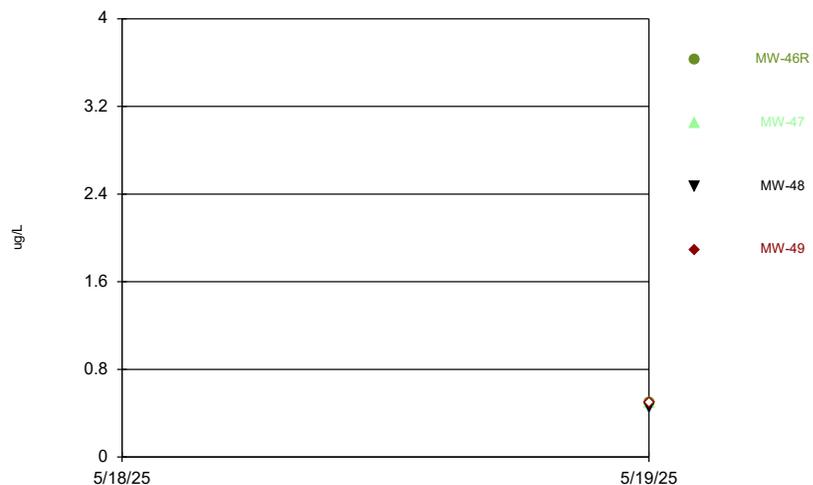
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



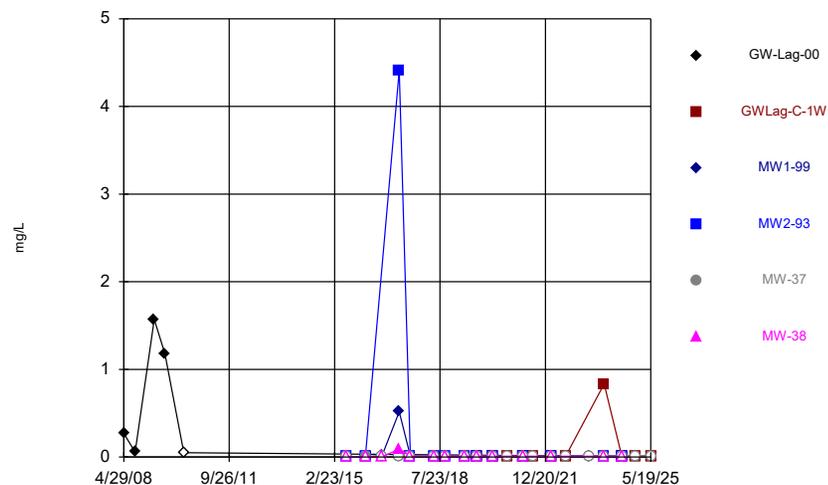
Constituent: Vinyl Chloride Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



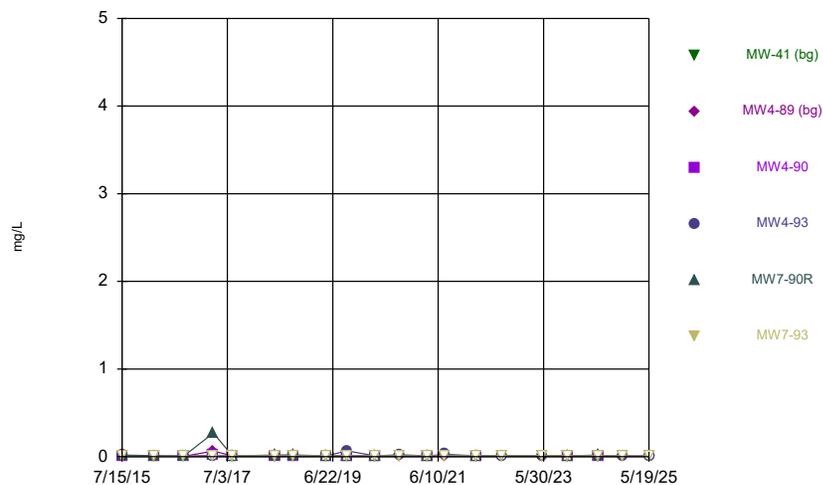
Constituent: Vinyl Chloride Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



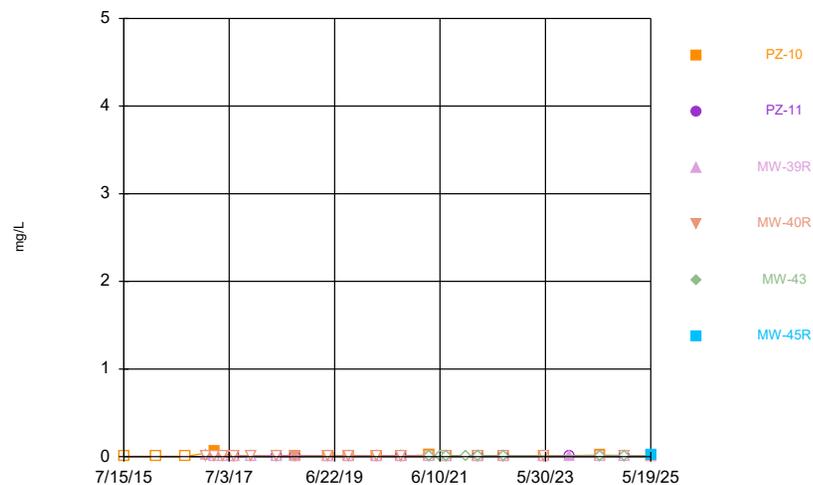
Constituent: Zinc Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Zinc Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Zinc Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Time Series



Constituent: Zinc Analysis Run 10/9/2025 9:51 AM View: 2025_SSN-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Outliers Tables and Graphs

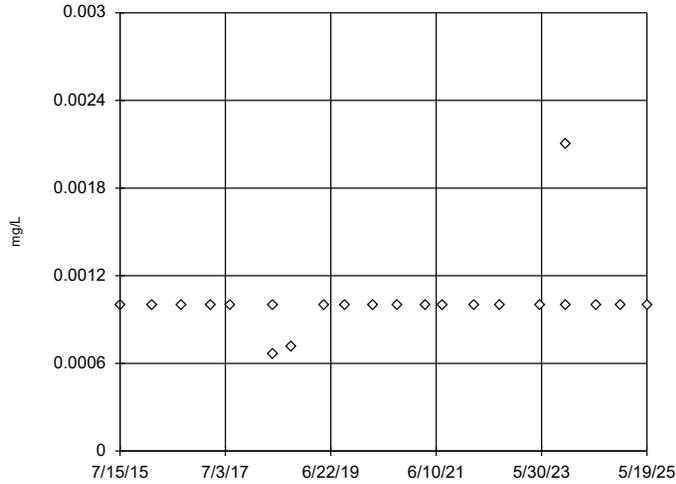
BG Outlier Analysis

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 10/9/2025, 11:17 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	22	0.001022	0.0002576	n/a	n/a
Barium (mg/L)	MW-41,MW4-89	Yes	0.197,0.0151,0.018	n/a w/combined bg	Rosner/OH	0.01	22	0.08304	0.03357	normal	ShapiroWilk
Chromium (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	22	0.002507	0.0004249	n/a	n/a
Cobalt (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	20	0.0002994	0.0001398	n/a	n/a
Copper (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	22	0.002304	0.0004682	n/a	n/a
Lead (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	22	0.0002504	0.00005221	n/a	n/a
Nickel (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	22	0.002406	0.0005928	n/a	n/a
Vanadium (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	22	0.002401	0.0004641	n/a	n/a
Zinc (mg/L)	MW-41,MW4-89	Yes	0.0635	n/a w/combined bg	OH	NaN	22	0.01172	0.0117	n/a	n/a

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

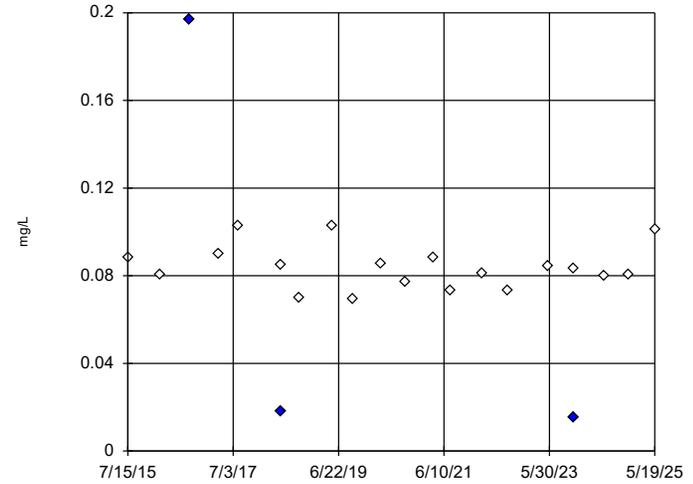


n = 22
No statistical outliers.

Constituent: Arsenic Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Rosner's Outlier Test / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

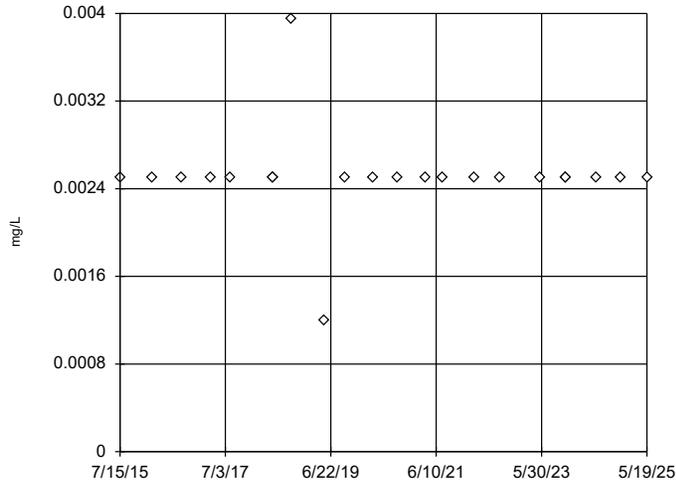


n = 22
Statistical outliers are drawn as solid.
k = 3
r = 3.542
Tabulated value = 3.186
Alpha = 0.01
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9253
Critical = 0.803
The distribution, after removal of suspect values, was found to be normally distributed.

Constituent: Barium Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

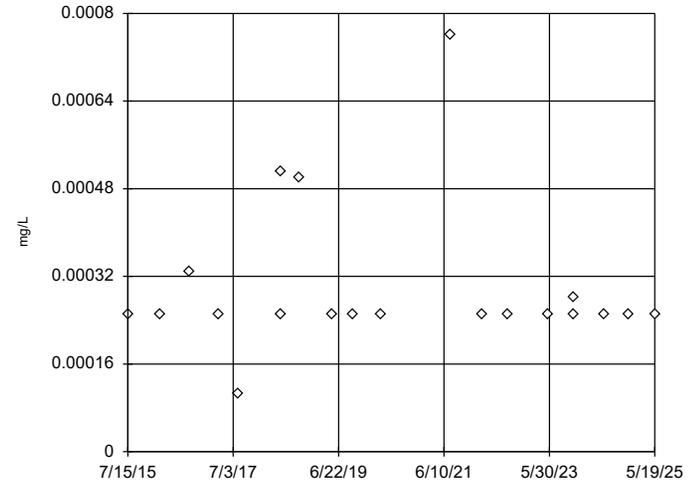


n = 22
No statistical outliers.

Constituent: Chromium Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

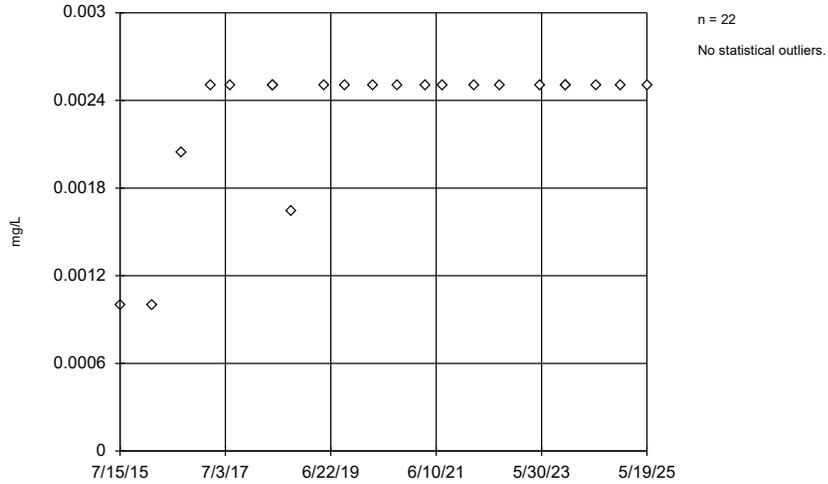


n = 20
No statistical outliers.
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9253
Critical = 0.803
The distribution was found to be normally distributed.

Constituent: Cobalt Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

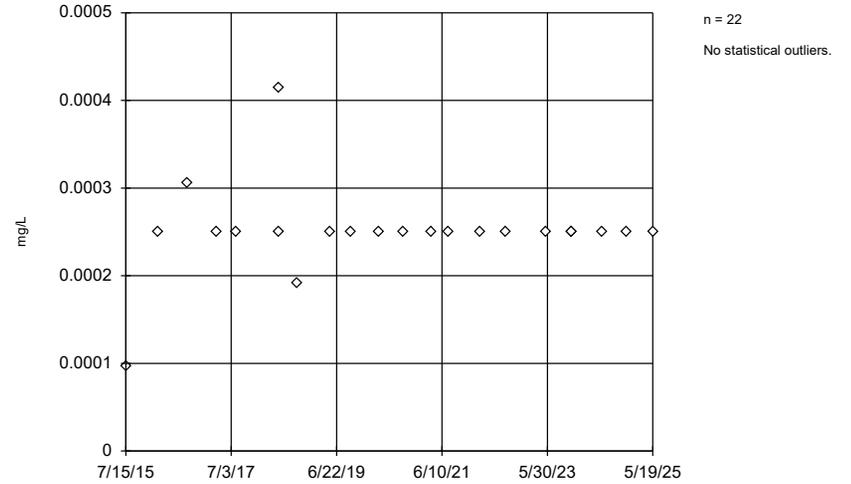
MW-41,MW4-89



Constituent: Copper Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

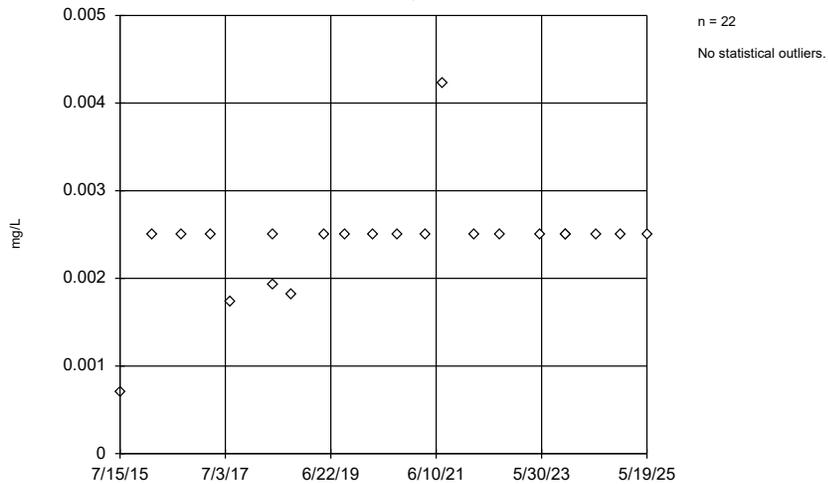
MW-41,MW4-89



Constituent: Lead Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

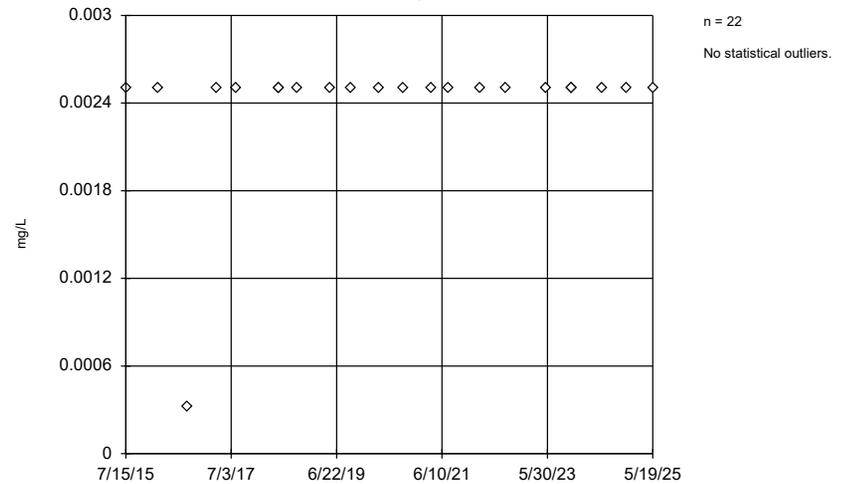
MW-41,MW4-89



Constituent: Nickel Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89



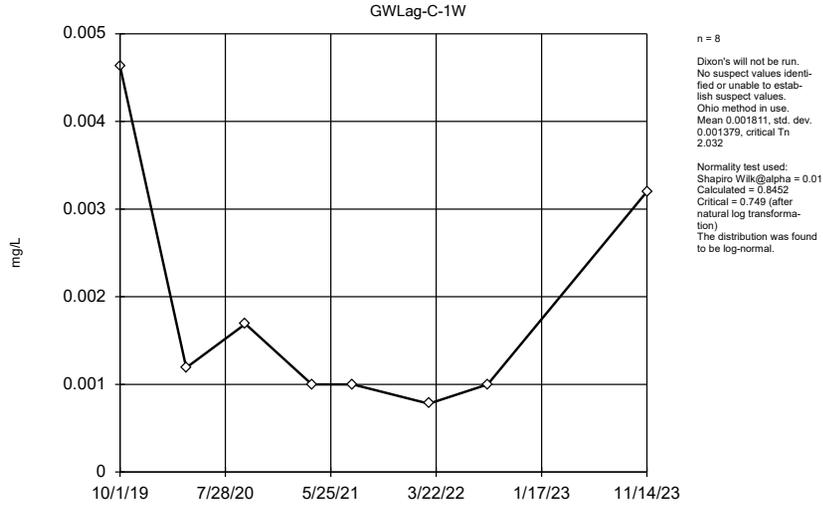
Constituent: Vanadium Analysis Run 10/9/2025 11:13 AM View: 2025_SSN-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

GWLag-C-1W BG Outlier Analysis

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 10/10/2025, 8:52 AM

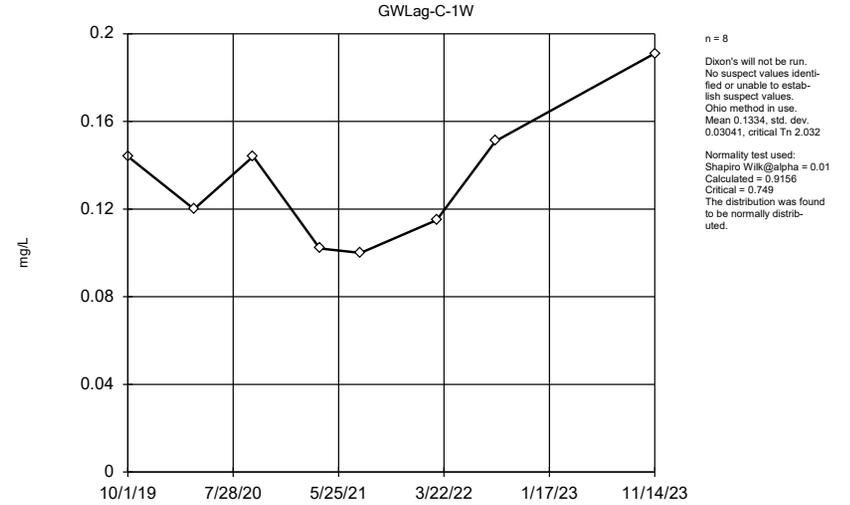
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic (mg/L)	GWLag-C-1W	No	n/a	n/a	EPA/OH	0.05	8	0.001811	0.001379	ln(x)	ShapiroWilk
Barium (mg/L)	GWLag-C-1W	No	n/a	n/a	EPA/OH	0.05	8	0.1334	0.03041	normal	ShapiroWilk
Cobalt (mg/L)	GWLag-C-1W	No	n/a	n/a	EPA/OH	0.05	6	0.001407	0.0007715	normal	ShapiroWilk
Copper (mg/L)	GWLag-C-1W	Yes	0.343	11/14/2023	OH	NaN	8	0.04503	0.1204	n/a	n/a
Lead (mg/L)	GWLag-C-1W	Yes	0.0887	11/14/2023	OH	NaN	8	0.01131	0.03127	n/a	n/a
Nickel (mg/L)	GWLag-C-1W	No	n/a	n/a	EPA/OH	0.05	8	0.005605	0.002038	normal	ShapiroWilk
Selenium (mg/L)	GWLag-C-1W	No	n/a	n/a	Dixon/OH	0.01	8	0.002211	0.0005034	normal	ShapiroWilk
Vanadium (mg/L)	GWLag-C-1W	No	n/a	n/a	OH	NaN	8	0.002415	0.0007014	n/a	n/a
Zinc (mg/L)	GWLag-C-1W	Yes	0.834	11/14/2023	OH	NaN	8	0.113	0.2913	n/a	n/a

EPA Screening (suspected outliers for Dixon's Test)



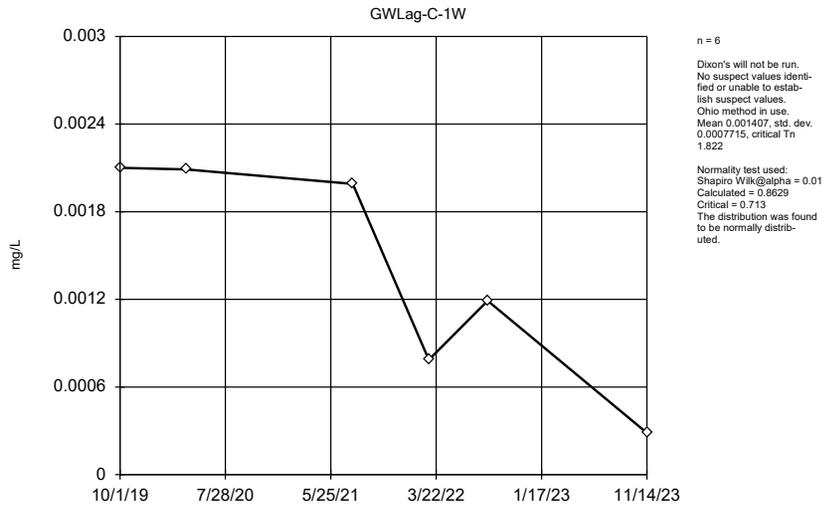
Constituent: Arsenic Analysis Run 10/10/2025 8:47 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)



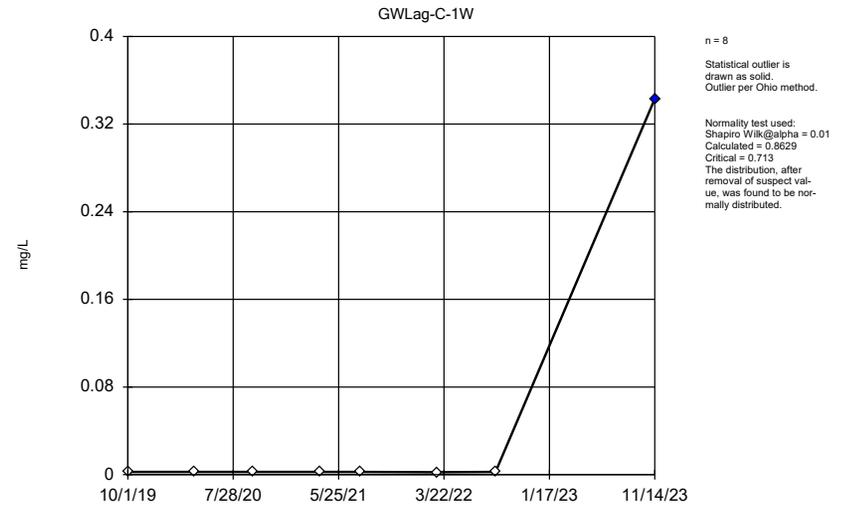
Constituent: Barium Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cobalt Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

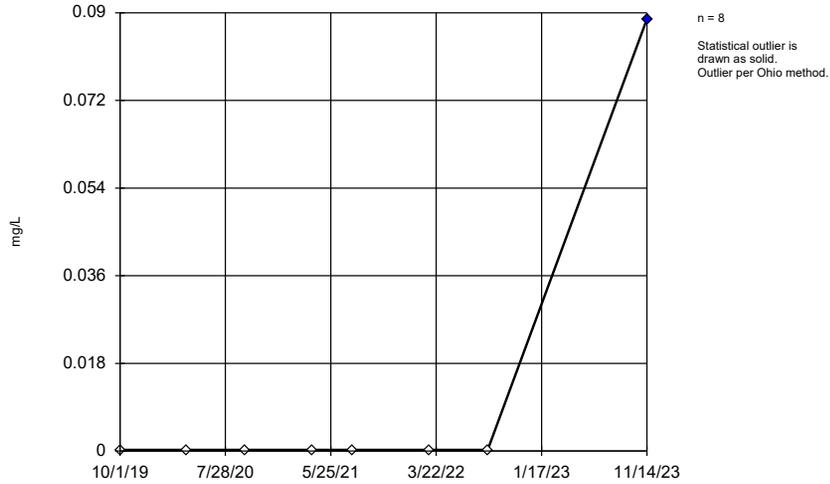
Ohio EPA 0715 Outlier Algorithm



Constituent: Copper Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm

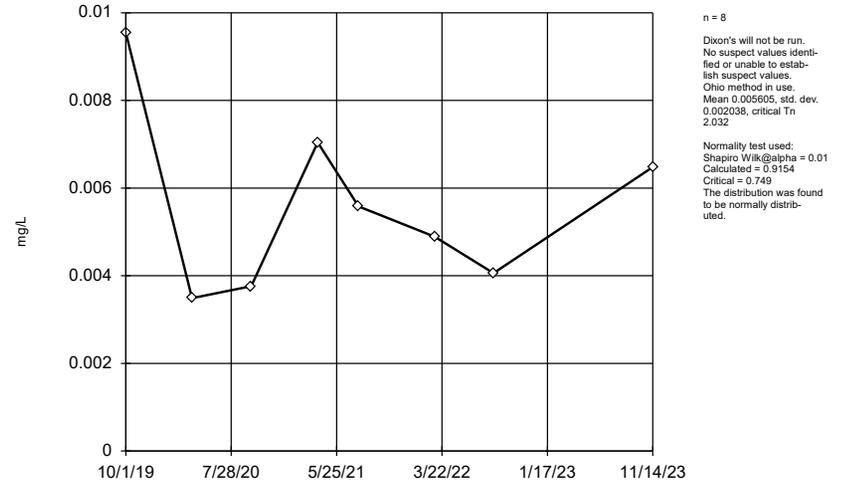
GWLag-C-1W



Constituent: Lead Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)

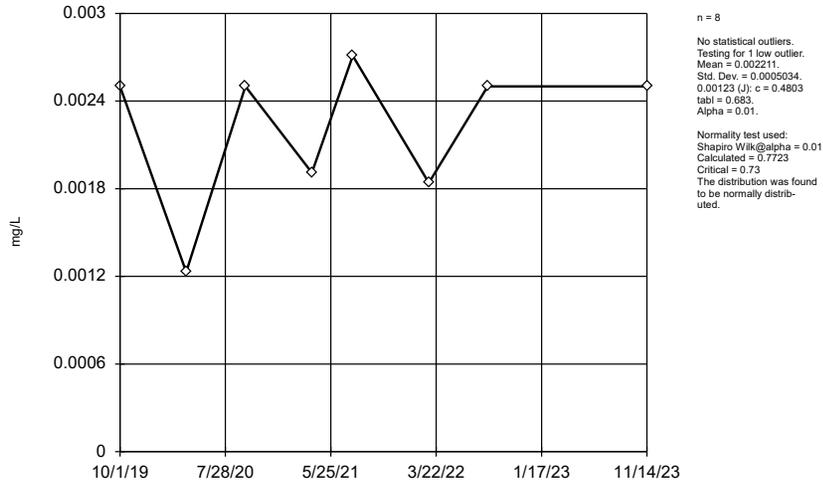
GWLag-C-1W



Constituent: Nickel Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

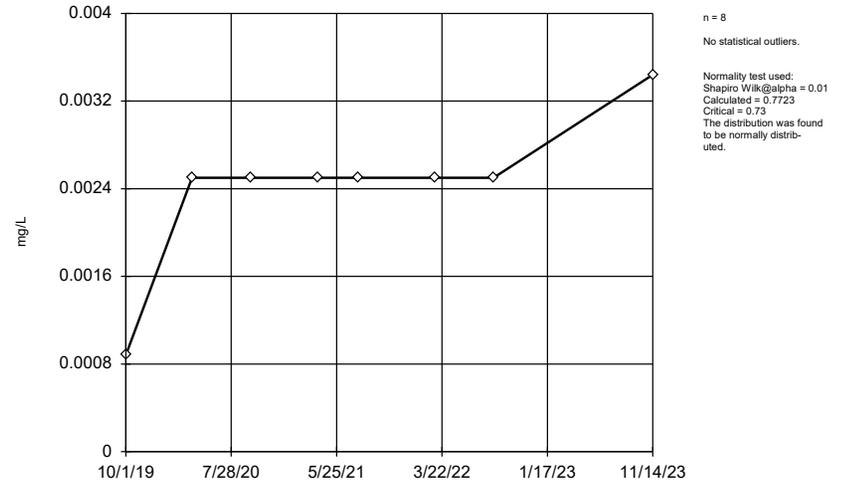
GWLag-C-1W



Constituent: Selenium Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm

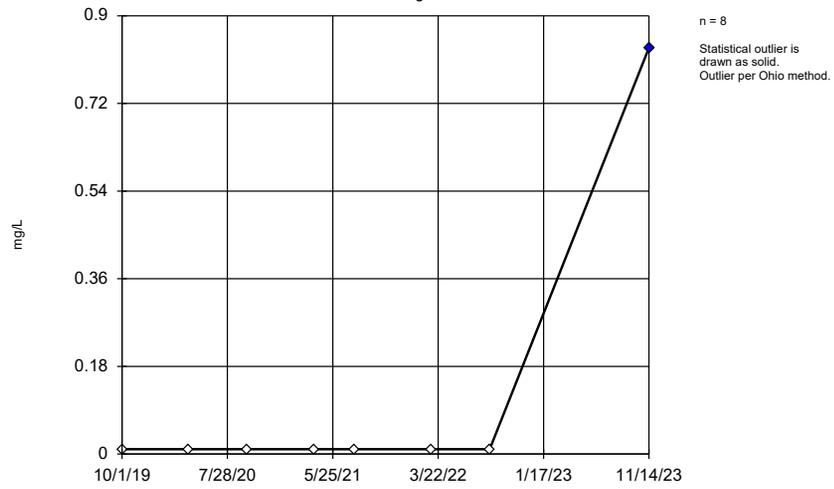
GWLag-C-1W



Constituent: Vanadium Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm

GWLag-C-1W



Constituent: Zinc Analysis Run 10/10/2025 8:48 AM View: 2025_SSN-GWLag-C-1W_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Prediction Limit Table and Graphs

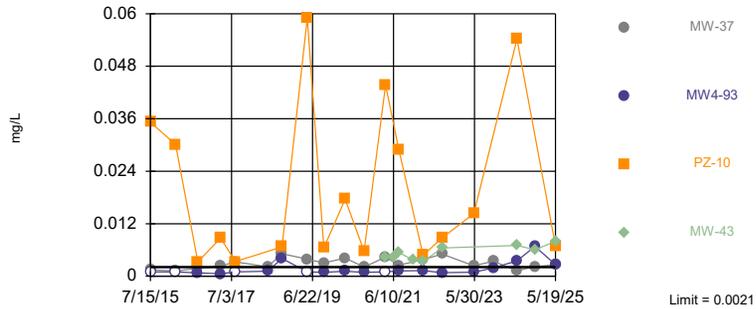
Prediction Limit

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 10/16/2025, 2:08 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	MW-37	0.0021	n/a	5/19/2025	0.00262	Yes	22	86.36	n/a	0.003102	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW4-93	0.0021	n/a	5/19/2025	0.00266	Yes	22	86.36	n/a	0.003102	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	PZ-10	0.0021	n/a	5/19/2025	0.00692	Yes	22	86.36	n/a	0.003102	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-43	0.0021	n/a	5/19/2025	0.00797	Yes	22	86.36	n/a	0.003102	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW1-99	0.197	n/a	5/19/2025	0.0279	No	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-37	0.197	n/a	5/19/2025	0.0189	No	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	MW4-93	0.197	n/a	5/19/2025	0.0264	No	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	MW7-93	0.197	n/a	5/19/2025	0.0868	No	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	PZ-10	0.197	n/a	5/19/2025	0.299	Yes	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-39R	0.197	n/a	5/19/2025	0.207	Yes	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-40R	0.197	n/a	5/19/2025	0.0861	No	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-43	0.197	n/a	5/19/2025	0.606	Yes	22	0	n/a	0.003102	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW-37	0.000761	n/a	5/19/2025	0.014	Yes	20	75	n/a	0.003535	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW4-93	0.000761	n/a	5/19/2025	0.0128	Yes	20	75	n/a	0.003535	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW7-93	0.000761	n/a	5/19/2025	0.0109	Yes	20	75	n/a	0.003535	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	PZ-10	0.000761	n/a	5/19/2025	0.0179	Yes	20	75	n/a	0.003535	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-39R	0.000761	n/a	5/19/2025	0.00152	Yes	20	75	n/a	0.003535	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-43	0.000761	n/a	5/19/2025	0.00133	Yes	20	75	n/a	0.003535	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-37	0.00423	n/a	5/19/2025	0.0482	Yes	22	77.27	n/a	0.003102	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW4-93	0.00423	n/a	5/19/2025	0.0586	Yes	22	77.27	n/a	0.003102	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW7-93	0.00423	n/a	5/19/2025	0.0632	Yes	22	77.27	n/a	0.003102	NP Inter (NDs) 1 of 2
Nickel (mg/L)	PZ-10	0.00423	n/a	5/19/2025	0.0123	Yes	22	77.27	n/a	0.003102	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-39R	0.00423	n/a	5/19/2025	0.0169	Yes	22	77.27	n/a	0.003102	NP Inter (NDs) 1 of 2
Vanadium (mg/L)	MW4-93	0.0025	n/a	5/19/2025	0.00856	Yes	22	95.45	n/a	0.003102	NP Inter (NDs) 1 of 2

Exceeds Limit: MW-37, MW4-93, PZ-10, MW-43

Prediction Limit Interwell Non-parametric

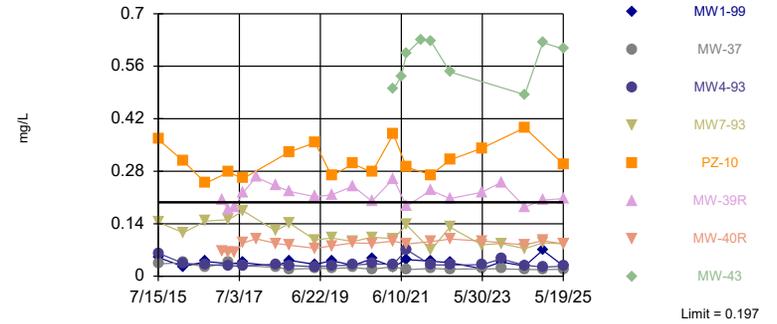


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Annual per-constituent alpha = 0.08898. Individual comparison alpha = 0.003102 (1 of 2). Comparing 4 points to limit. Assumes 11 future values.

Constituent: Arsenic Analysis Run 10/16/2025 2:06 PM View: 2025_SSN-AM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: PZ-10, MW-39R, MW-43

Prediction Limit Interwell Non-parametric

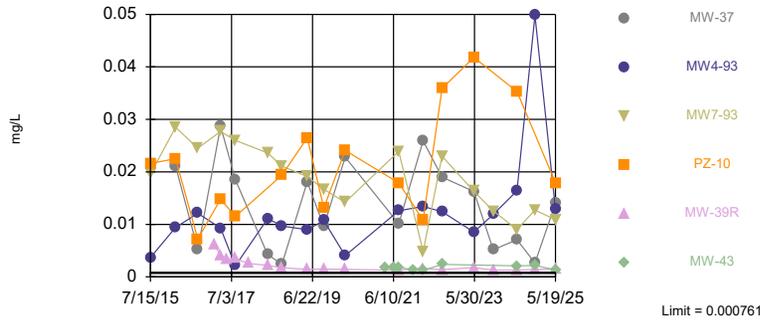


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.08898. Individual comparison alpha = 0.003102 (1 of 2). Comparing 8 points to limit. Assumes 7 future values.

Constituent: Barium Analysis Run 10/16/2025 2:06 PM View: 2025_SSN-AM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW-37, MW4-93, MW7-93, PZ-10, MW-39R, MW-43

Prediction Limit Interwell Non-parametric

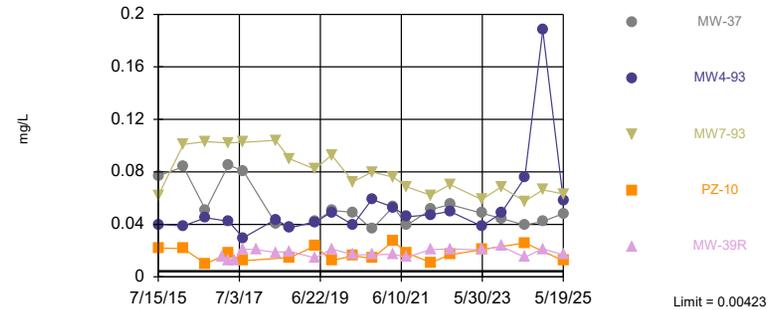


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Annual per-constituent alpha = 0.1008. Individual comparison alpha = 0.003535 (1 of 2). Comparing 6 points to limit. Assumes 9 future values.

Constituent: Cobalt Analysis Run 10/16/2025 2:06 PM View: 2025_SSN-AM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW-37, MW4-93, MW7-93, PZ-10, MW-39R

Prediction Limit Interwell Non-parametric



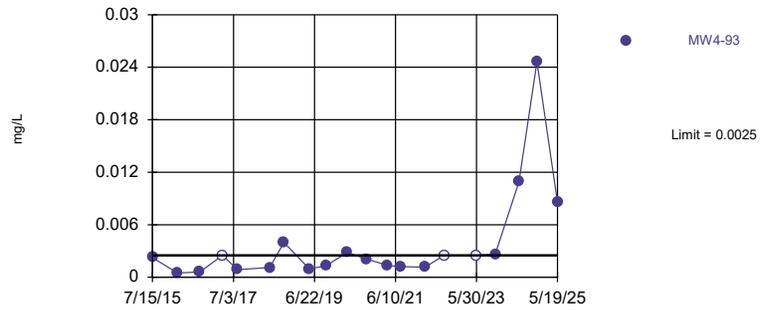
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 77.27% NDs. Annual per-constituent alpha = 0.08898. Individual comparison alpha = 0.003102 (1 of 2). Comparing 5 points to limit. Assumes 10 future values.

Constituent: Nickel Analysis Run 10/16/2025 2:06 PM View: 2025_SSN-AM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW4-93

Prediction Limit

Interwell Non-parametric



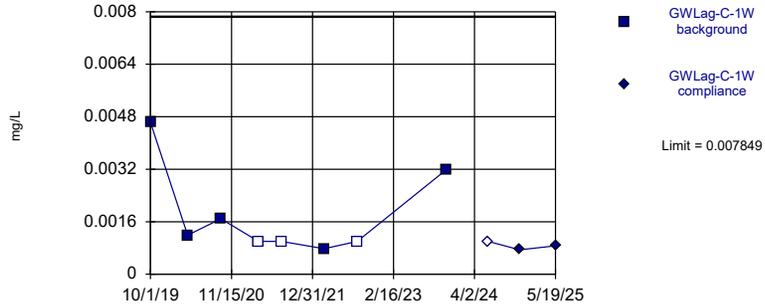
GWLag-C-1W Intra Prediction Limit

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 10/10/2025, 9:06 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	GWLag-C-1W	0.007849	n/a	5/19/2025	0.000863J	No	8	37.5	sqrt(x)	0.0003901	Param Intra 1 of 2
Barium (mg/L)	GWLag-C-1W	0.2418	n/a	5/19/2025	0.137	No	8	0	No	0.0003901	Param Intra 1 of 2
Cobalt (mg/L)	GWLag-C-1W	0.004924	n/a	5/19/2025	0.00081	No	6	0	No	0.0003901	Param Intra 1 of 2
Copper (mg/L)	GWLag-C-1W	0.343	n/a	5/19/2025	0.0025ND	No	8	75	n/a	0.02144	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWLag-C-1W	0.0887	n/a	5/19/2025	0.00025ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWLag-C-1W	0.01287	n/a	5/19/2025	0.00394J	No	8	0	No	0.0003901	Param Intra 1 of 2
Selenium (mg/L)	GWLag-C-1W	0.003798	n/a	5/19/2025	0.0025ND	No	8	50	No	0.0003901	Param Intra 1 of 2
Vanadium (mg/L)	GWLag-C-1W	0.00344	n/a	5/19/2025	0.0025ND	No	8	75	n/a	0.02144	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWLag-C-1W	0.834	n/a	5/19/2025	0.01ND	No	8	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit
Intrawell Parametric

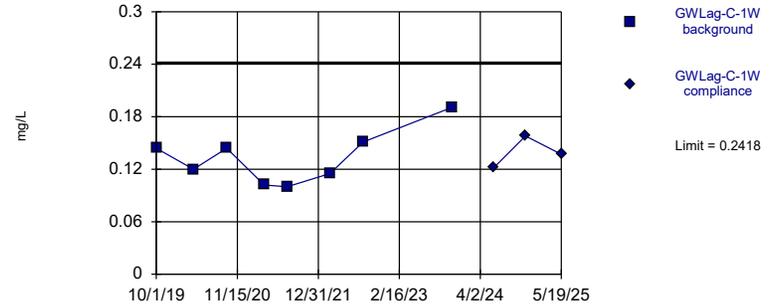


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04146, Std. Dev.=0.01322, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7979, critical = 0.749. Kappa = 3.565 (c=9, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Arsenic Analysis Run 10/10/2025 8:59 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Parametric

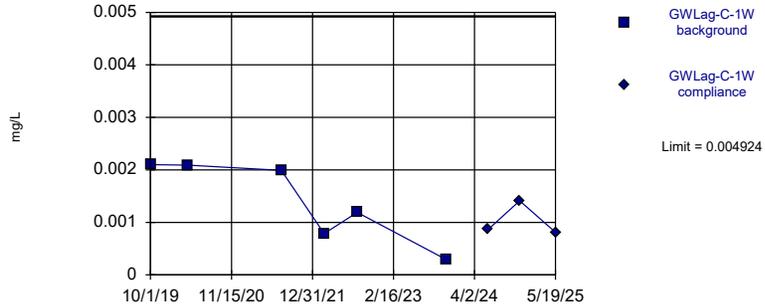


Background Data Summary: Mean=0.1334, Std. Dev.=0.03041, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9156, critical = 0.749. Kappa = 3.565 (c=9, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium Analysis Run 10/10/2025 8:59 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Parametric

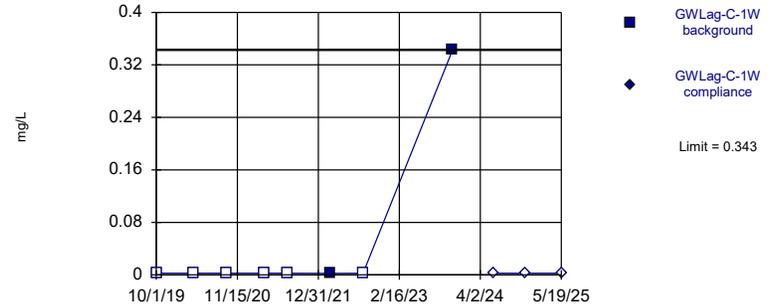


Background Data Summary: Mean=0.001407, Std. Dev.=0.0007715, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8629, critical = 0.713. Kappa = 4.559 (c=9, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Non-parametric

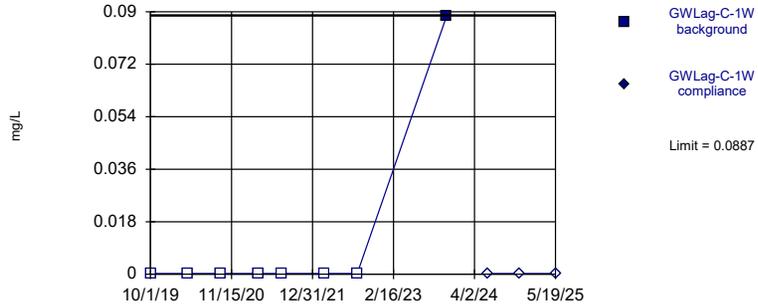


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Copper Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Non-parametric

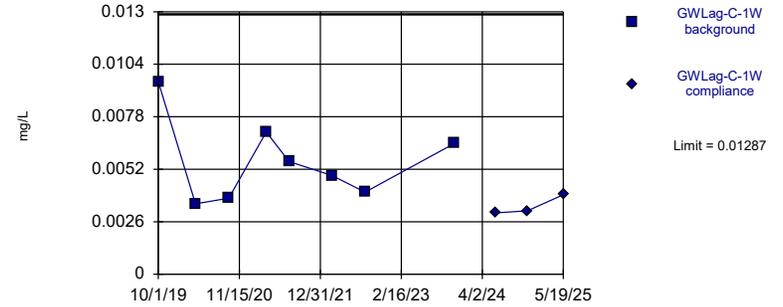


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Lead Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Parametric

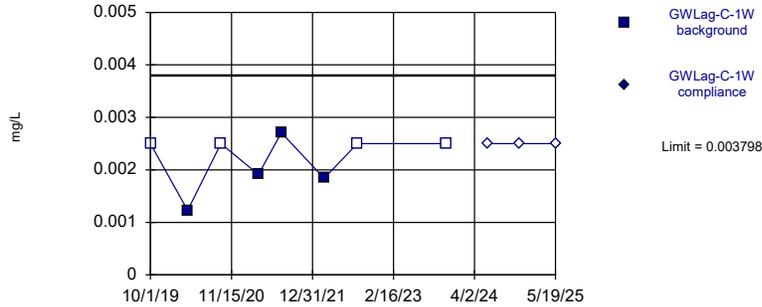


Background Data Summary: Mean=0.005605, Std. Dev.=0.002038, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9154, critical = 0.749. Kappa = 3.565 (c=9, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Nickel Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Parametric

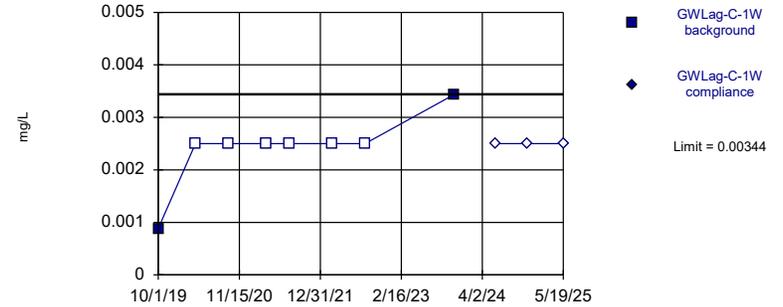


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001923, Std. Dev.=0.000526, n=8, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8219, critical = 0.749. Kappa = 3.565 (c=9, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Selenium Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Non-parametric

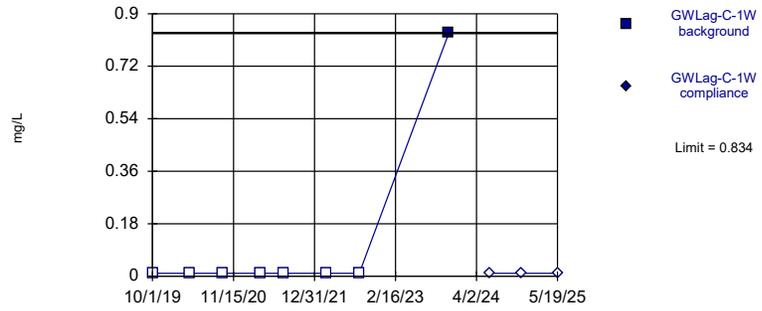


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Vanadium Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Zinc Analysis Run 10/10/2025 9:00 AM View: 2025SSN Intra PL GWLag-C-1W
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Mann-Kendall Trend Table and Graphs

Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/15/2025, 9:02 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
1,1,1-Trichloroethane (ug/L)	MW1-99	0	-1	-21	No	8	87.5	0.01	NP
1,1-Dichloroethane (ug/L)	MW2-93	0.9388	20	21	No	8	50	0.01	NP
1,1-Dichloroethane (ug/L)	MW4-93	-0.07833	-11	-21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	MW-37	-0.6966	-2	-21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	MW-39R	1.848	11	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	PZ-10	-0.09099	-8	-21	No	8	0	0.01	NP
1,1-Dichloroethene (ug/L)	MW1-99	0	-1	-21	No	8	87.5	0.01	NP
1,1-Dichloroethene (ug/L)	MW2-93	0	9	21	No	8	75	0.01	NP
1,1-Dichloroethene (ug/L)	MW-37	-0.5488	-12	-21	No	8	0	0.01	NP
1,2-Dichloroethane (ug/L)	MW1-99	0	-1	-21	No	8	87.5	0.01	NP
1,2-Dichloropropane (ug/L)	MW1-99	0	-1	-21	No	8	87.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW4-90	0	-2	-21	No	8	62.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW4-93	0.2611	16	21	No	8	12.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW7-90R	-0.136	-9	-21	No	8	25	0.01	NP
1,4-Dichlorobenzene (ug/L)	PZ-10	-0.3736	-12	-21	No	8	0	0.01	NP
2,4,5-TP [Silvex] [2C] (ug/L)	MW-39R	-0.009655	-6	-12	No	5	80	0.01	NP
Acetone (ug/L)	MW4-93	0	-9	-21	No	8	75	0.01	NP
Acetone (ug/L)	MW-43	-0.04296	-9	-21	No	8	37.5	0.01	NP
alpha-BHC (ug/L)	MW-39R	-0.01139	-14	-21	No	8	37.5	0.01	NP
Antimony (mg/L)	MW4-93	0.0005332	21	21	No	8	50	0.01	NP
Arsenic (mg/L)	MW1-99	-0.00001357	-3	-21	No	8	37.5	0.01	NP
Arsenic (mg/L)	MW2-93	-0.0001916	-12	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW4-90	0.0001935	6	21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW4-93	0.0007351	16	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW7-90R	-0.01383	-20	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-37	-0.0002887	-8	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-38	0	-7	-21	No	8	87.5	0.01	NP
Arsenic (mg/L)	MW-43	0.0008485	14	21	No	8	0	0.01	NP
Arsenic (mg/L)	PZ-10	0.0004608	2	21	No	8	0	0.01	NP
Barium (mg/L)	MW1-99	-0.003451	-6	-21	No	8	0	0.01	NP
Barium (mg/L)	MW2-93	0.02685	12	21	No	8	0	0.01	NP
Barium (mg/L)	MW4-90	0.0002997	0	21	No	8	0	0.01	NP
Barium (mg/L)	MW4-93	-0.002357	-16	-21	No	8	0	0.01	NP
Barium (mg/L)	MW7-90R	0.06633	18	21	No	8	0	0.01	NP
Barium (mg/L)	MW7-93	-0.00485	-4	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-37	-0.0002903	-5	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-38	0.0008889	0	21	No	8	0	0.01	NP
Barium (mg/L)	MW-39R	-0.0003476	-1	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-43	0.0008381	0	21	No	8	0	0.01	NP
Barium (mg/L)	PZ-10	0.01283	8	21	No	8	0	0.01	NP
Benzene (ug/L)	MW4-90	0	-3	-21	No	8	87.5	0.01	NP
Benzene (ug/L)	MW4-93	-0.03064	-12	-21	No	8	12.5	0.01	NP
Benzene (ug/L)	MW7-90R	-0.06332	-17	-21	No	8	25	0.01	NP
Benzene (ug/L)	MW-37	-0.06252	-12	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-39R	0.04152	4	21	No	8	12.5	0.01	NP
Benzene (ug/L)	PZ-10	-0.156	-1	-21	No	8	0	0.01	NP
Beryllium (mg/L)	MW4-93	0	3	21	No	8	87.5	0.01	NP
Cadmium (mg/L)	MW2-93	-9.9e-7	-1	-21	No	8	50	0.01	NP
Cadmium (mg/L)	MW4-93	0.0001086	15	21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW7-93	-0.000013	-4	-21	No	8	12.5	0.01	NP

Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/15/2025, 9:02 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Cadmium (mg/L)	PZ-10	-0.00002274	-13	-21	No	8	87.5	0.01	NP
Chlorobenzene (ug/L)	MW2-93	-0.7527	-18	-21	No	8	50	0.01	NP
Chlorobenzene (ug/L)	MW4-90	0	1	21	No	8	75	0.01	NP
Chlorobenzene (ug/L)	MW4-93	-0.6459	-10	-21	No	8	0	0.01	NP
Chlorobenzene (ug/L)	MW-37	-0.9083	-16	-21	No	8	0	0.01	NP
Chlorobenzene (ug/L)	PZ-10	0.101	5	21	No	8	0	0.01	NP
Chloroethane (ug/L)	MW4-90	-0.0009881	0	21	No	8	0	0.01	NP
Chloroethane (ug/L)	MW-37	-1.16	-8	-21	No	8	0	0.01	NP
Chloroethane (ug/L)	PZ-10	-0.5903	-14	-21	No	8	0	0.01	NP
Chromium (mg/L)	MW-38	-0.0003554	-18	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW2-93	0.08501	12	21	No	8	50	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW4-93	0.00149	0	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-37	0.1594	18	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-39R	1.096	5	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	PZ-10	-0.09223	-10	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW1-99	0.0003163	4	21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW2-93	-0.0003611	-6	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW4-90	-0.0003886	-8	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW4-93	0.0009548	6	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW7-90R	-0.003426	-18	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW7-93	-0.003394	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-37	-0.003023	-12	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-39R	0.00001533	4	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-43	0.00006054	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	PZ-10	0.002657	7	21	No	8	0	0.01	NP
Copper (mg/L)	MW2-93	0	-8	-21	No	8	62.5	0.01	NP
Copper (mg/L)	MW4-93	0	0	21	No	8	50	0.01	NP
Copper (mg/L)	MW7-90R	0	7	21	No	8	75	0.01	NP
Copper (mg/L)	MW7-93	-0.0003949	-10	-21	No	8	0	0.01	NP
Copper (mg/L)	PZ-10	0	1	21	No	8	87.5	0.01	NP
Dichlorodifluoromethane (ug/L)	MW-39R	0.3453	10	21	No	8	0	0.01	NP
Endosulfan sulfate (ug/L)	MW4-90	0.005409	8	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW4-93	0.00006286	5	21	No	8	37.5	0.01	NP
Lead (mg/L)	MW7-90R	0	4	21	No	8	50	0.01	NP
Lead (mg/L)	MW-37	0	-3	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-39R	0	-1	-21	No	8	87.5	0.01	NP
Lead (mg/L)	PZ-10	0	4	21	No	8	50	0.01	NP
Nickel (mg/L)	MW2-93	-0.009178	-16	-21	No	8	50	0.01	NP
Nickel (mg/L)	MW4-90	-0.0007737	-14	-21	No	8	12.5	0.01	NP
Nickel (mg/L)	MW4-93	0.006197	16	21	No	8	0	0.01	NP
Nickel (mg/L)	MW7-90R	-0.0002823	-5	-21	No	8	37.5	0.01	NP
Nickel (mg/L)	MW7-93	-0.00149	-8	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-37	-0.00152	-4	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-39R	0.00007351	2	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-43	-0.0002531	-6	-21	No	8	0	0.01	NP
Nickel (mg/L)	PZ-10	0.00003963	0	21	No	8	0	0.01	NP
Selenium (mg/L)	MW1-99	0.0001727	9	21	No	8	37.5	0.01	NP
Selenium (mg/L)	MW-38	0.0009226	24	21	Yes	8	0	0.01	NP
Sulfide (mg/L)	MW7-90R	0	7	21	No	8	87.5	0.01	NP
Tetrachloroethene (ug/L)	MW-39R	0.09056	5	21	No	8	25	0.01	NP

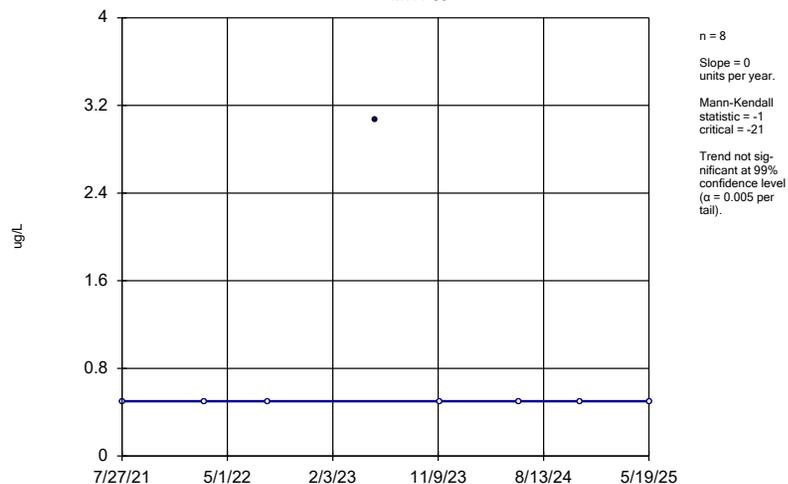
Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/15/2025, 9:02 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Toluene (ug/L)	MW4-90	0	7	21	No	8	87.5	0.01	NP
Trichloroethene (ug/L)	MW-39R	-0.2077	-12	-21	No	8	0	0.01	NP
Vanadium (mg/L)	MW4-93	0.002605	21	21	No	8	25	0.01	NP
Vanadium (mg/L)	PZ-10	0	1	21	No	8	87.5	0.01	NP
Vinyl Chloride (ug/L)	MW-37	-0.2045	-18	-21	No	8	12.5	0.01	NP
Vinyl Chloride (ug/L)	MW-39R	-0.02458	0	21	No	8	0	0.01	NP
Zinc (mg/L)	MW4-93	0	-3	-21	No	8	50	0.01	NP
Zinc (mg/L)	MW7-90R	0	-1	-21	No	8	75	0.01	NP

Sen's Slope Estimator

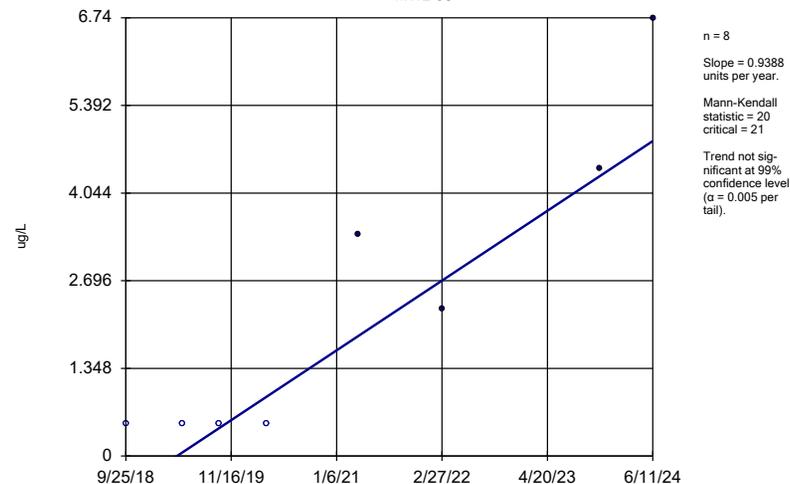
MW1-99



Constituent: 1,1,1-Trichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

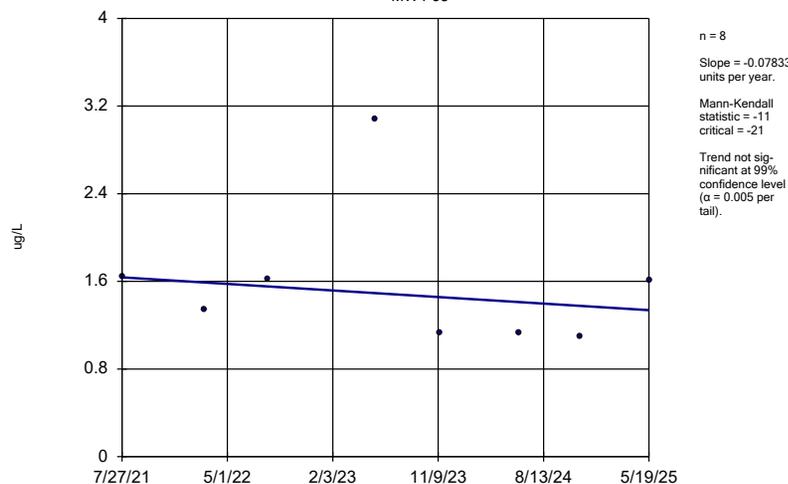
MW2-93



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

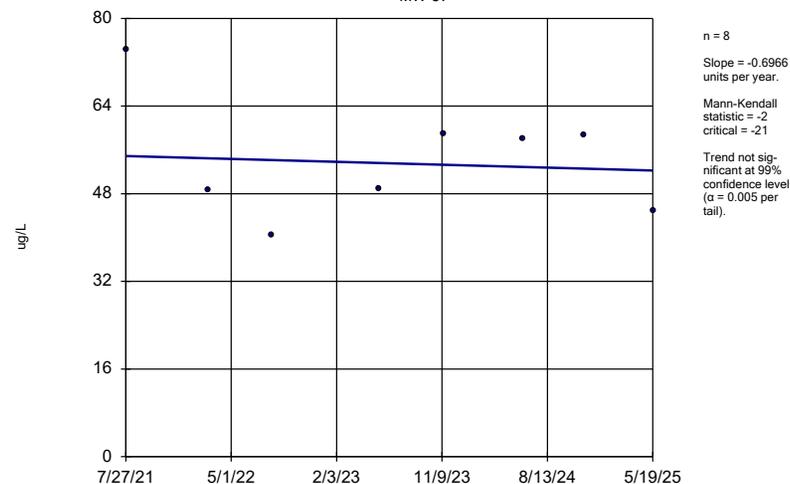
MW4-93



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

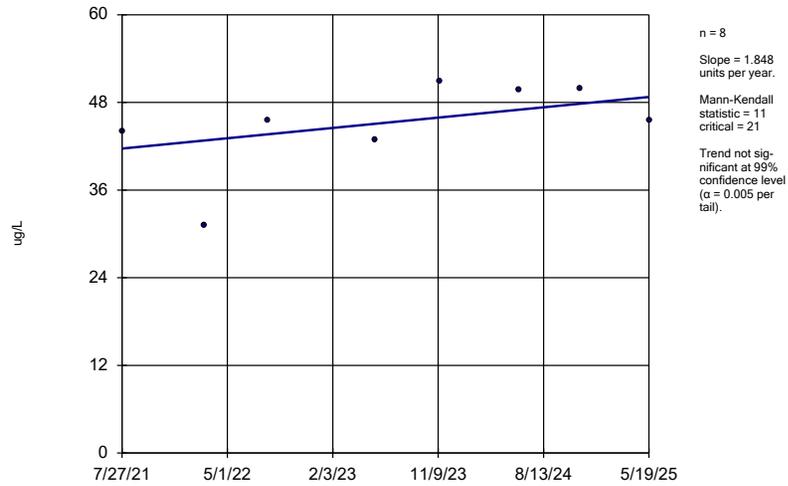
MW-37



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

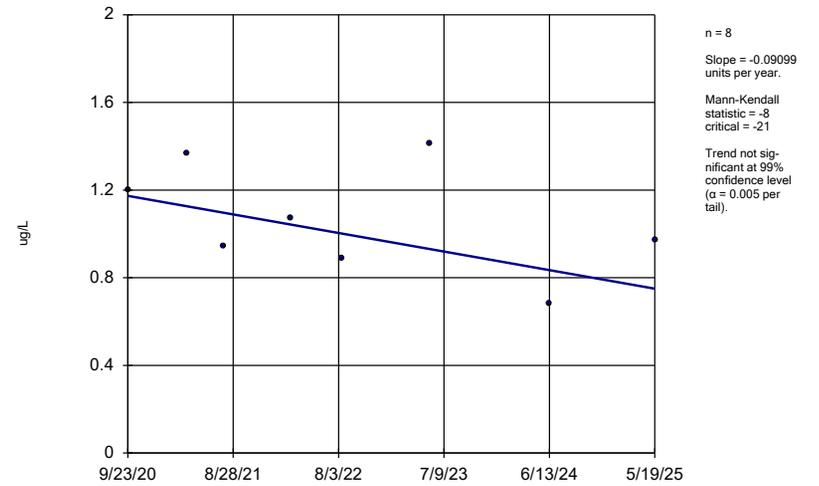
MW-39R



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

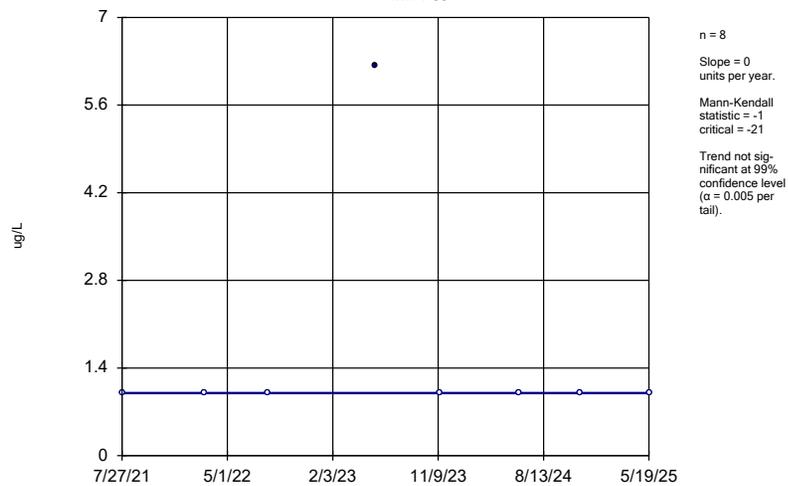
PZ-10



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

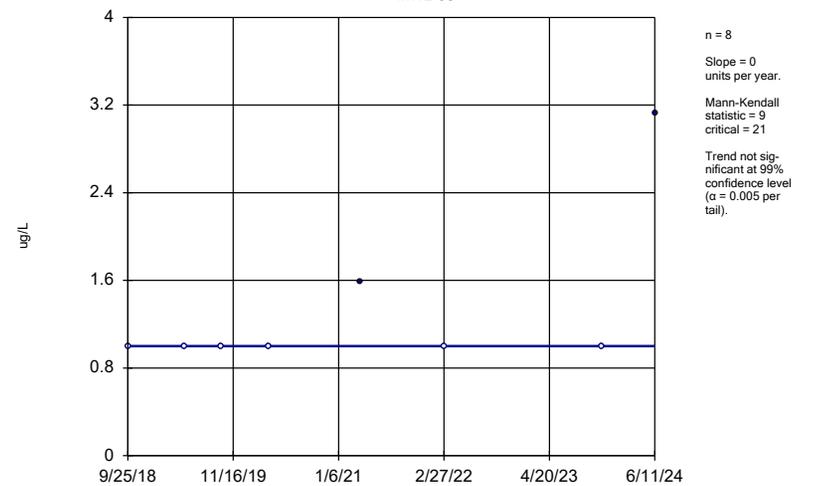
MW1-99



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

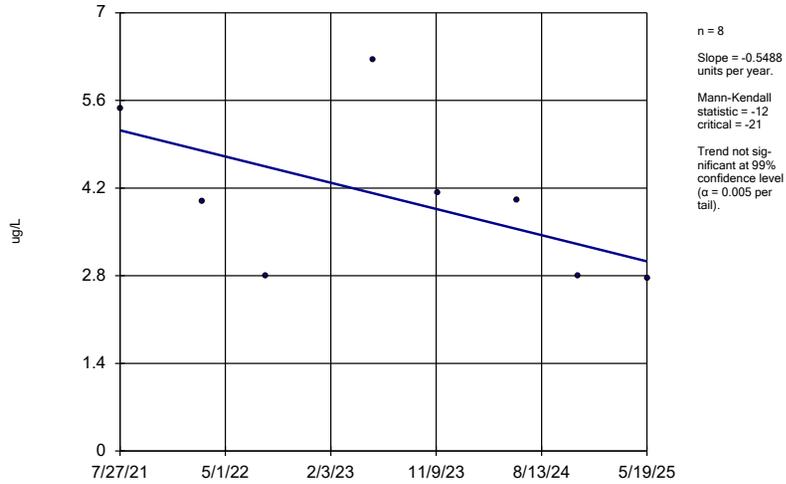
MW2-93



Constituent: 1,1-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

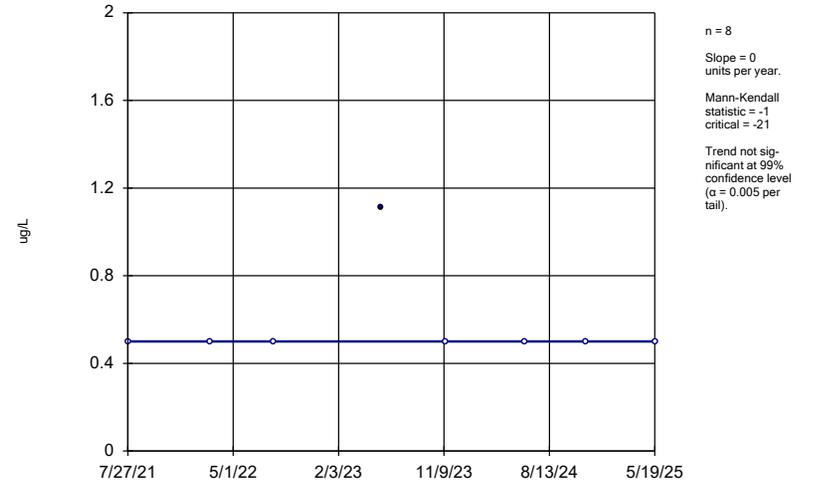
MW-37



Constituent: 1,1-Dichloroethene Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

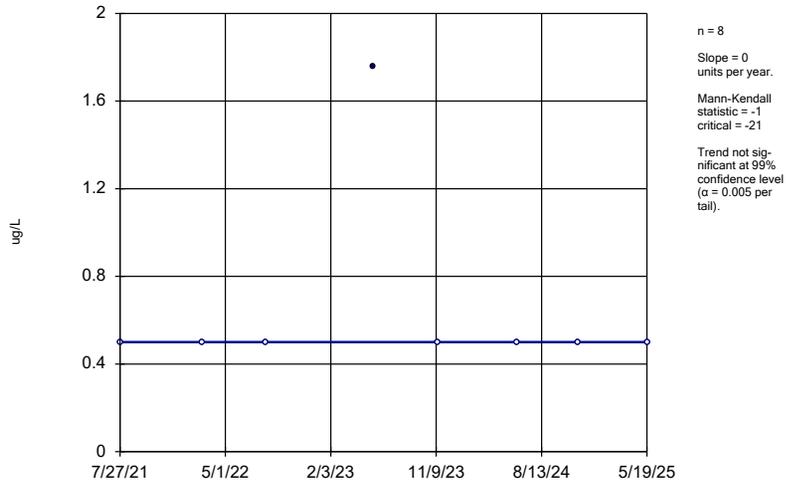
MW1-99



Constituent: 1,2-Dichloroethane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

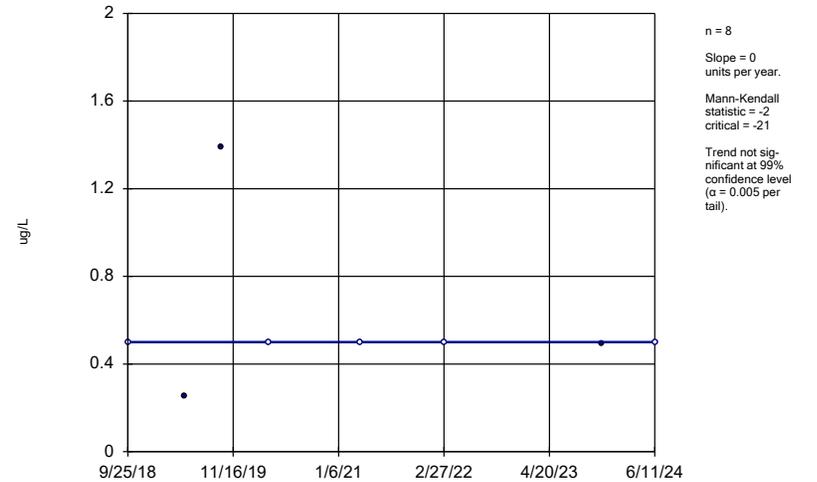
MW1-99



Constituent: 1,2-Dichloropropane Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

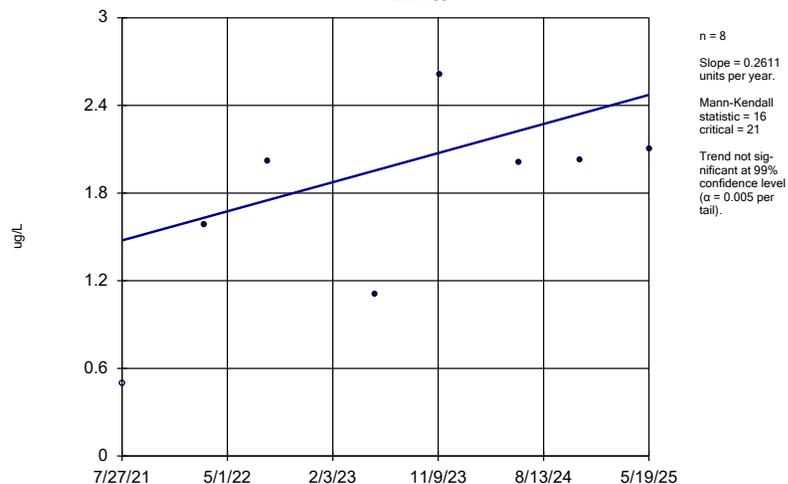
MW4-90



Constituent: 1,4-Dichlorobenzene Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

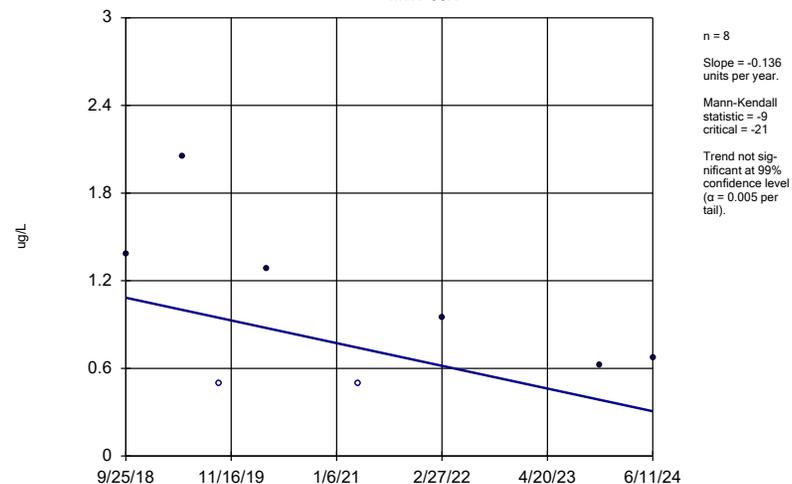
MW4-93



Constituent: 1,4-Dichlorobenzene Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

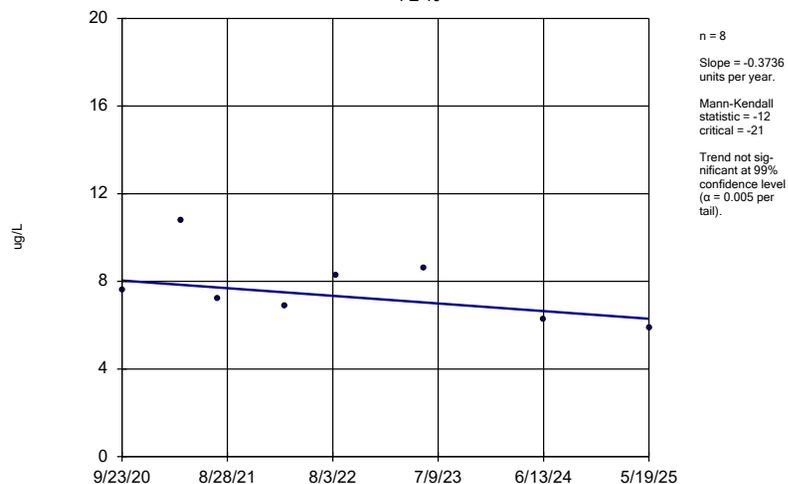
MW7-90R



Constituent: 1,4-Dichlorobenzene Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

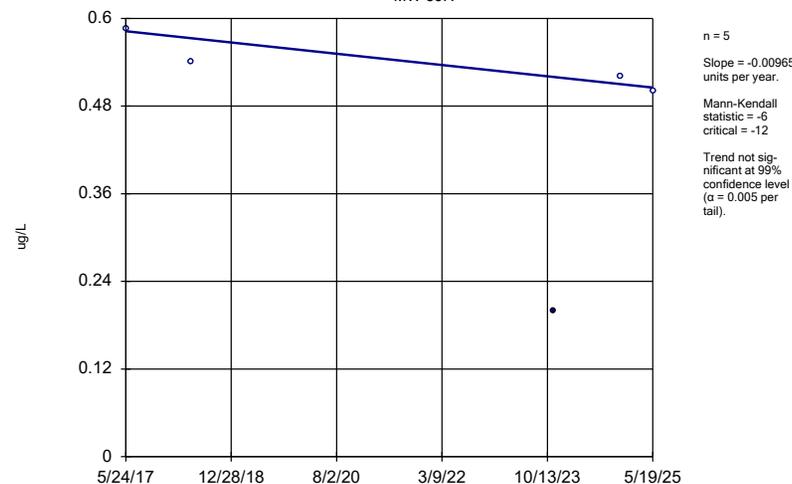
PZ-10



Constituent: 1,4-Dichlorobenzene Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

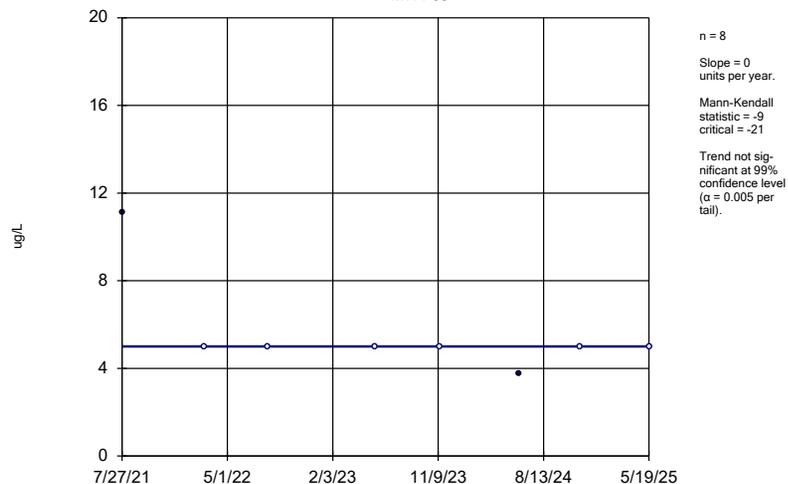
MW-39R



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

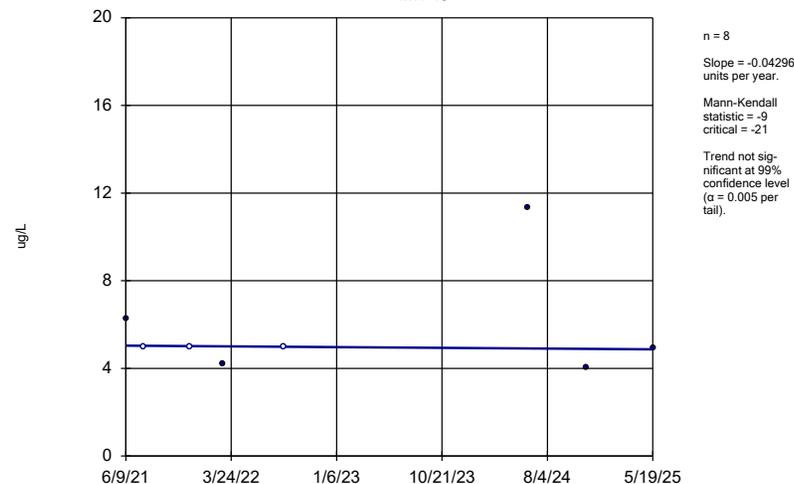
MW4-93



Constituent: Acetone Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

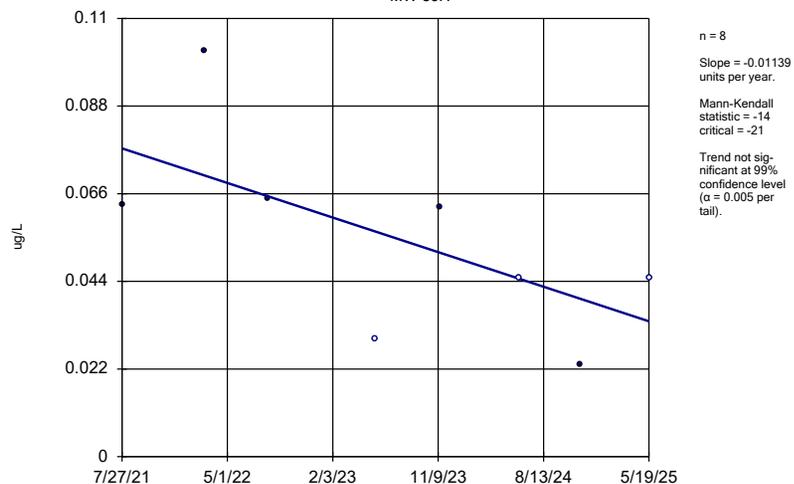
MW-43



Constituent: Acetone Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

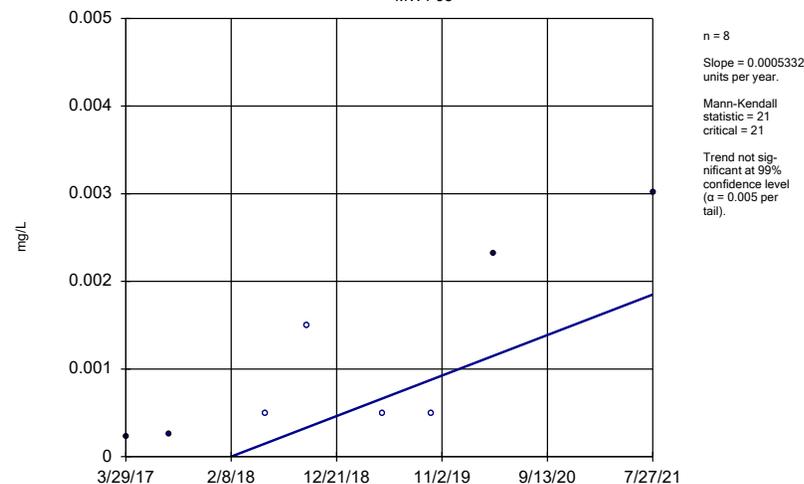
MW-39R



Constituent: alpha-BHC Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

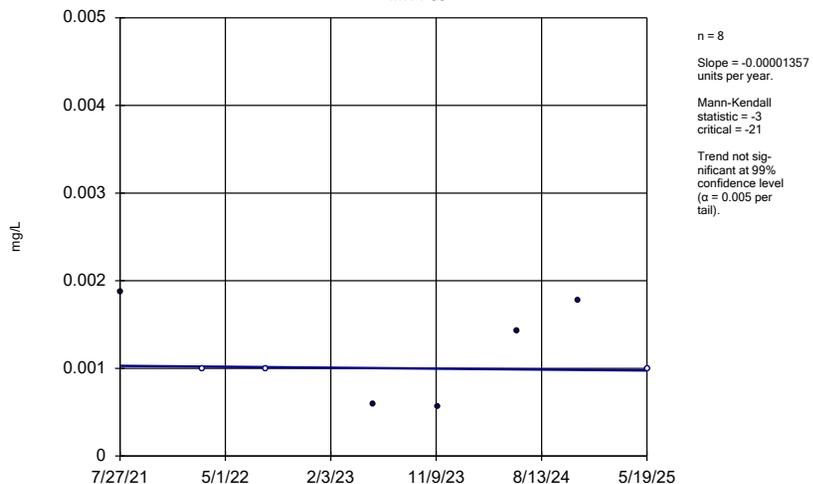
MW4-93



Constituent: Antimony Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

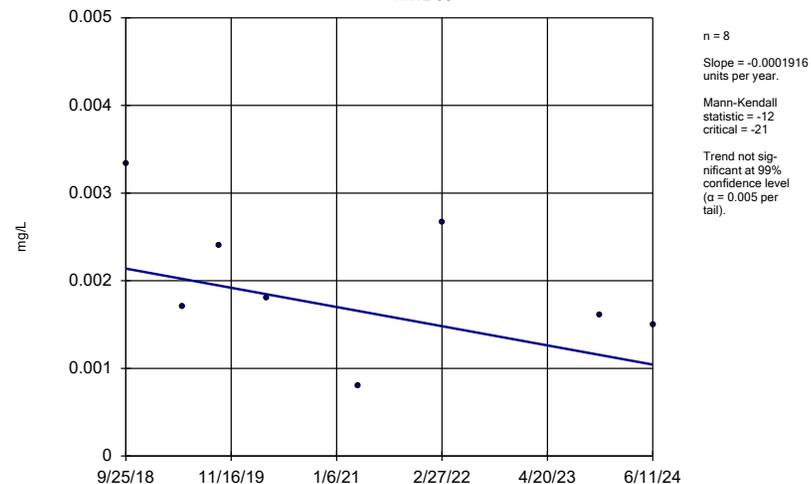
MW1-99



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

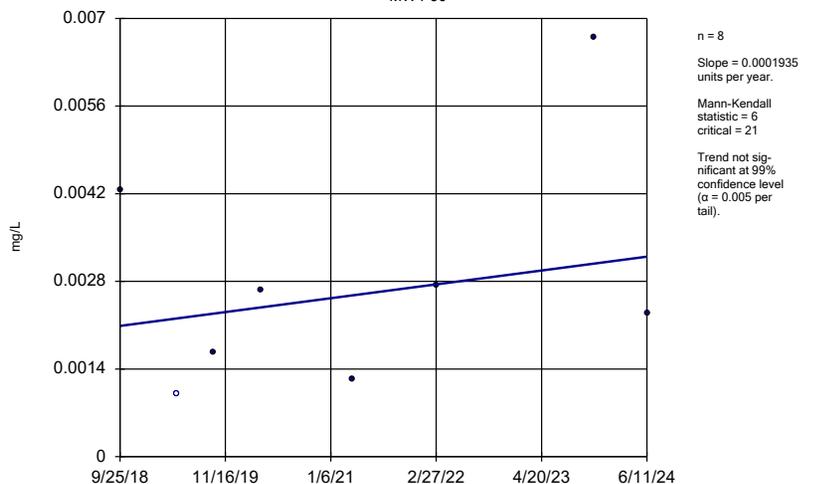
MW2-93



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

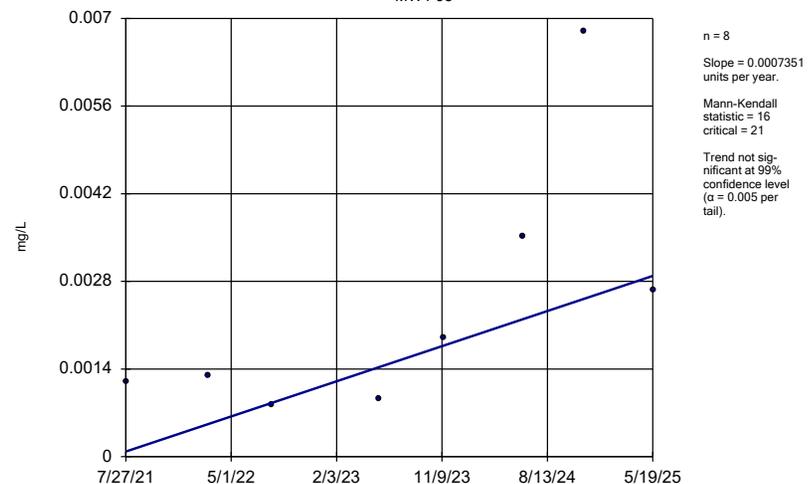
MW4-90



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

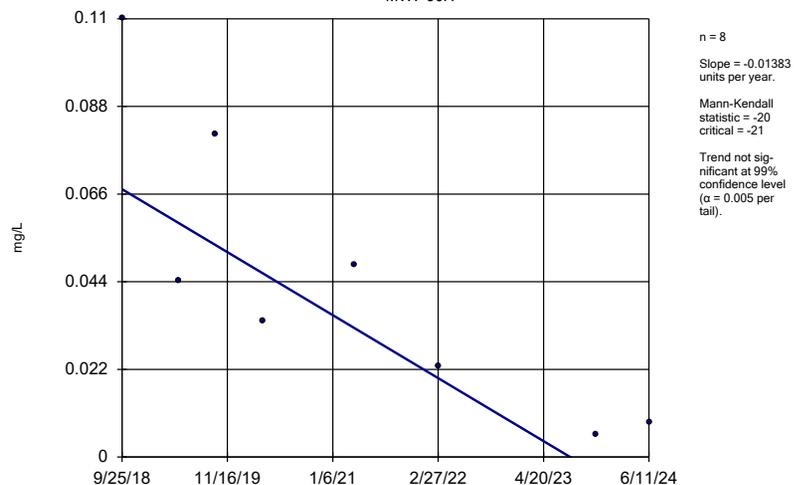
MW4-93



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

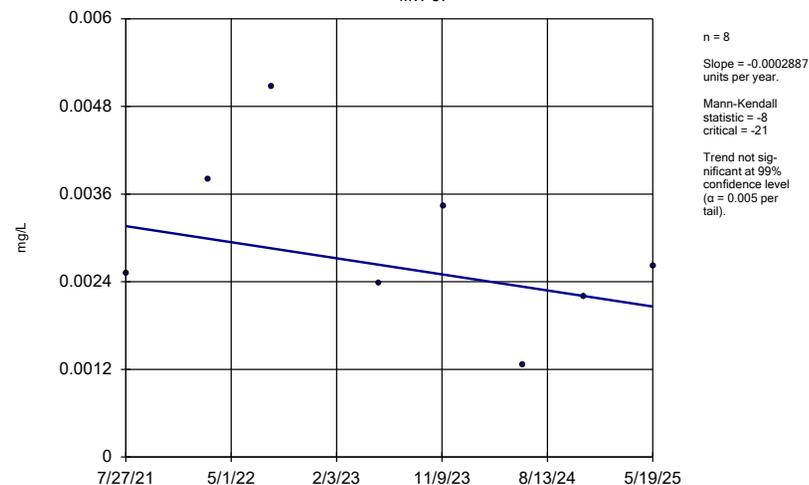
MW7-90R



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

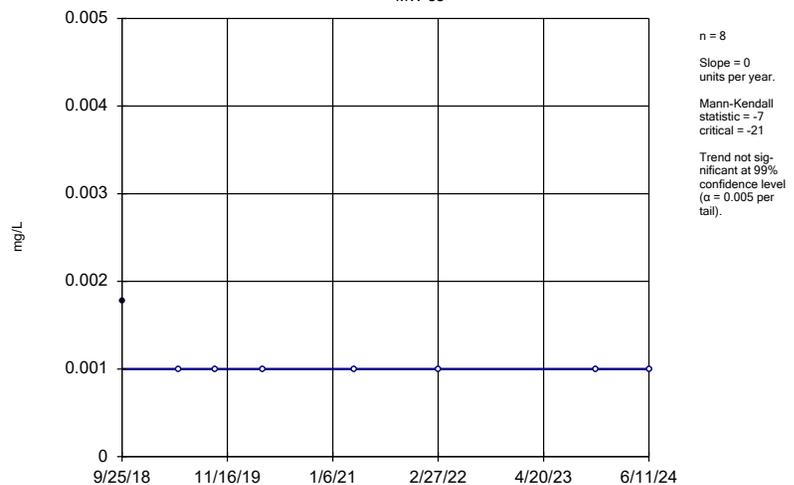
MW-37



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

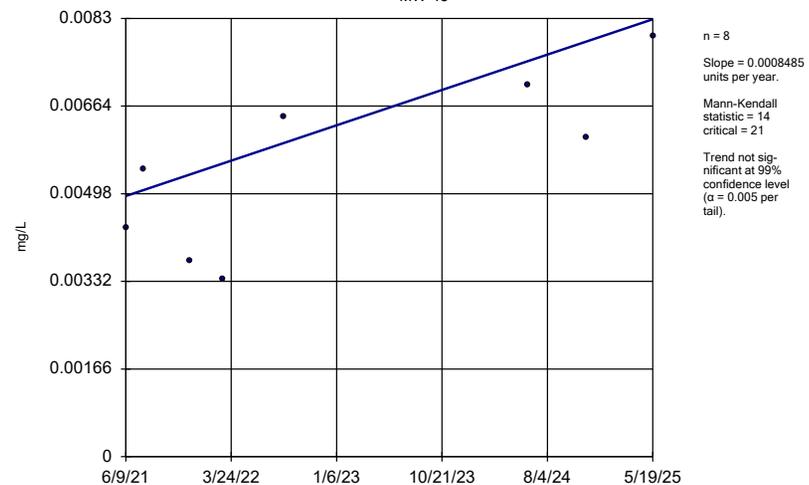
MW-38



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

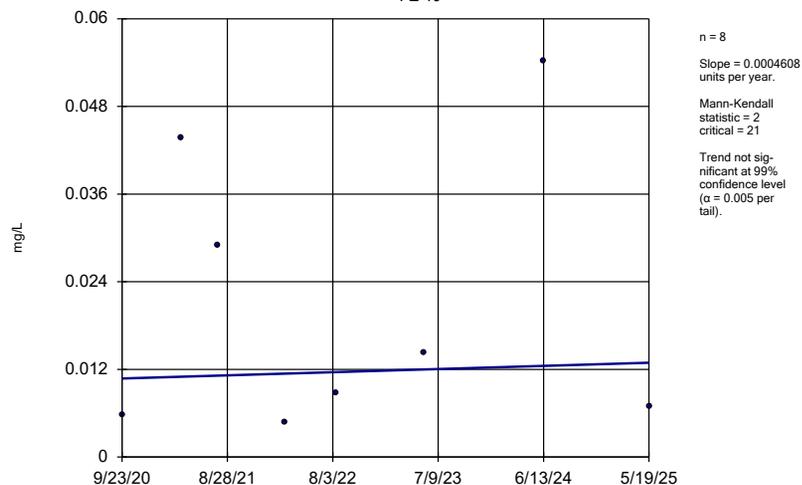
MW-43



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

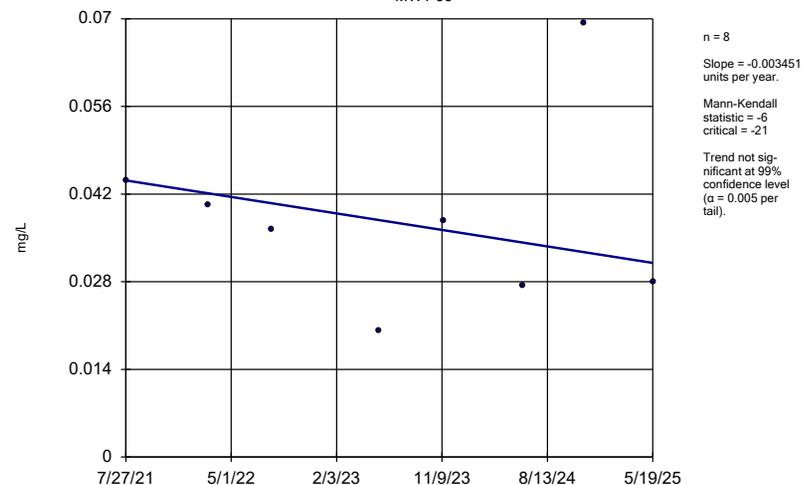
PZ-10



Constituent: Arsenic Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

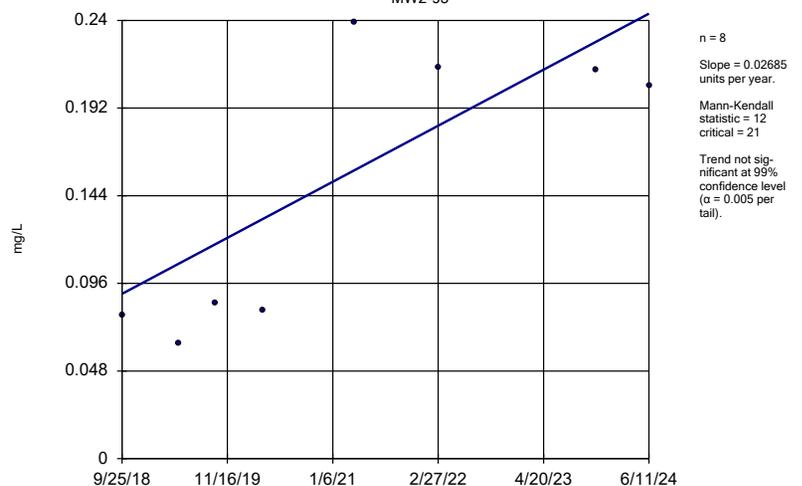
MW1-99



Constituent: Barium Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

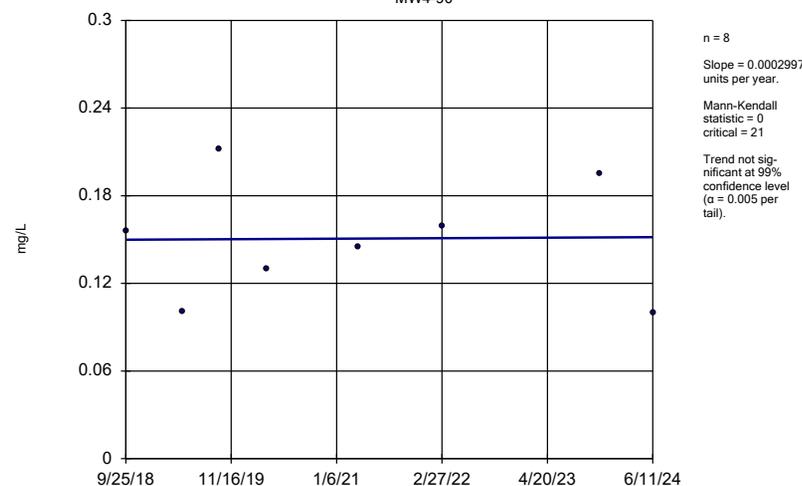
MW2-93



Constituent: Barium Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

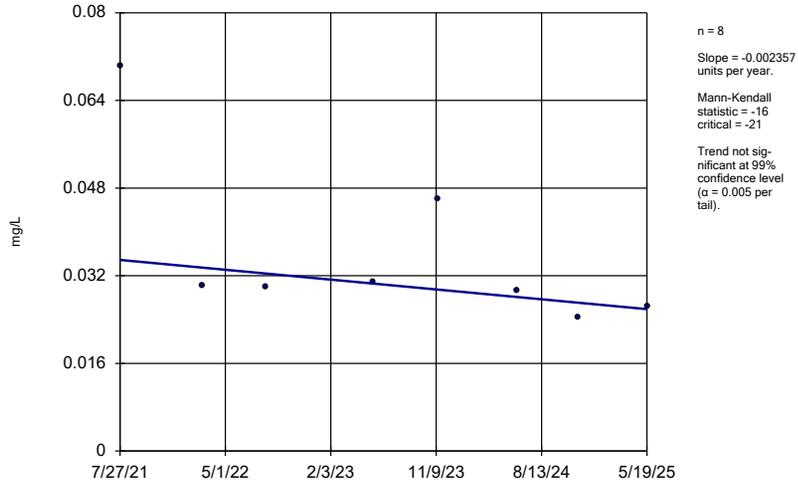
MW4-90



Constituent: Barium Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

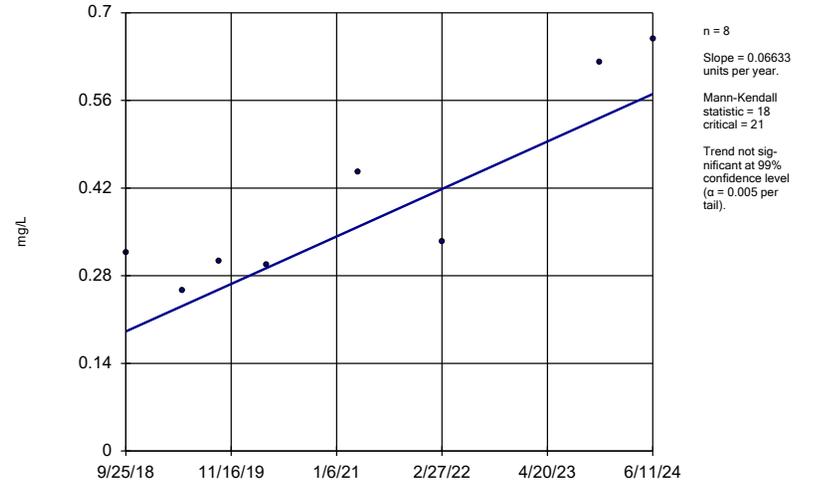
MW4-93



Constituent: Barium Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

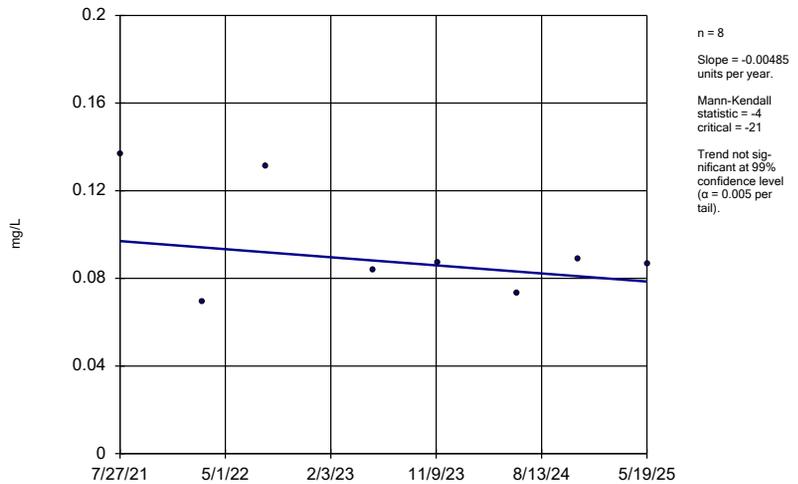
MW7-90R



Constituent: Barium Analysis Run 10/15/2025 8:57 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

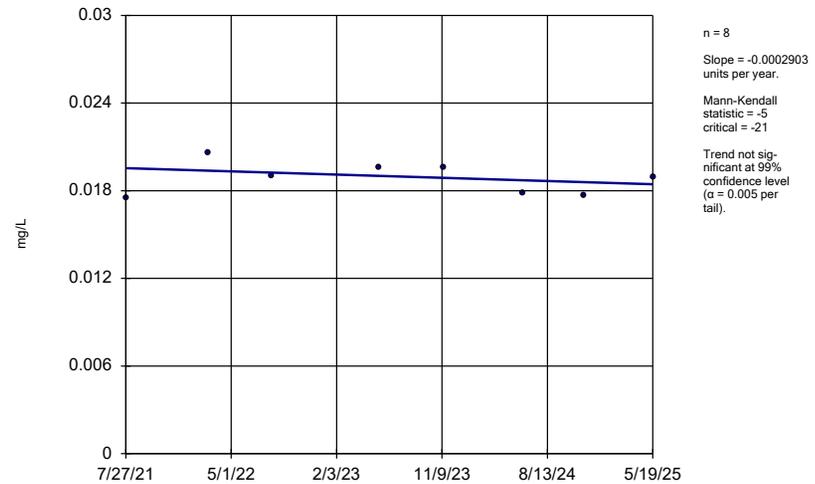
MW7-93



Constituent: Barium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

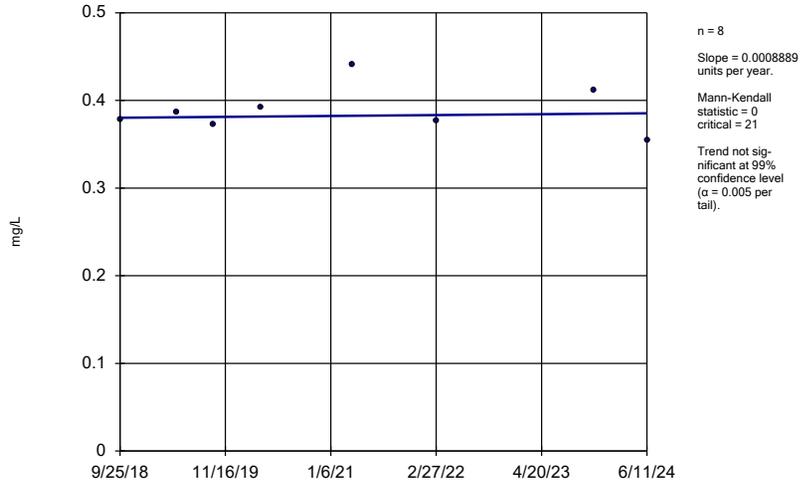
MW-37



Constituent: Barium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

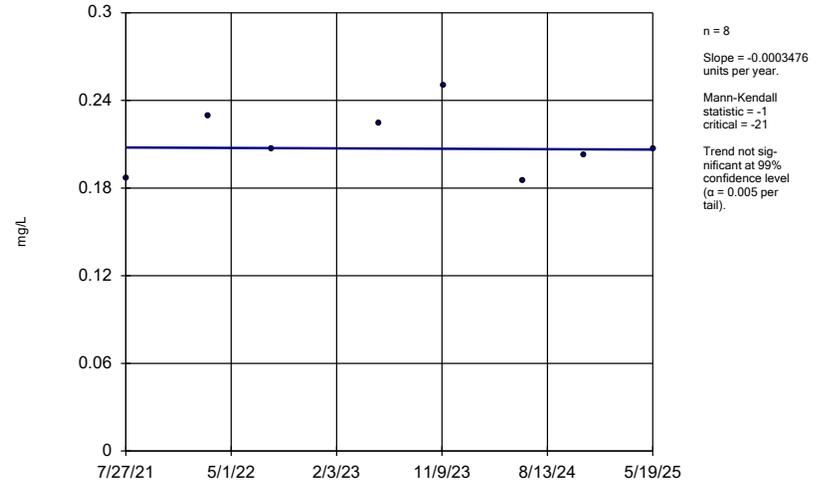
MW-38



Constituent: Barium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

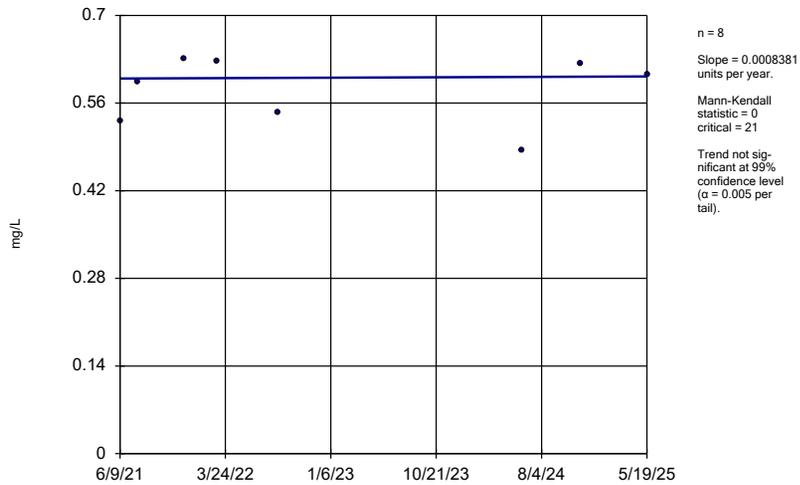
MW-39R



Constituent: Barium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

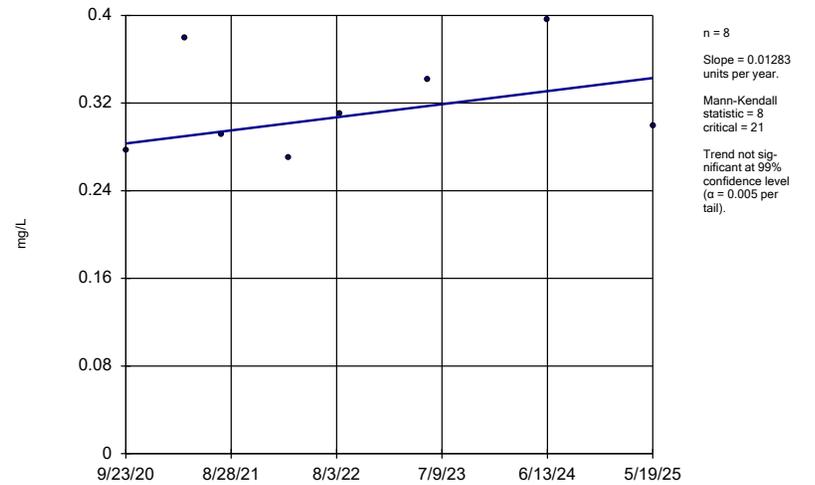
MW-43



Constituent: Barium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

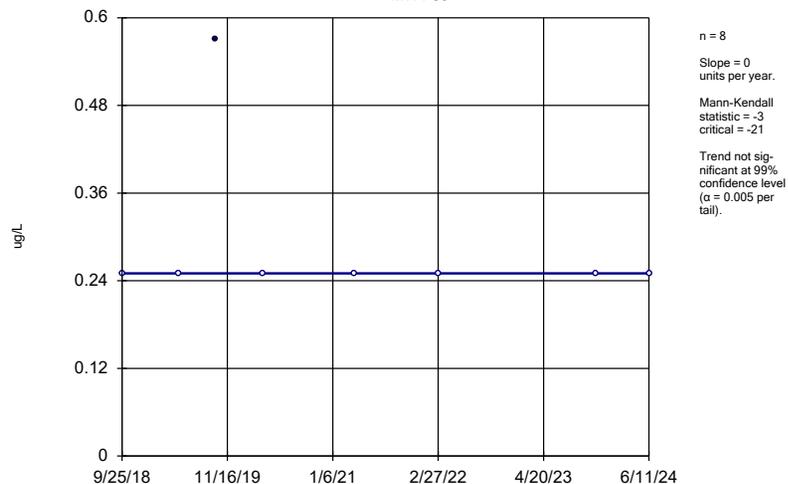
PZ-10



Constituent: Barium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

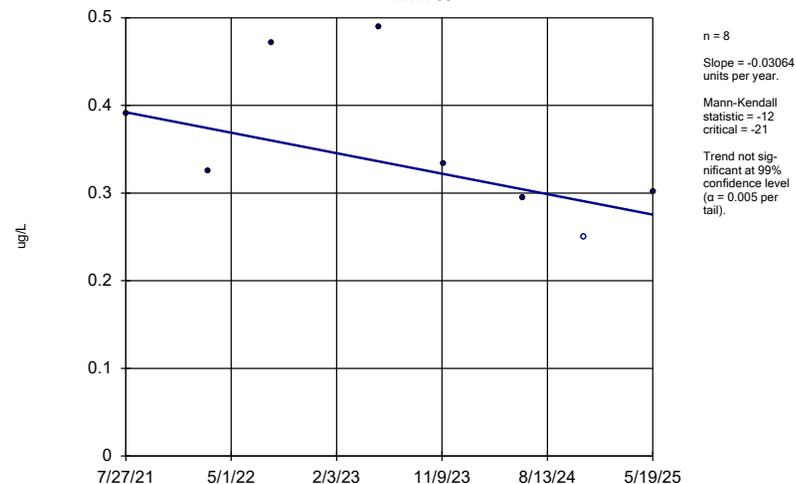
MW4-90



Constituent: Benzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

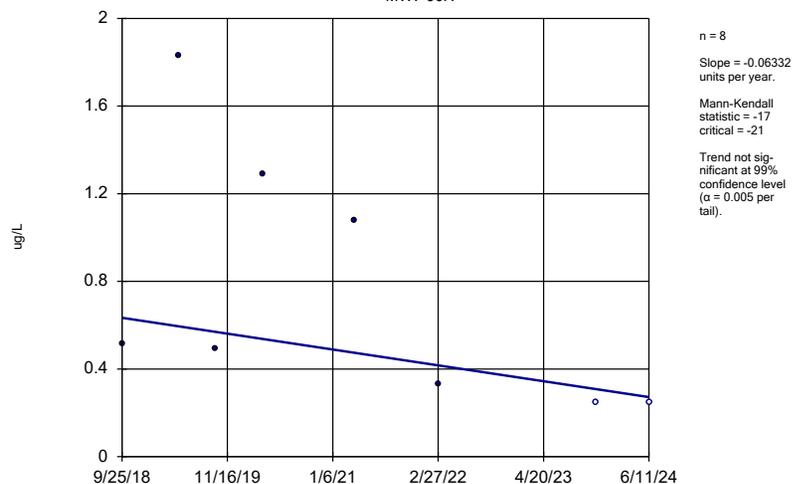
MW4-93



Constituent: Benzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

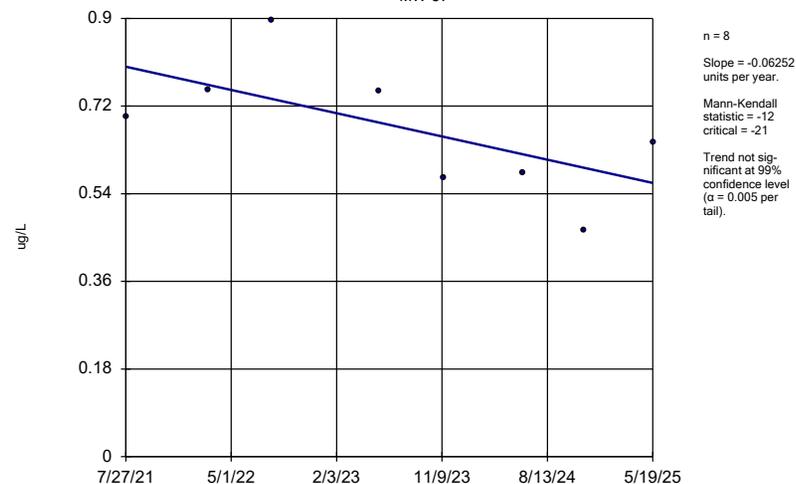
MW7-90R



Constituent: Benzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

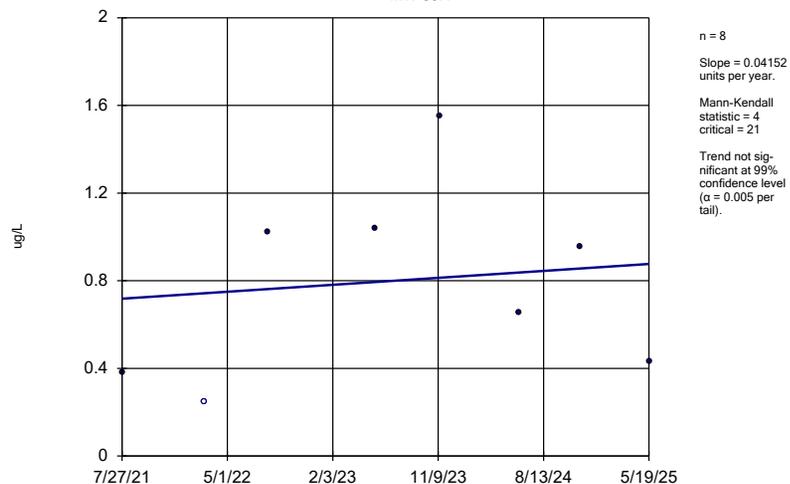
MW-37



Constituent: Benzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

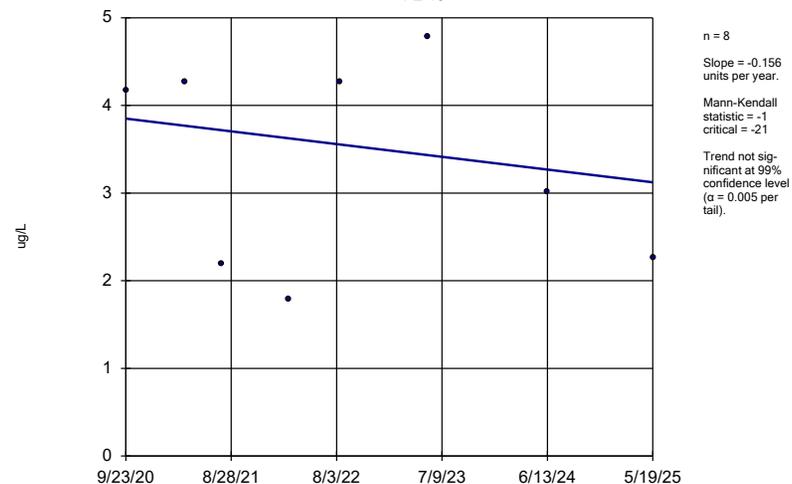
MW-39R



Constituent: Benzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

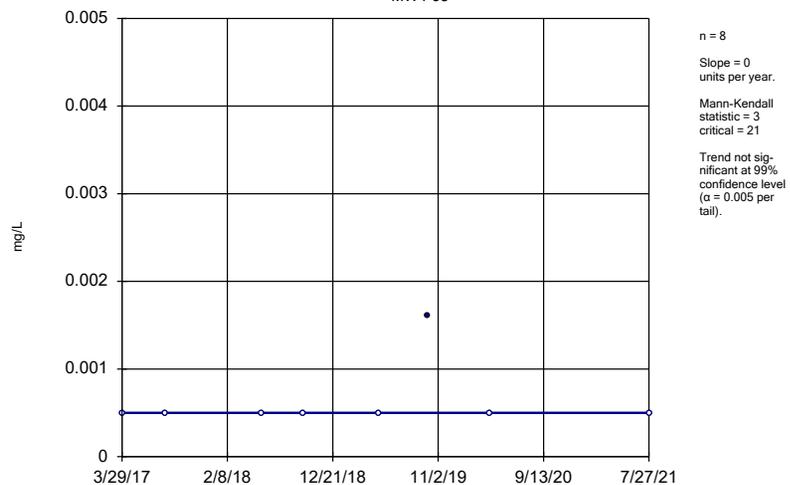
PZ-10



Constituent: Benzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

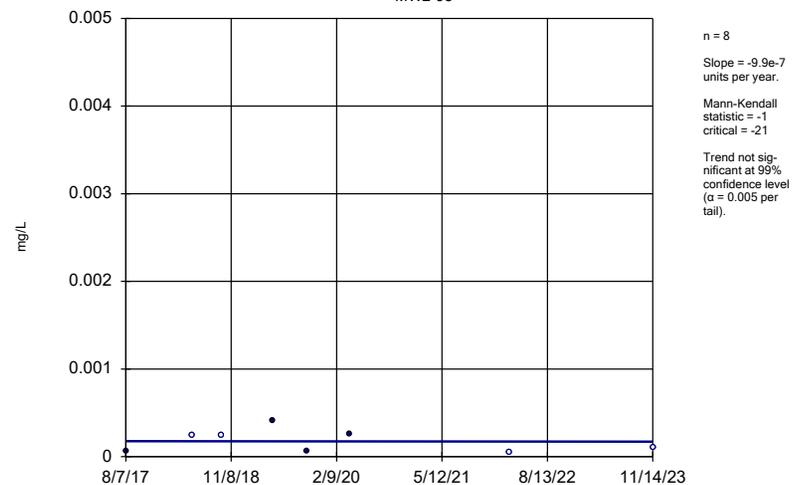
MW4-93



Constituent: Beryllium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

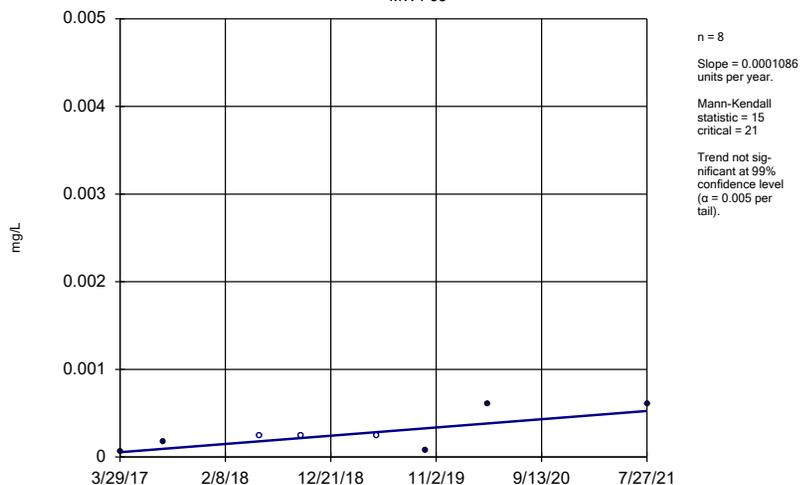
MW2-93



Constituent: Cadmium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

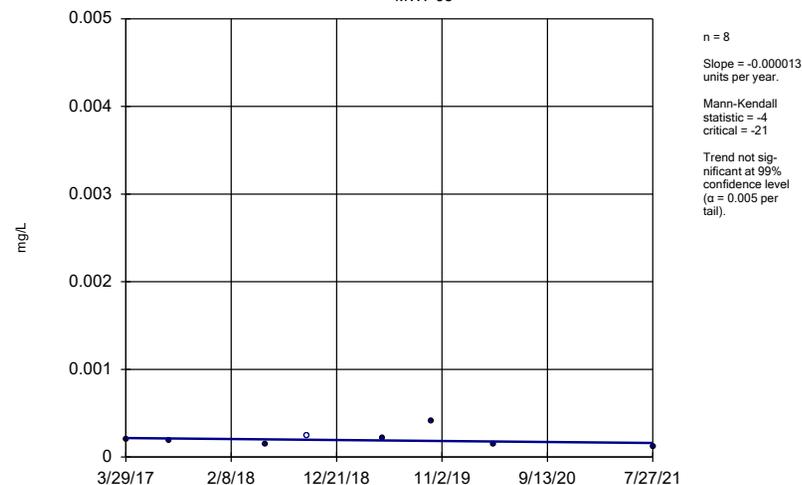
MW4-93



Constituent: Cadmium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

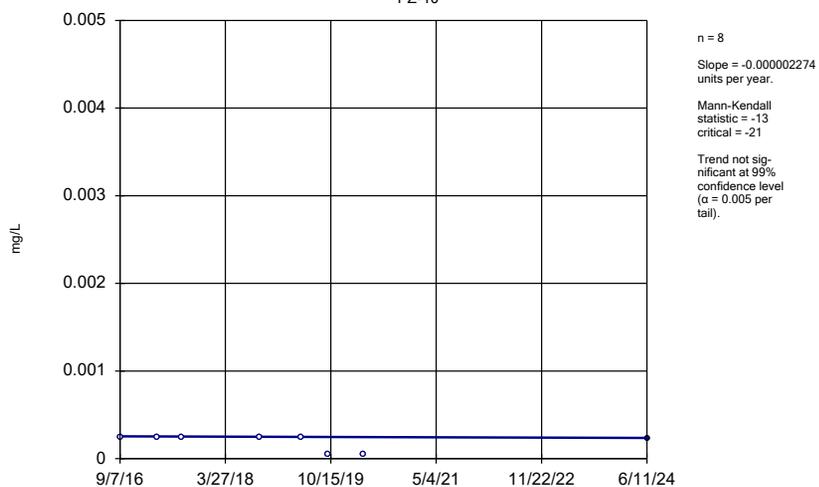
MW7-93



Constituent: Cadmium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

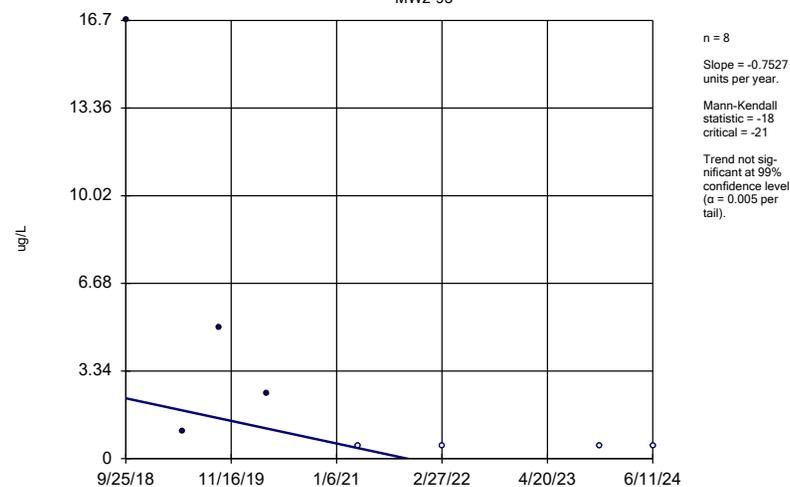
PZ-10



Constituent: Cadmium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

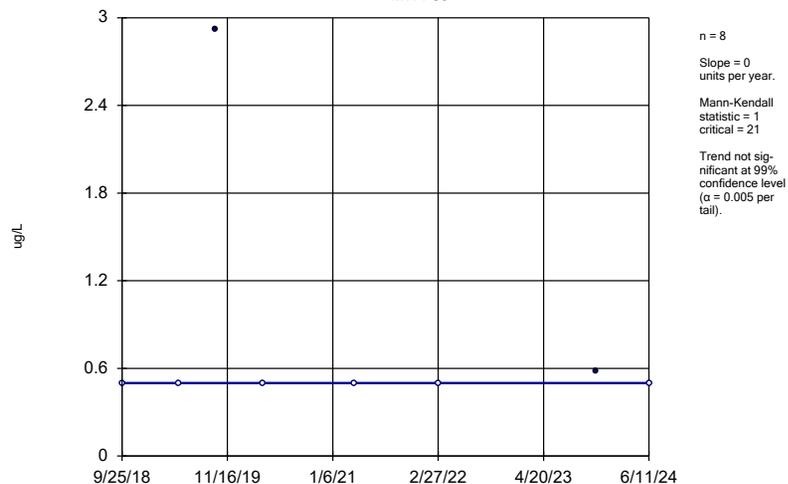
MW2-93



Constituent: Chlorobenzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

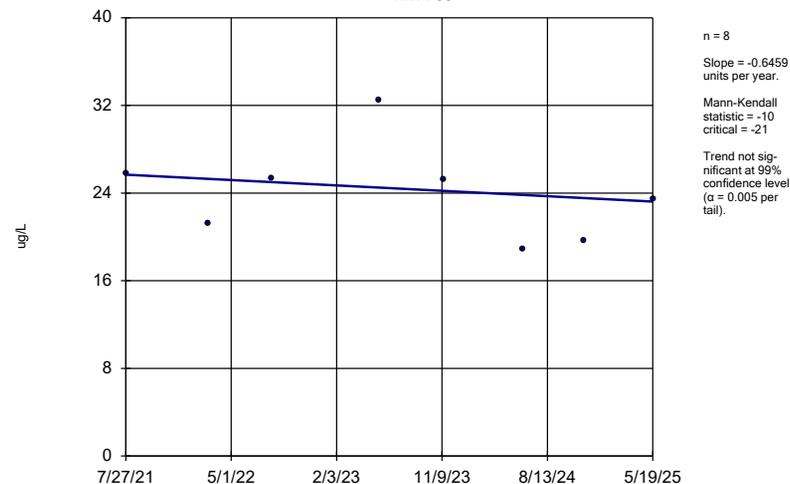
MW4-90



Constituent: Chlorobenzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

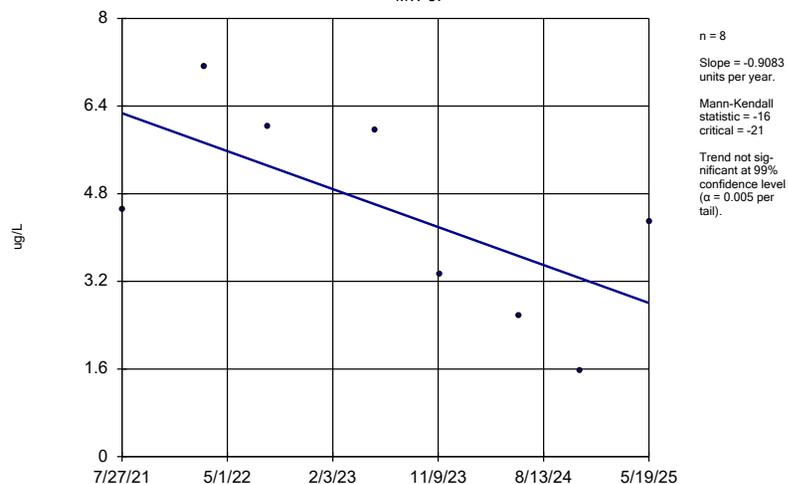
MW4-93



Constituent: Chlorobenzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

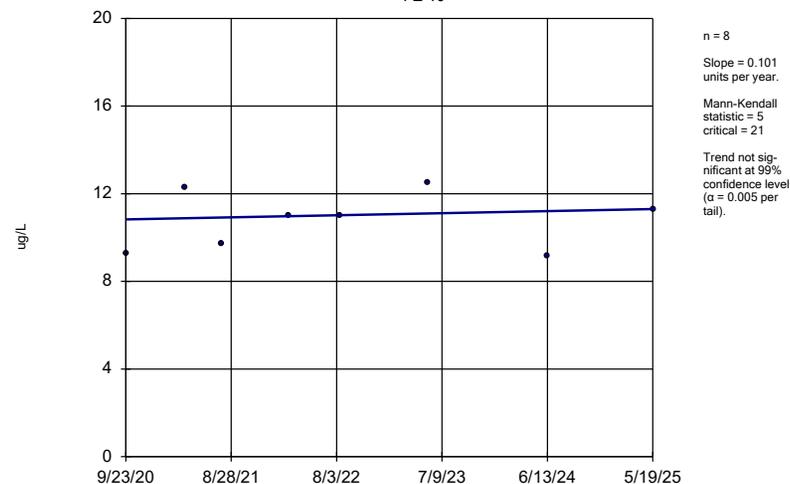
MW-37



Constituent: Chlorobenzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

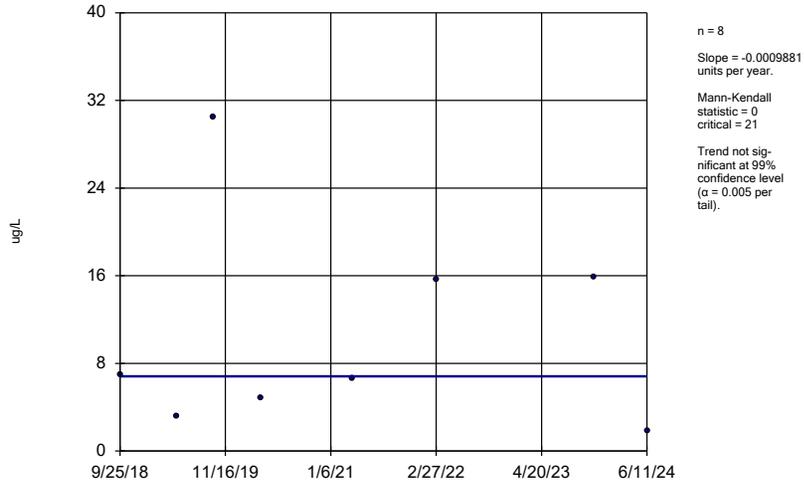
PZ-10



Constituent: Chlorobenzene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

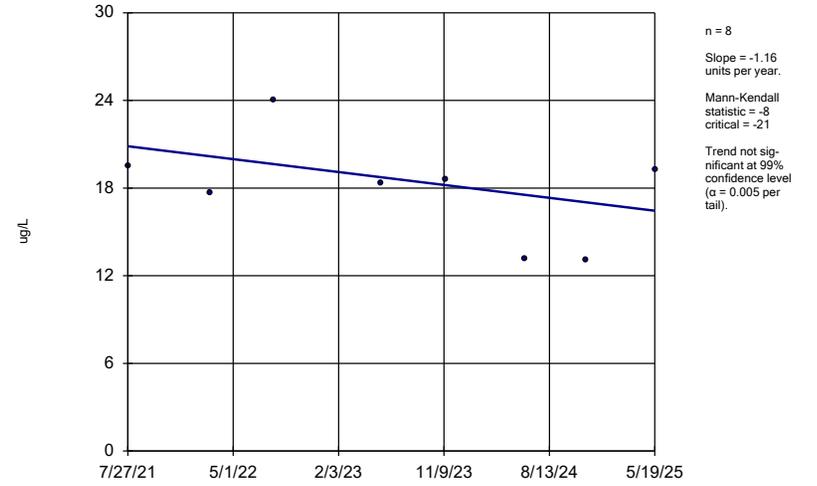
MW4-90



Constituent: Chloroethane Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

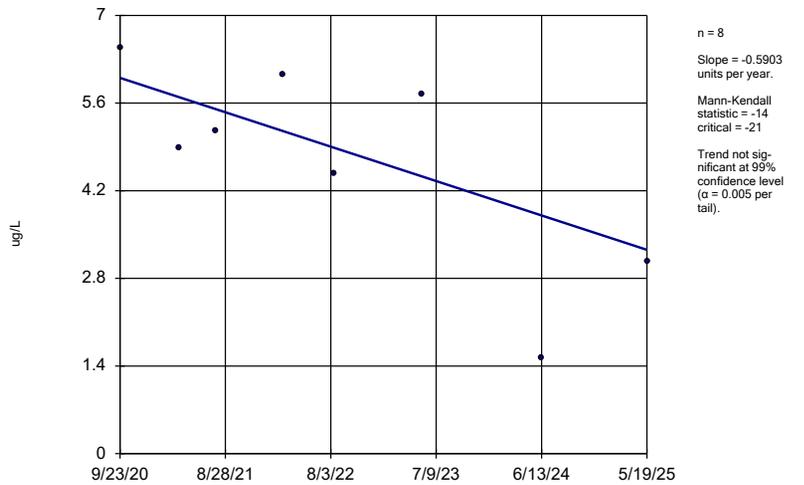
MW-37



Constituent: Chloroethane Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

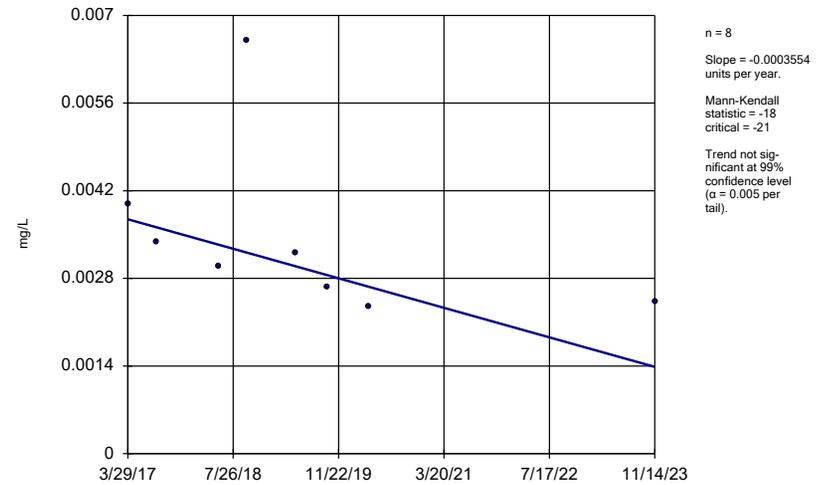
PZ-10



Constituent: Chloroethane Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

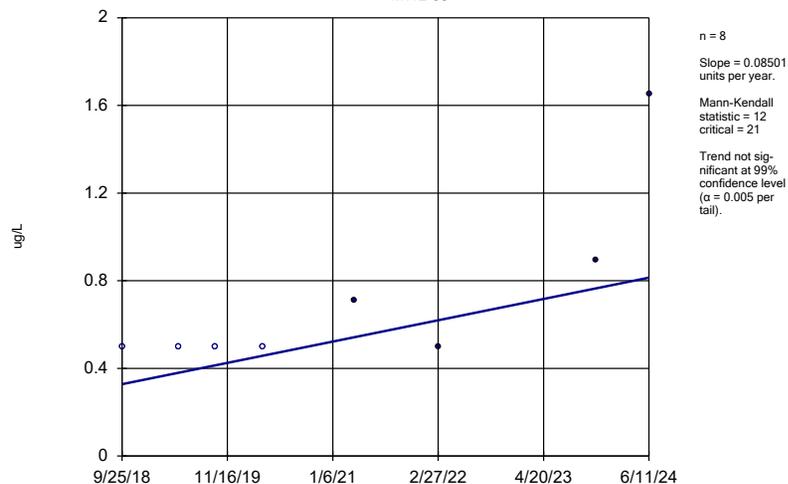
MW-38



Constituent: Chromium Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

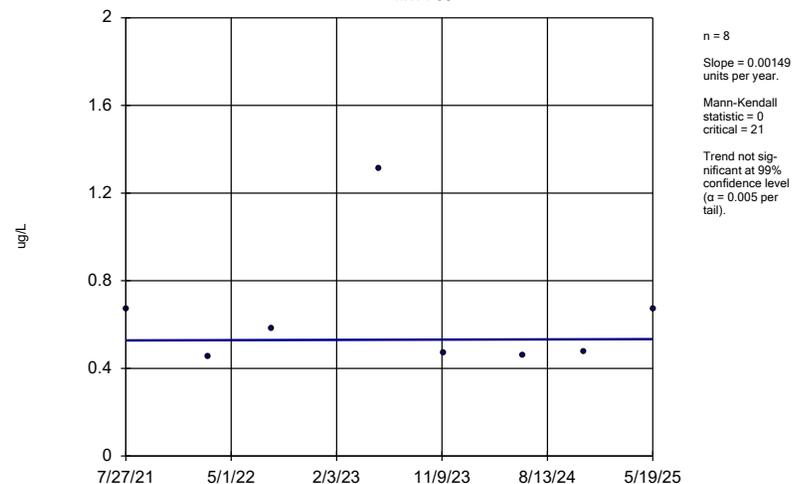
MW2-93



Constituent: cis-1,2-Dichloroethene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

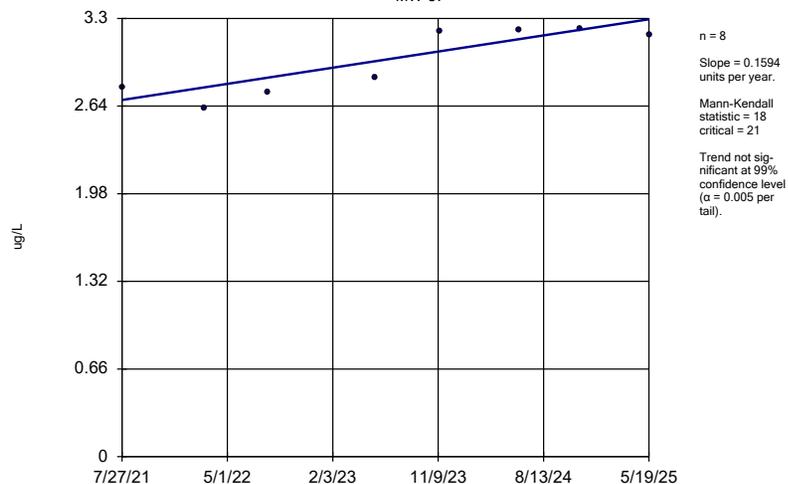
MW4-93



Constituent: cis-1,2-Dichloroethene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

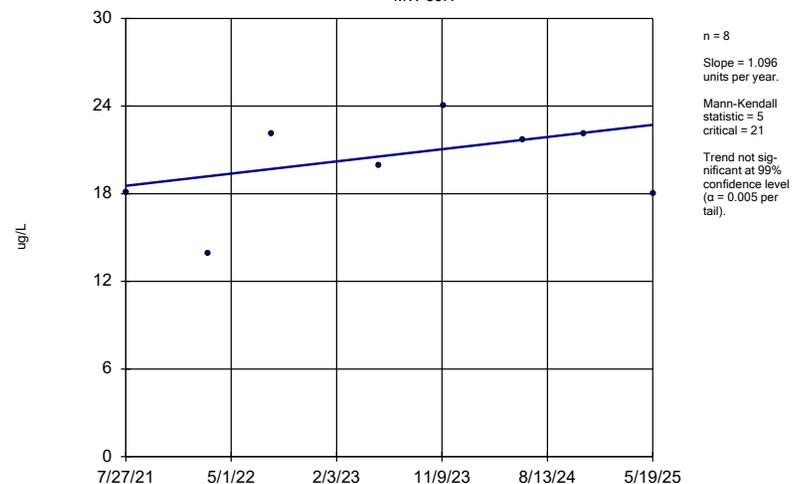
MW-37



Constituent: cis-1,2-Dichloroethene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

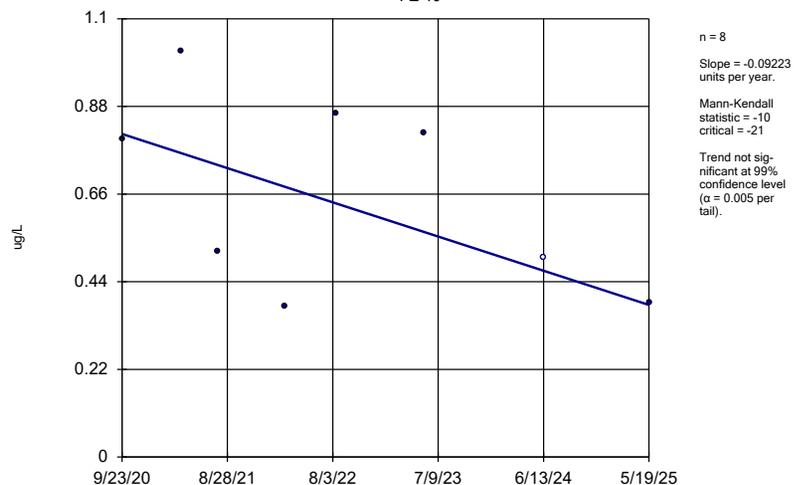
MW-39R



Constituent: cis-1,2-Dichloroethene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

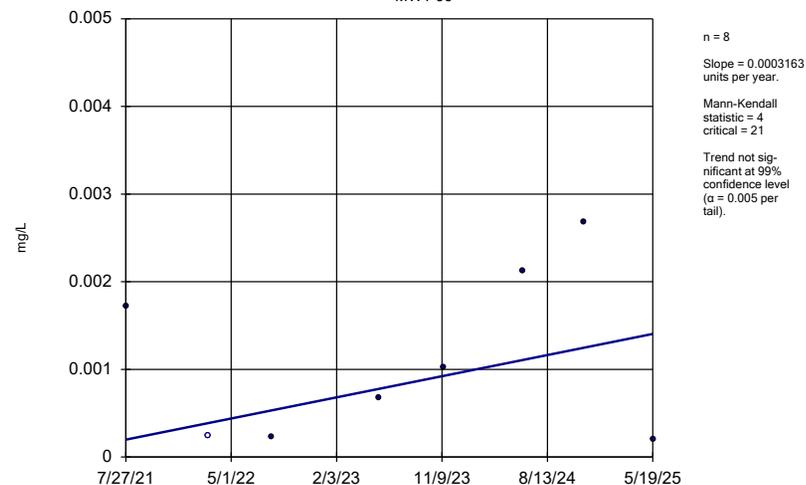
PZ-10



Constituent: cis-1,2-Dichloroethene Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

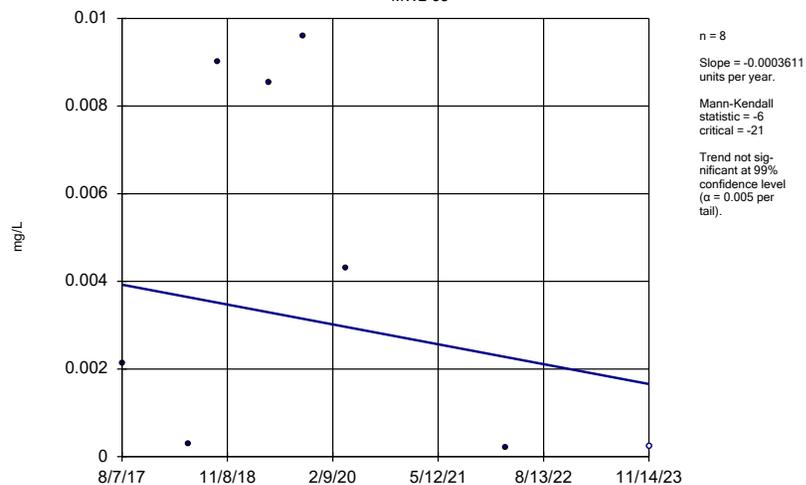
MW1-99



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

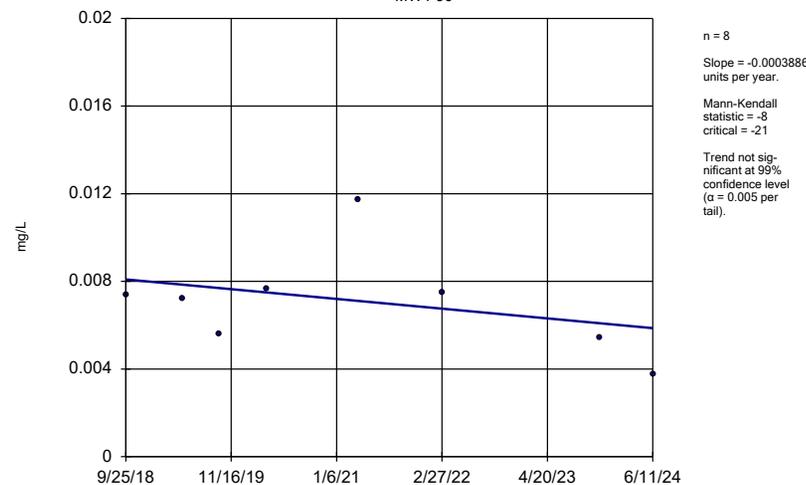
MW2-93



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

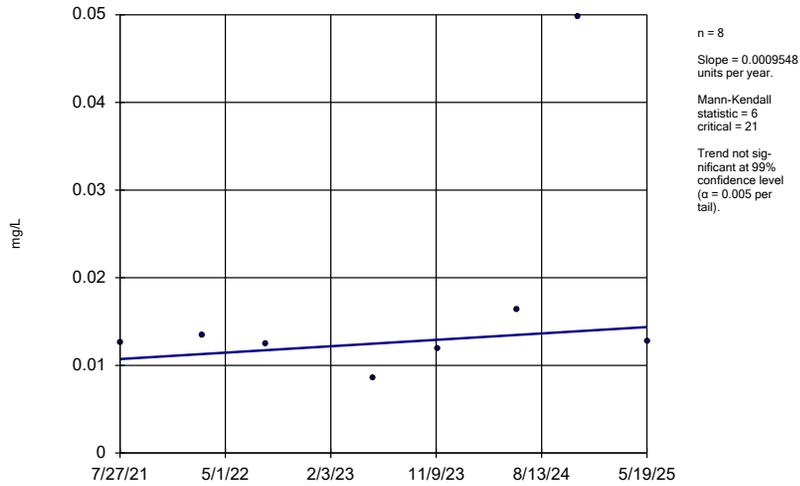
MW4-90



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

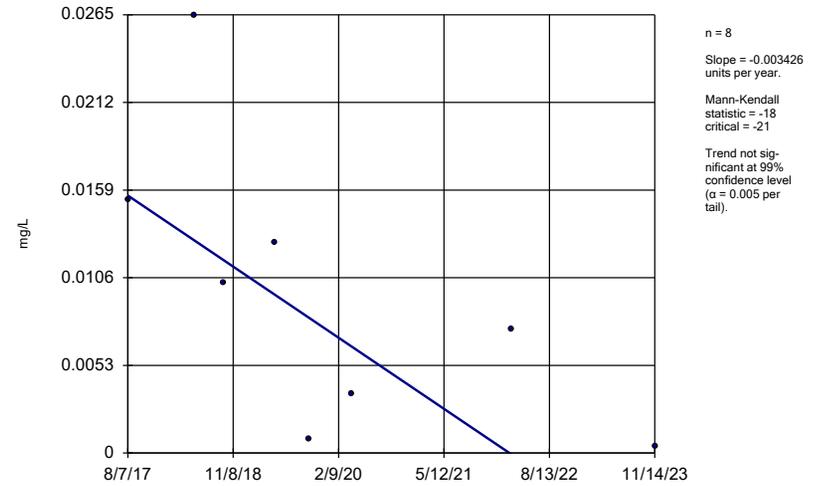
MW4-93



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

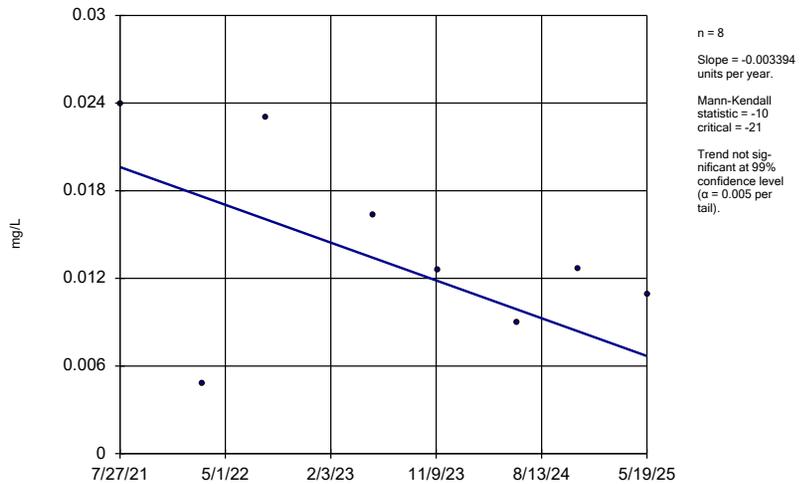
MW7-90R



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

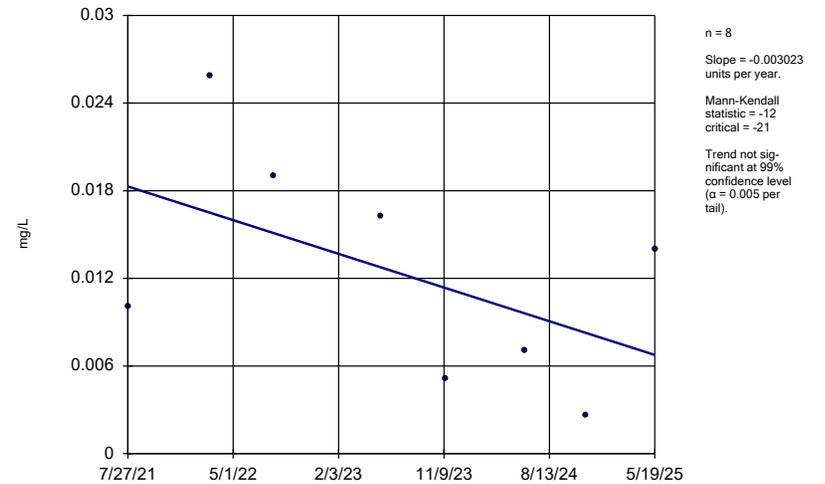
MW7-93



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

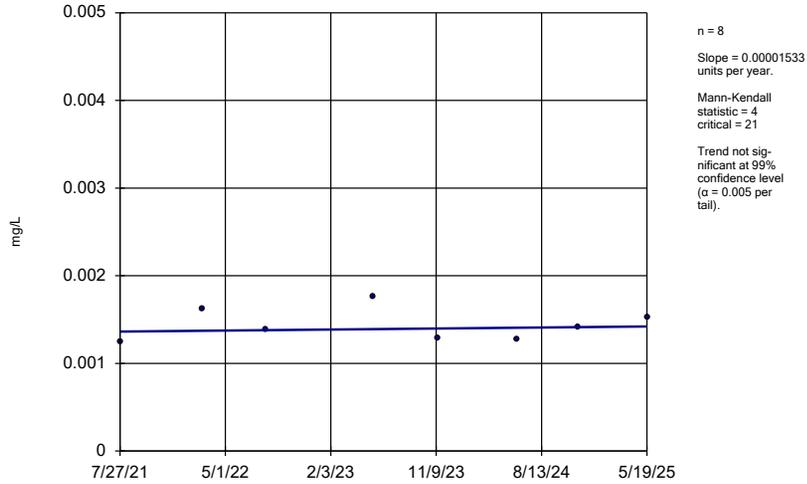
MW-37



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

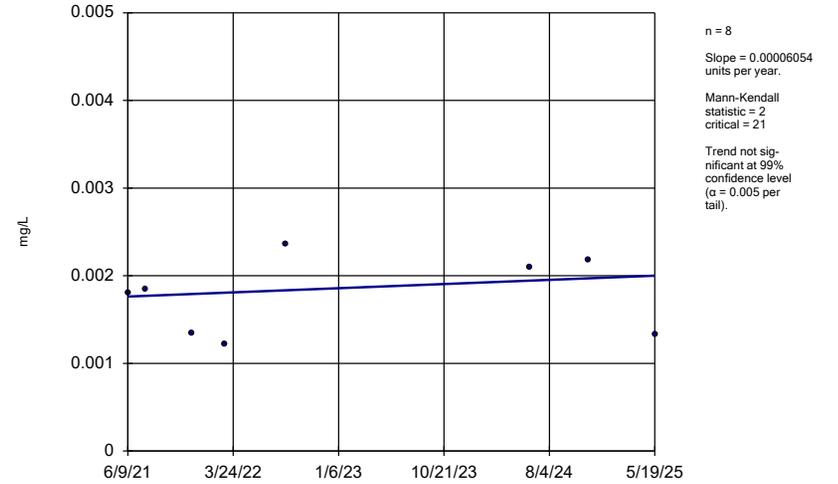
MW-39R



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

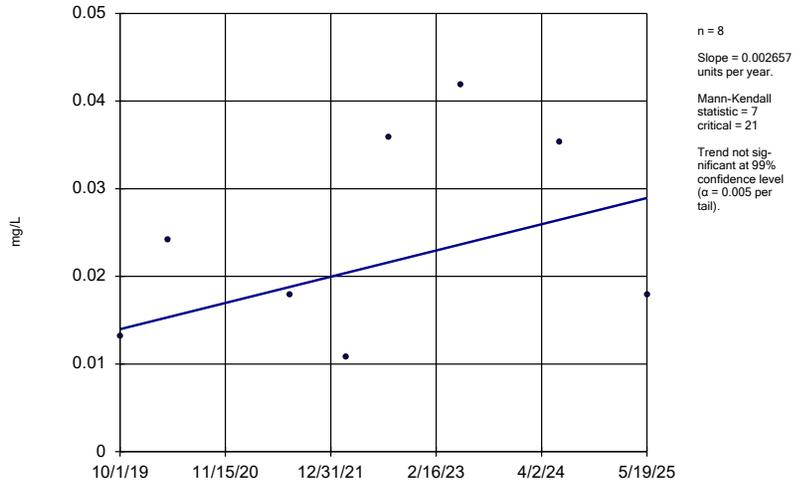
MW-43



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

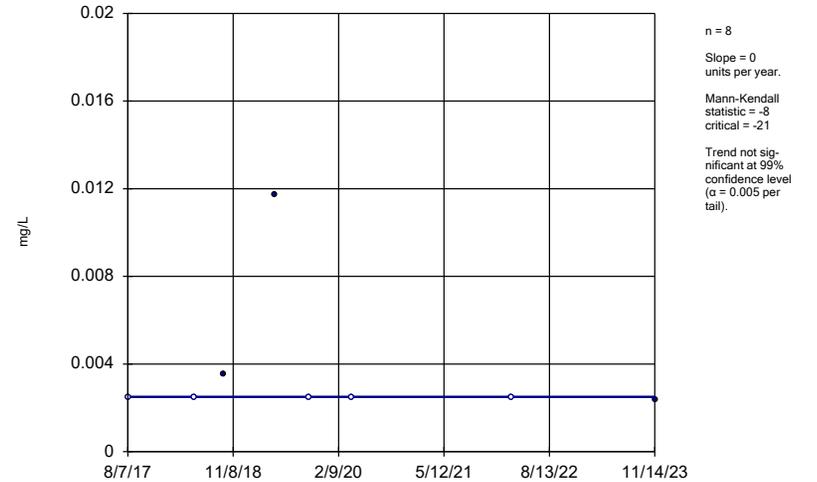
PZ-10



Constituent: Cobalt Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

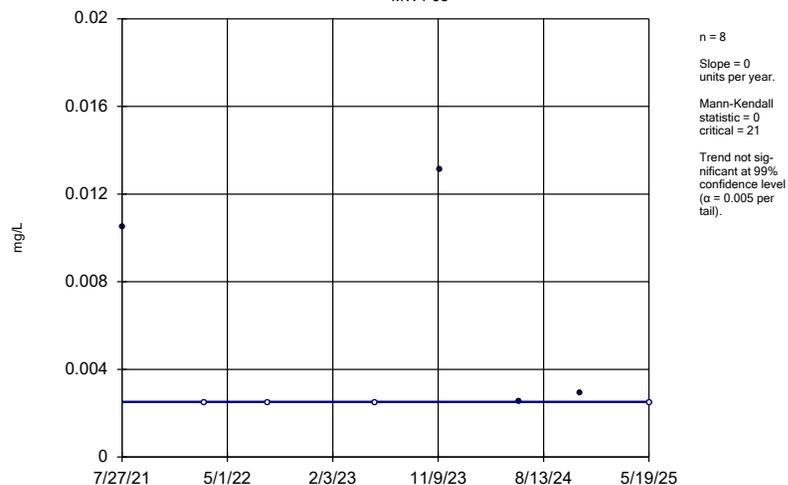
MW2-93



Constituent: Copper Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

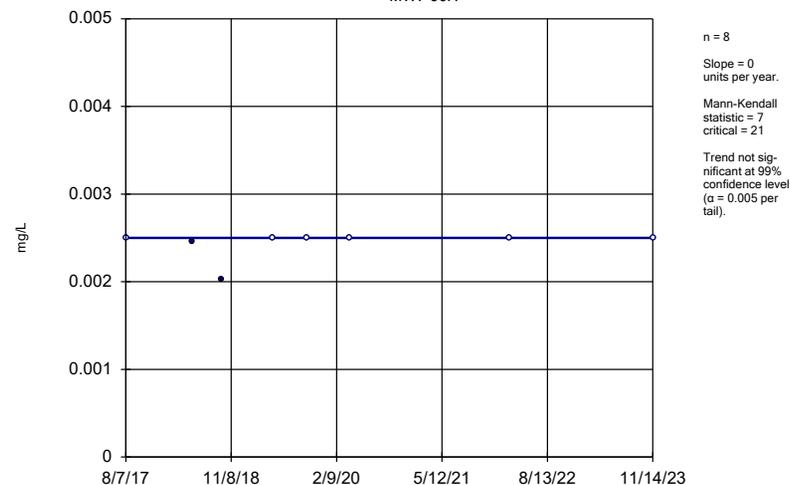
MW4-93



Constituent: Copper Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

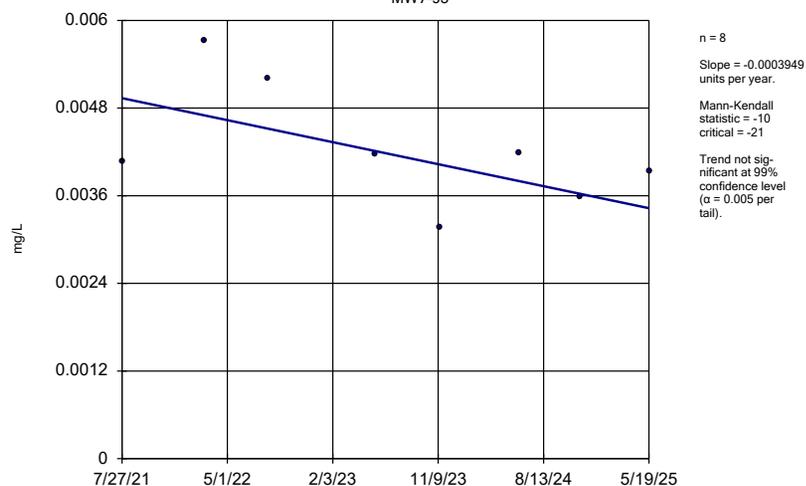
MW7-90R



Constituent: Copper Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

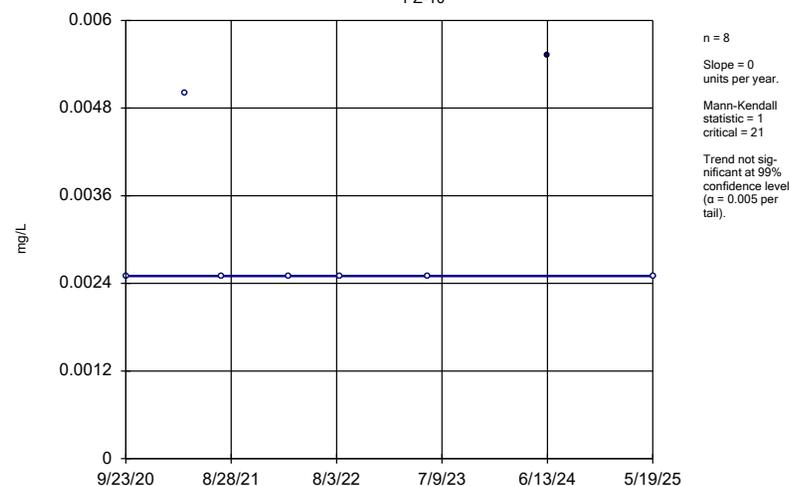
MW7-93



Constituent: Copper Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

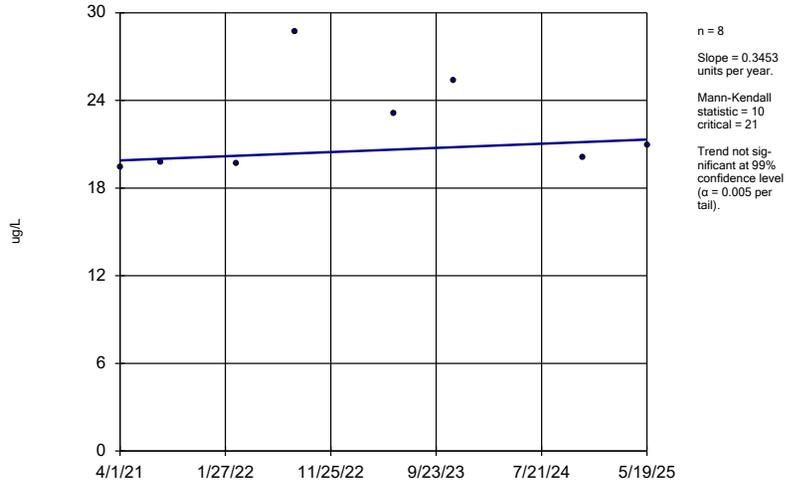
PZ-10



Constituent: Copper Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

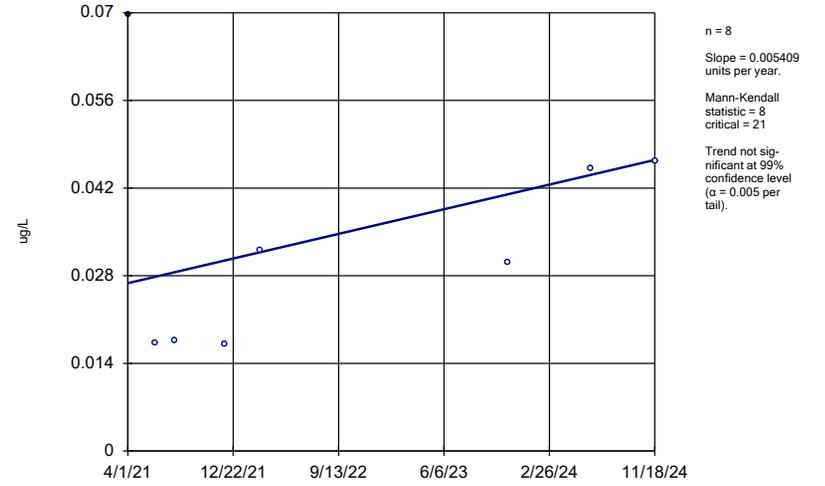
MW-39R



Constituent: Dichlorodifluoromethane Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

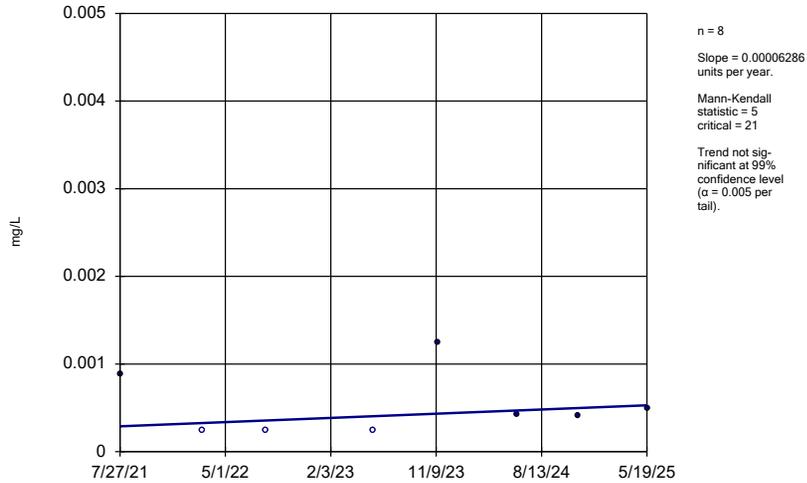
MW4-90



Constituent: Endosulfan sulfate Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

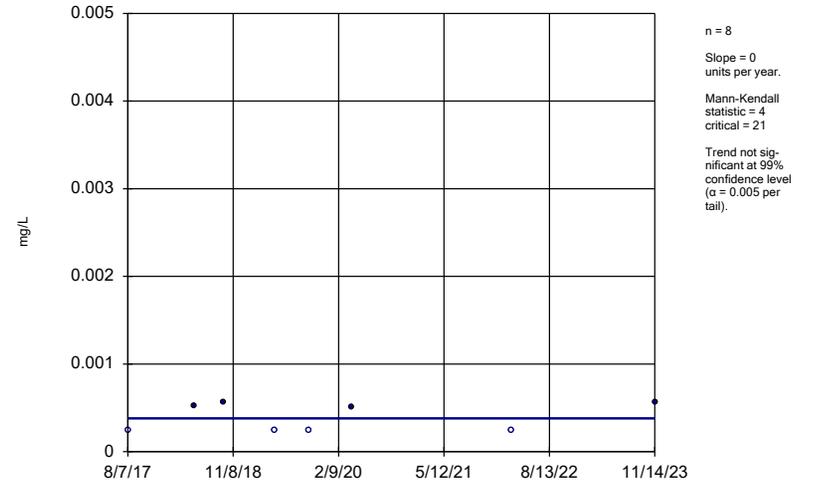
MW4-93



Constituent: Lead Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

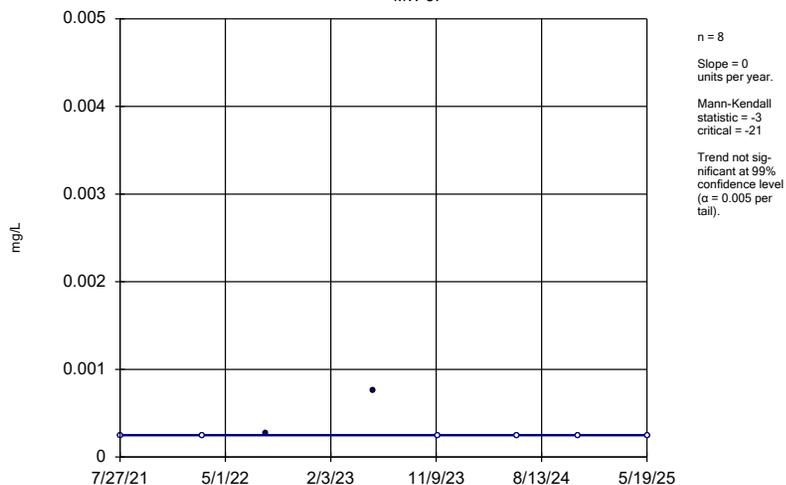
MW7-90R



Constituent: Lead Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

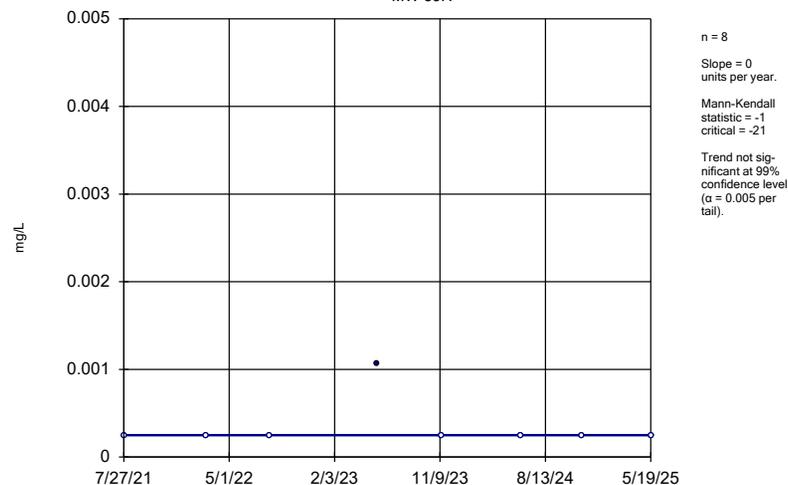
MW-37



Constituent: Lead Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

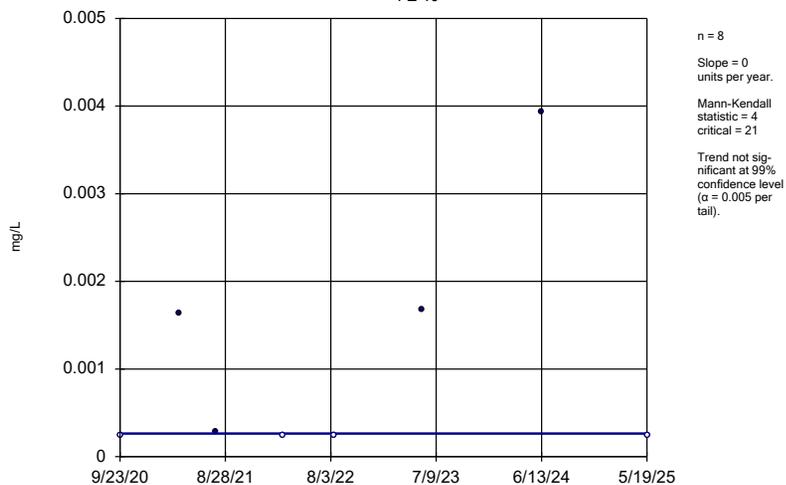
MW-39R



Constituent: Lead Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

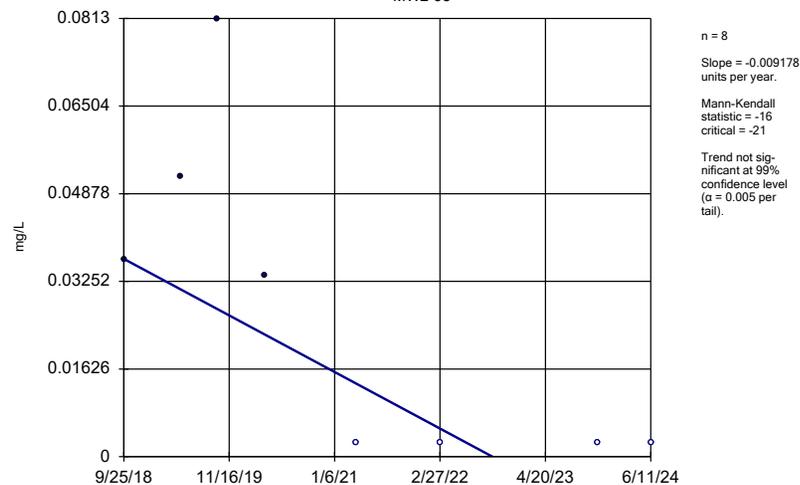
PZ-10



Constituent: Lead Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

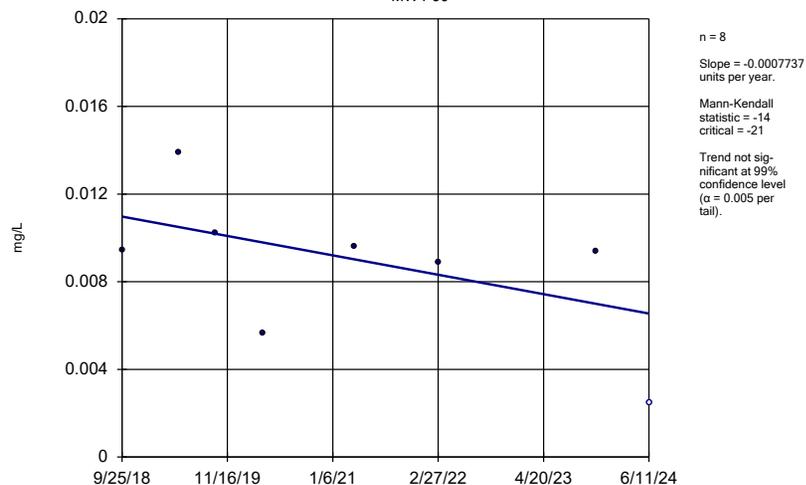
MW2-93



Constituent: Nickel Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

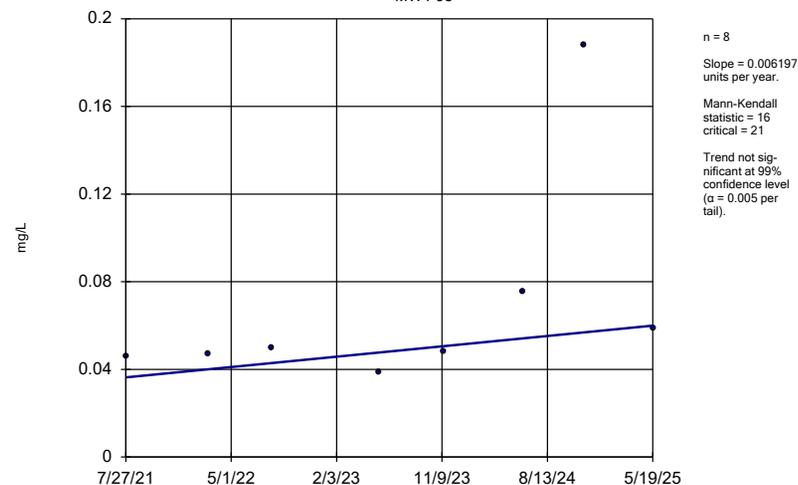
MW4-90



Constituent: Nickel Analysis Run 10/15/2025 8:58 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

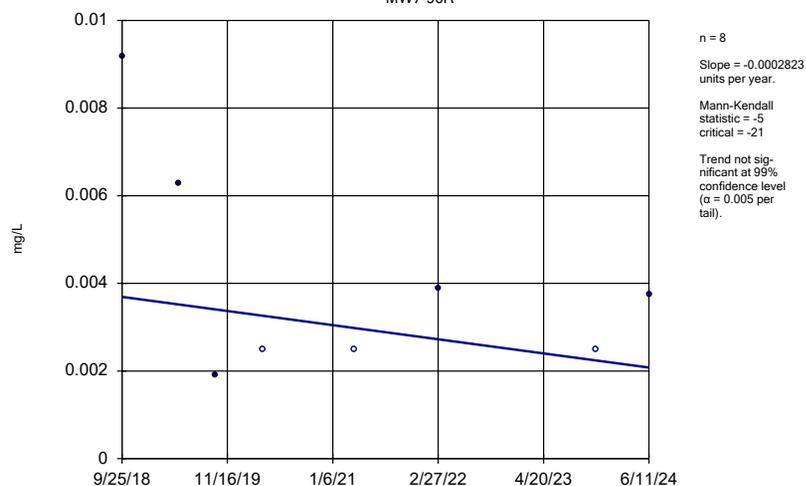
MW4-93



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

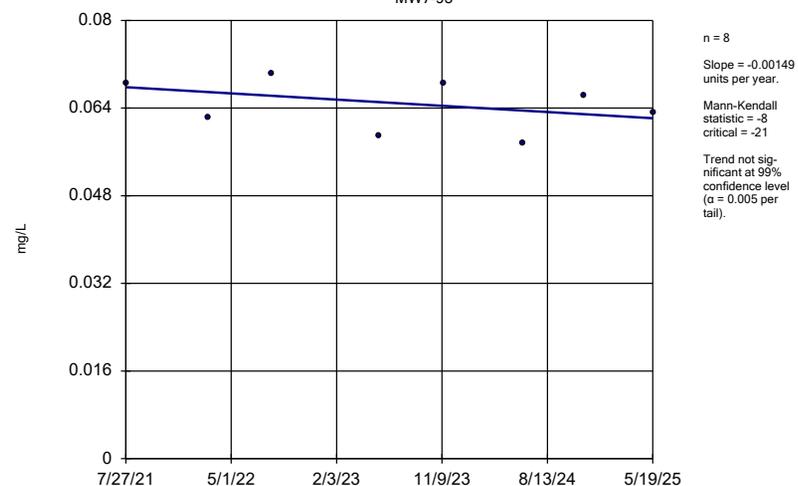
MW7-90R



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

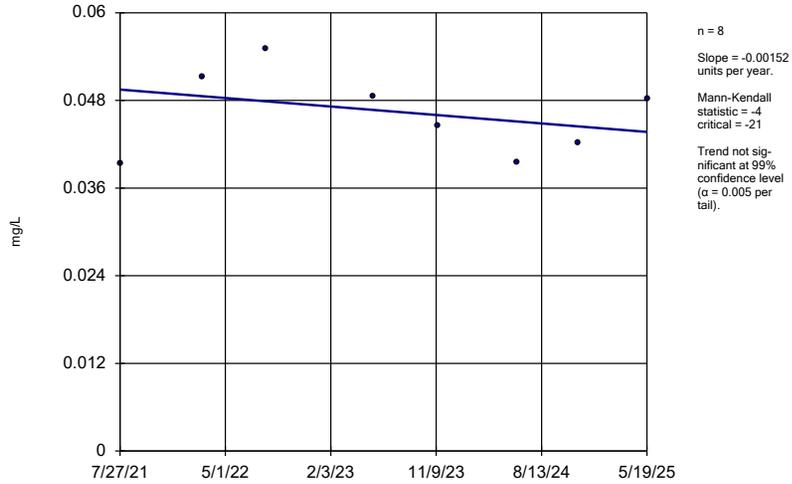
MW7-93



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

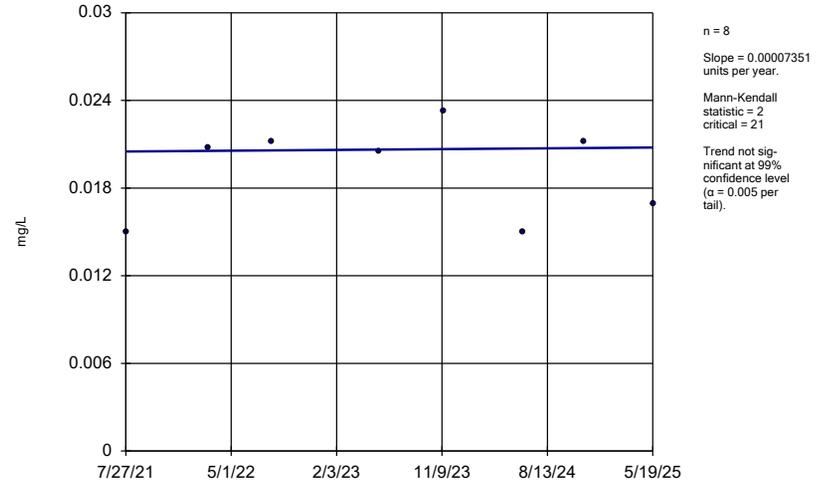
MW-37



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

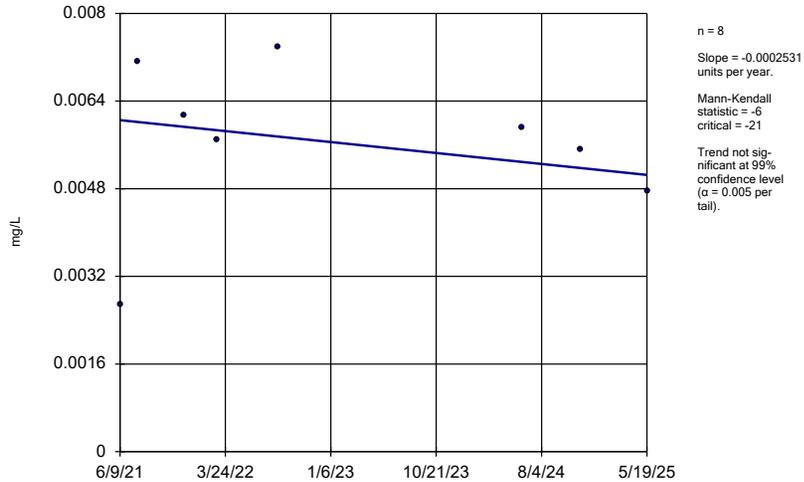
MW-39R



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

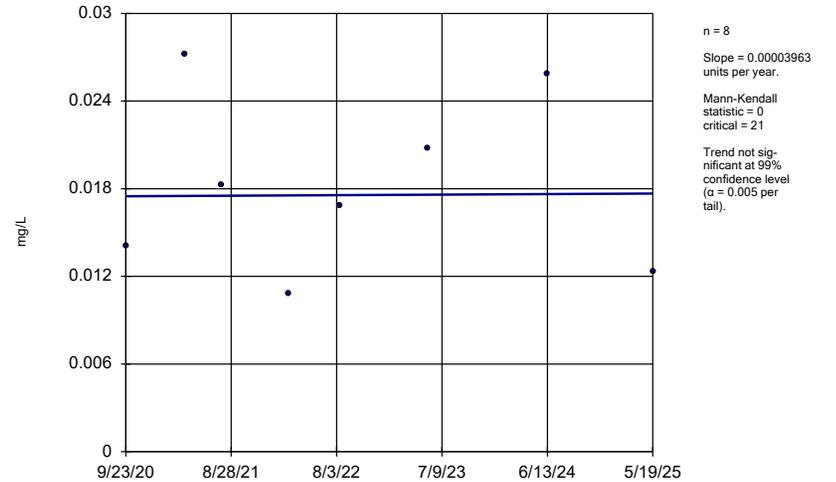
MW-43



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

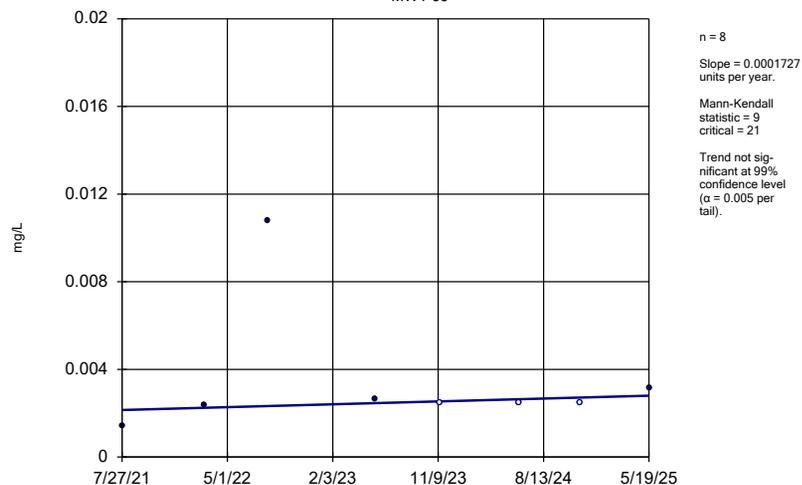
PZ-10



Constituent: Nickel Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

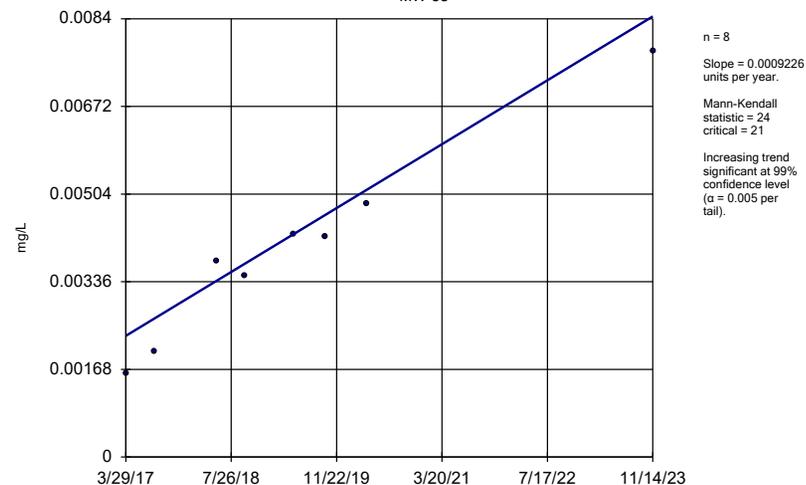
MW1-99



Constituent: Selenium Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

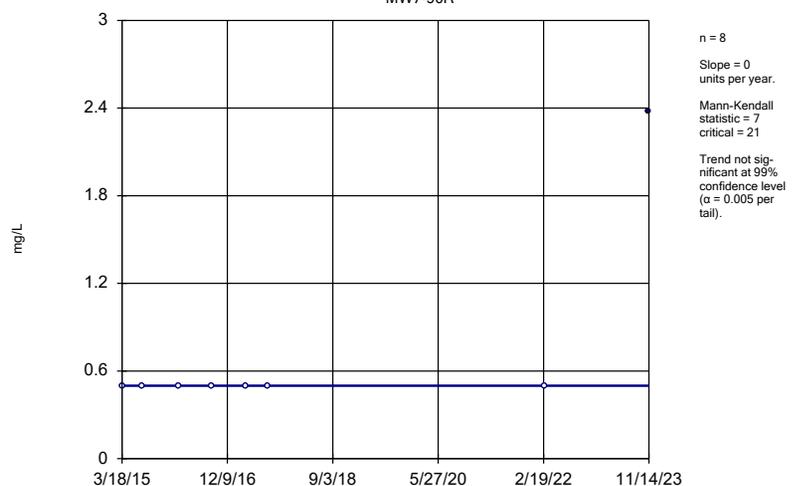
MW-38



Constituent: Selenium Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

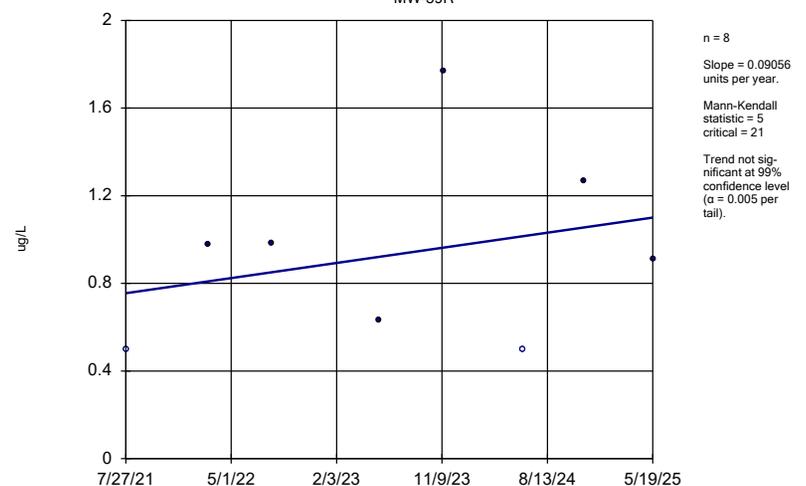
MW7-90R



Constituent: Sulfide Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

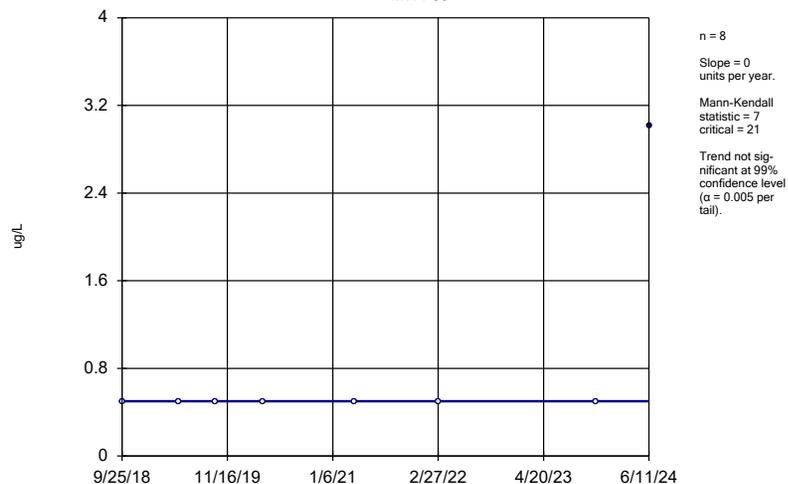
MW-39R



Constituent: Tetrachloroethene Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

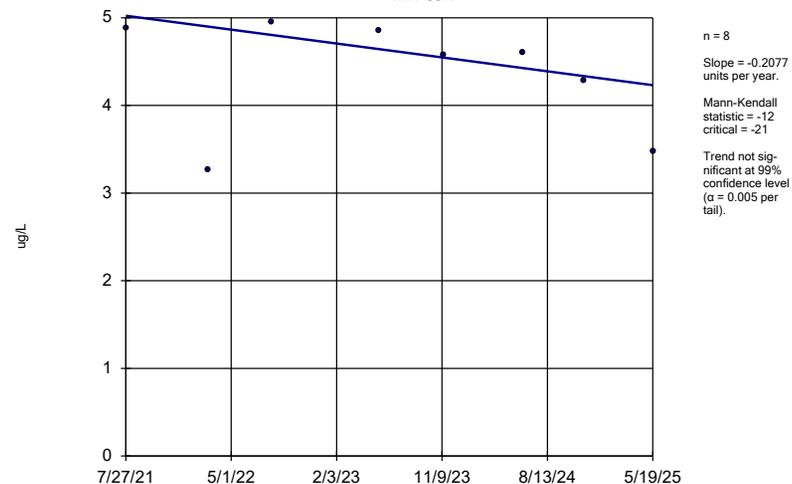
MW4-90



Constituent: Toluene Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

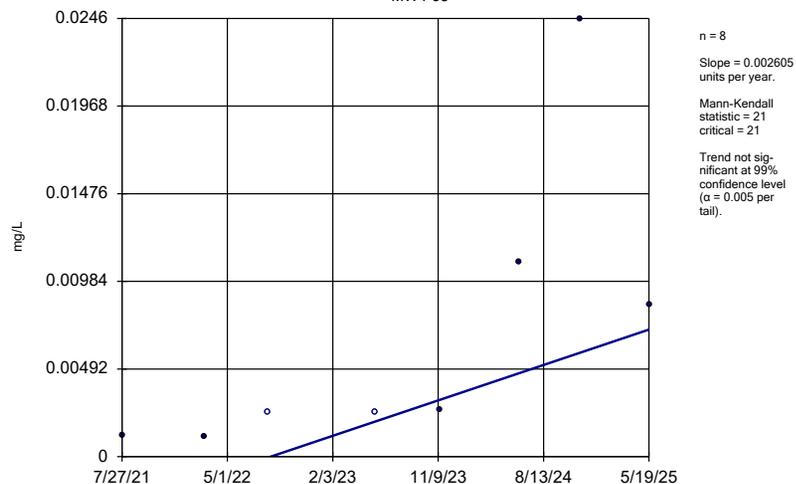
MW-39R



Constituent: Trichloroethene Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

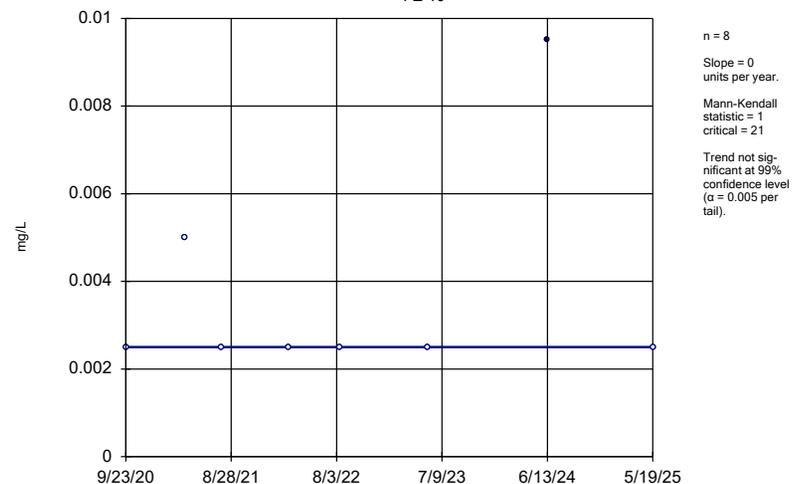
MW4-93



Constituent: Vanadium Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

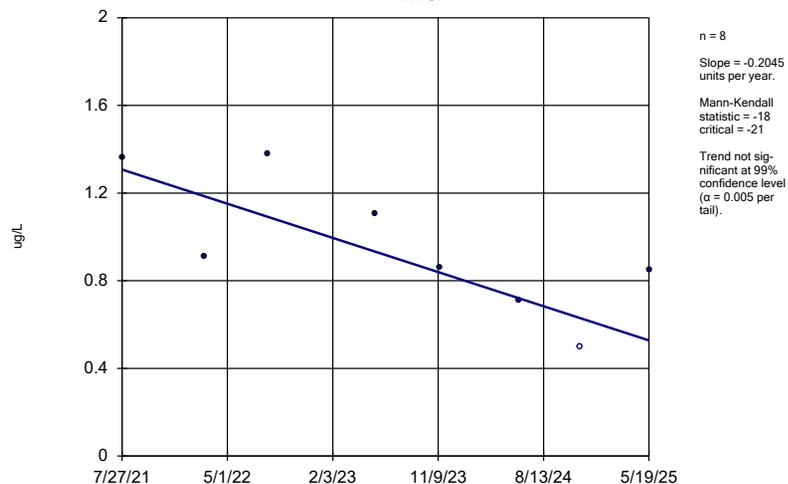
PZ-10



Constituent: Vanadium Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

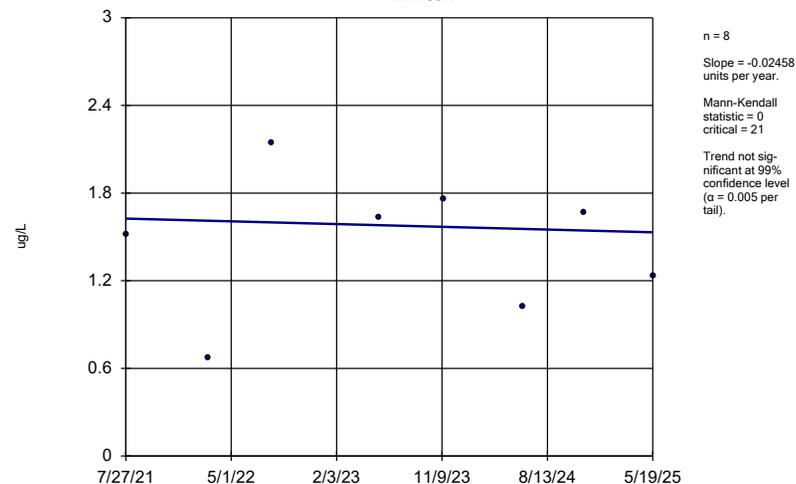
MW-37



Constituent: Vinyl Chloride Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

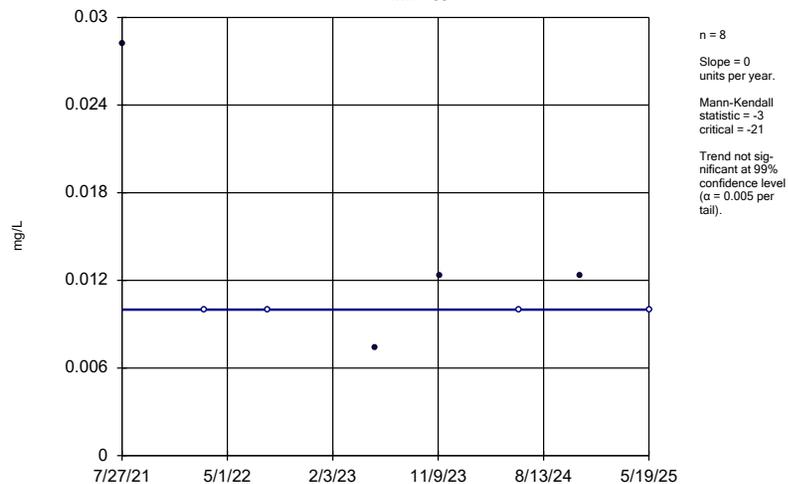
MW-39R



Constituent: Vinyl Chloride Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

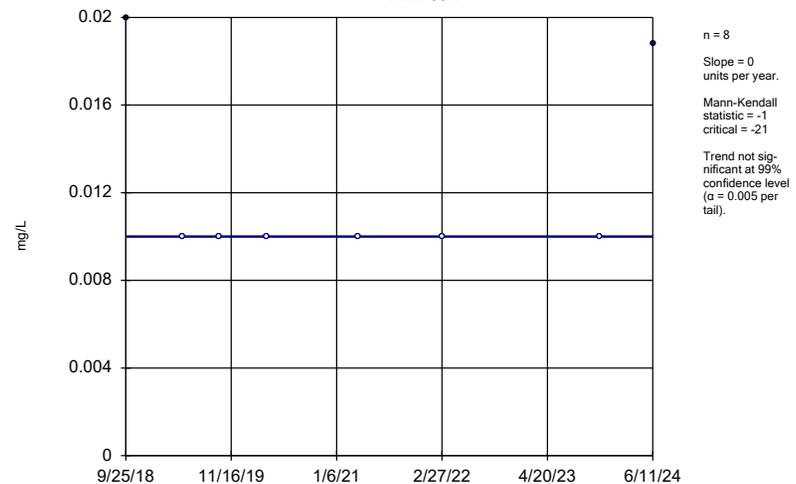
MW4-93



Constituent: Zinc Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Sen's Slope Estimator

MW7-90R



Constituent: Zinc Analysis Run 10/15/2025 8:59 AM View: 2025_SSN-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Confidence Interval Table and Graphs

Confidence Interval

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/16/2025, 2:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
1,1,1-Trichloroethane (ug/L)	MW1-99	3.07	0.5	200	No	8	87.5	No	0.004	NP (NDs)
1,1-Dichloroethane (ug/L)	MW2-93	4.704	0.501	140	No	8	50	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW4-93	3.08	1.1	140	No	8	0	No	0.004	NP (normality)
1,1-Dichloroethane (ug/L)	MW-37	65.4	42.82	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW-39R	51.64	38.23	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	PZ-10	1.33	0.8028	140	No	8	0	No	0.01	Param.
1,1-Dichloroethene (ug/L)	MW1-99	6.23	1	7	No	8	87.5	No	0.004	NP (NDs)
1,1-Dichloroethene (ug/L)	MW2-93	3.13	1	7	No	8	75	No	0.004	NP (NDs)
1,1-Dichloroethene (ug/L)	MW-37	5.388	2.654	7	No	8	0	No	0.01	Param.
1,2-Dichloroethane (ug/L)	MW1-99	1.11	0.5	5	No	8	87.5	No	0.004	NP (NDs)
1,2-Dichloropropane (ug/L)	MW1-99	1.76	0.5	5	No	8	87.5	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/L)	MW4-90	1.39	0.253	75	No	8	62.5	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/L)	MW4-93	2.448	1.042	75	No	8	12.5	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW7-90R	1.548	0.5629	75	No	8	25	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	PZ-10	9.344	6.041	75	No	8	0	No	0.01	Param.
2,4,5-TP [Silvex] [2C] (ug/L)	MW-39R	0.585	0.2	50	No	5	80	No	0.031	NP (NDs)
Acetone (ug/L)	MW4-93	11.1	3.77	6300	No	8	75	No	0.004	NP (NDs)
Acetone (ug/L)	MW-43	11.35	4.065	6300	No	8	37.5	No	0.004	NP (normality)
alpha-BHC (ug/L)	MW-39R	0.08169	0.02686	0.028	No	8	37.5	No	0.01	Param.
Antimony (mg/L)	MW4-93	0.002035	0	0.006	No	8	50	No	0.01	Param.
Arsenic (mg/L)	MW1-99	0.001847	0.0006447	0.01	No	8	37.5	No	0.01	Param.
Arsenic (mg/L)	MW2-93	0.002811	0.001143	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW4-90	0.004804	0.0008314	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	MW4-93	0.004518	0.0002597	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW7-90R	0.08237	0.006384	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-37	0.004144	0.001673	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-38	0.00178	0.001	0.01	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-43	0.007284	0.003806	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	PZ-10	0.04124	0.0006069	0.01	No	8	0	No	0.01	Param.
Barium (mg/L)	MW1-99	0.05372	0.02205	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW2-93	0.2278	0.06685	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW4-90	0.1924	0.107	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW4-93	0.0704	0.0243	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW7-90R	0.5692	0.2393	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW7-93	0.1215	0.06799	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-37	0.02	0.01767	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-38	0.4174	0.3606	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-39R	0.2347	0.1883	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-43	0.6373	0.5232	2	No	8	0	No	0.01	Param.
Barium (mg/L)	PZ-10	0.3701	0.2706	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW4-90	0.57	0.25	5	No	8	87.5	No	0.004	NP (NDs)
Benzene (ug/L)	MW4-93	0.448	0.2656	5	No	8	12.5	No	0.01	Param.
Benzene (ug/L)	MW7-90R	1.337	0.2546	5	No	8	25	No	0.01	Param.
Benzene (ug/L)	MW-37	0.8125	0.5295	5	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-39R	1.246	0.3252	5	No	8	12.5	No	0.01	Param.
Benzene (ug/L)	PZ-10	4.577	2.111	5	No	8	0	No	0.01	Param.
Beryllium (mg/L)	MW4-93	0.00161	0.0005	0.004	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	MW2-93	0.0003015	0.00006864	0.005	No	8	50	No	0.01	Param.
Cadmium (mg/L)	MW4-93	0.0004631	0	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW7-93	0.0003076	0.0001104	0.005	No	8	12.5	No	0.01	Param.

Confidence Interval

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/16/2025, 2:21 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Cadmium (mg/L)	PZ-10	0.00025	0.00005	0.005	No	8	87.5	No	0.004	NP (NDs)
Chlorobenzene (ug/L)	MW2-93	16.7	0.5	100	No	8	50	No	0.004	NP (normality)
Chlorobenzene (ug/L)	MW4-90	2.92	0.5	100	No	8	75	No	0.004	NP (NDs)
Chlorobenzene (ug/L)	MW4-93	28.62	19.43	100	No	8	0	No	0.01	Param.
Chlorobenzene (ug/L)	MW-37	6.424	2.423	100	No	8	0	No	0.01	Param.
Chlorobenzene (ug/L)	PZ-10	12.15	9.405	100	No	8	0	No	0.01	Param.
Chloroethane (ug/L)	MW4-90	20.86	0.5466	2800	No	8	0	No	0.01	Param.
Chloroethane (ug/L)	MW-37	21.72	14.22	2800	No	8	0	No	0.01	Param.
Chloroethane (ug/L)	PZ-10	6.428	2.925	2800	No	8	0	No	0.01	Param.
Chromium (mg/L)	MW-38	0.004921	0.001987	0.1	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW2-93	1.65	0.497	70	No	8	50	No	0.004	NP (normality)
cis-1,2-Dichloroethene (ug/L)	MW4-93	1.31	0.453	70	No	8	0	No	0.004	NP (normality)
cis-1,2-Dichloroethene (ug/L)	MW-37	3.241	2.709	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-39R	23.39	16.56	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	PZ-10	0.9173	0.4022	70	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW1-99	0.002128	0.00009928	0.004646	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW2-93	0.008723	0	0.004646	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW4-90	0.0095	0.004557	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW4-93	0.0498	0.00852	0.004646	Yes	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	MW7-90R	0.01886	0.0004254	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW7-93	0.02116	0.007137	0.004646	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-37	0.02077	0.004265	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-39R	0.001631	0.001247	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-43	0.002226	0.001315	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	PZ-10	0.03695	0.01225	0.004646	Yes	8	0	No	0.01	Param.
Copper (mg/L)	MW2-93	0.0117	0.00237	1.3	No	8	62.5	No	0.004	NP (NDs)
Copper (mg/L)	MW4-93	0.0131	0.0025	1.3	No	8	50	No	0.004	NP (normality)
Copper (mg/L)	MW7-90R	0.0025	0.00203	1.3	No	8	75	No	0.004	NP (NDs)
Copper (mg/L)	MW7-93	0.005138	0.003374	1.3	No	8	0	No	0.01	Param.
Copper (mg/L)	PZ-10	0.00553	0.0025	1.3	No	8	87.5	No	0.004	NP (NDs)
Dichlorodifluoromethane (ug/L)	MW-39R	25.7	18.57	1000	No	8	0	No	0.01	Param.
Endosulfan sulfate (ug/L)	MW4-90	0.0697	0.017	0.0333	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW4-93	0.000897	0.0002965	0.015	No	8	37.5	No	0.01	Param.
Lead (mg/L)	MW7-90R	0.000568	0.00025	0.015	No	8	50	No	0.004	NP (normality)
Lead (mg/L)	MW-37	0.0007635	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-39R	0.00106	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	PZ-10	0.00394	0.00025	0.015	No	8	50	No	0.004	NP (normality)
Nickel (mg/L)	MW2-93	0.05607	0	0.1	No	8	50	No	0.01	Param.
Nickel (mg/L)	MW4-90	0.01226	0.005149	0.1	No	8	12.5	No	0.01	Param.
Nickel (mg/L)	MW4-93	0.188	0.0386	0.1	No	8	0	No	0.004	NP (normality)
Nickel (mg/L)	MW7-90R	0.006693	0.001939	0.1	No	8	37.5	No	0.01	Param.
Nickel (mg/L)	MW7-93	0.06948	0.05941	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-37	0.05209	0.04006	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-39R	0.02258	0.01589	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-43	0.007216	0.004095	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	PZ-10	0.02468	0.01187	0.1	No	8	0	No	0.01	Param.
Selenium (mg/L)	MW1-99	0.0108	0.001405	0.05	No	8	37.5	No	0.004	NP (normality)
Sulfide (mg/L)	MW7-90R	2.38	0.5	1	No	8	87.5	No	0.004	NP (NDs)
Tetrachloroethene (ug/L)	MW-39R	1.386	0.6871	5	No	8	25	No	0.01	Param.
Toluene (ug/L)	MW4-90	3.01	0.5	1000	No	8	87.5	No	0.004	NP (NDs)

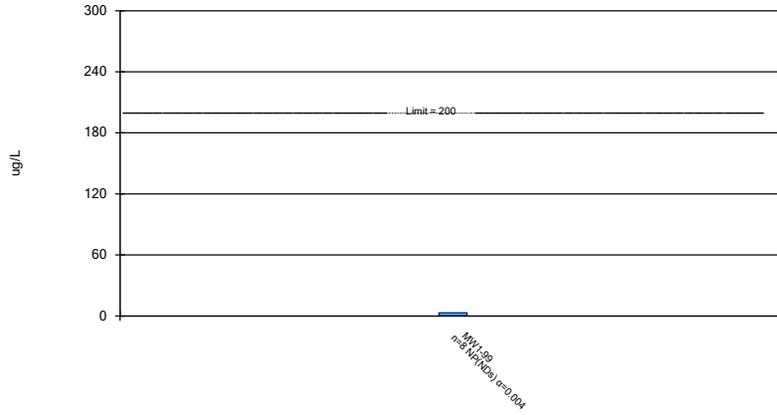
Confidence Interval

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/16/2025, 2:21 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Trichloroethene (ug/L)	MW-39R	5.049	3.676	5	No	8	0	No	0.01	Param.
Vanadium (mg/L)	MW4-93	0.0246	0.00116	0.035	No	8	25	No	0.004	NP (normality)
Vanadium (mg/L)	PZ-10	0.0095	0.0025	0.035	No	8	87.5	No	0.004	NP (NDs)
Vinyl Chloride (ug/L)	MW-37	1.284	0.6355	2	No	8	12.5	No	0.01	Param.
Vinyl Chloride (ug/L)	MW-39R	1.945	0.9652	2	No	8	0	No	0.01	Param.
Zinc (mg/L)	MW4-93	0.0282	0.00741	2	No	8	50	No	0.004	NP (normality)
Zinc (mg/L)	MW7-90R	0.02	0.01	2	No	8	75	No	0.004	NP (NDs)

Non-Parametric Confidence Interval

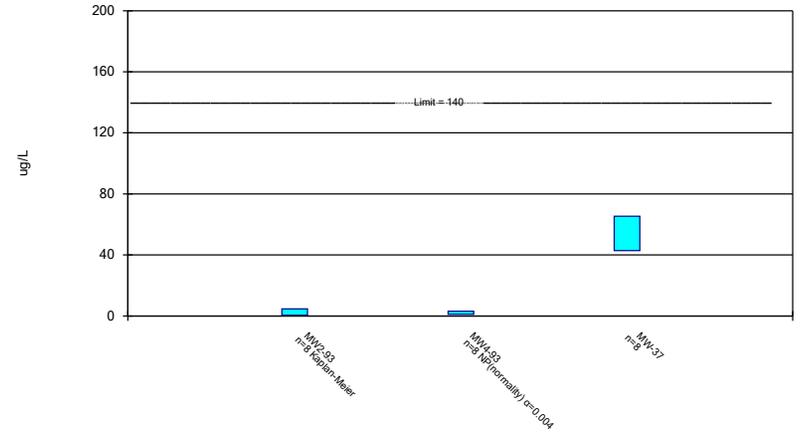
Compliance Limit is not exceeded.



Constituent: 1,1,1-Trichloroethane Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

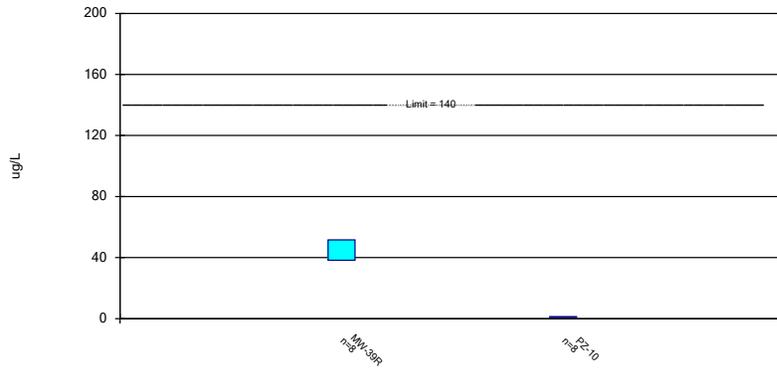
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

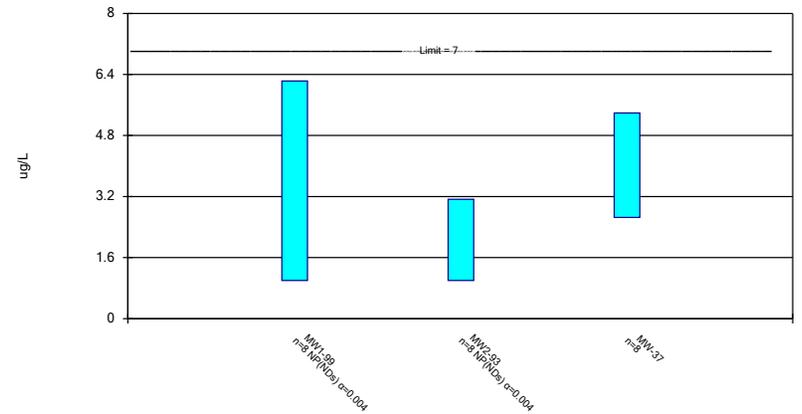
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Constituent: 1,1-Dichloroethane Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

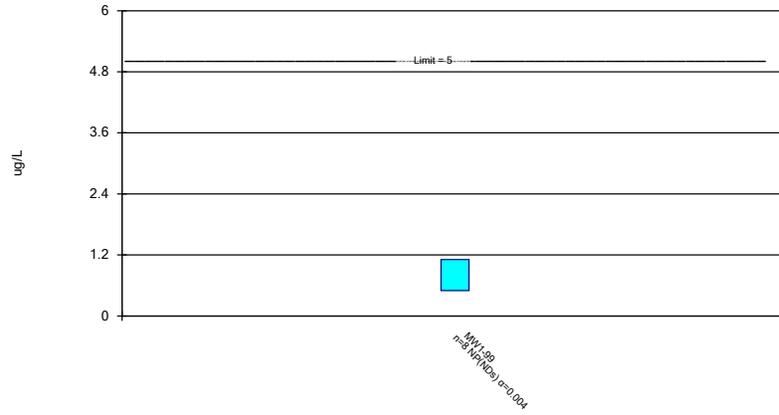
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Constituent: 1,1-Dichloroethane Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

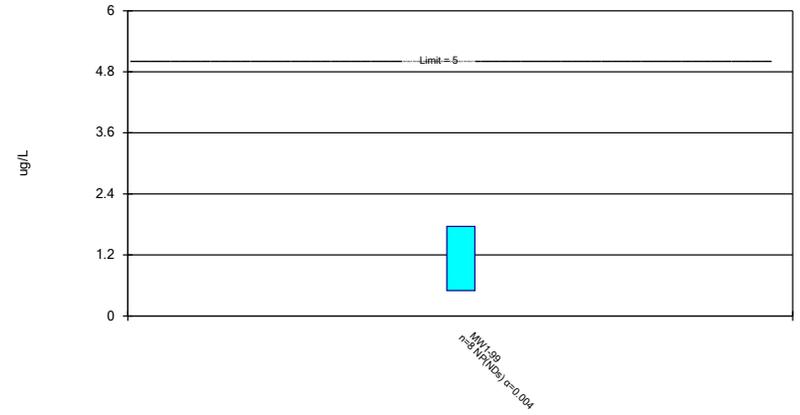
Compliance Limit is not exceeded.



Constituent: 1,2-Dichloroethane Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

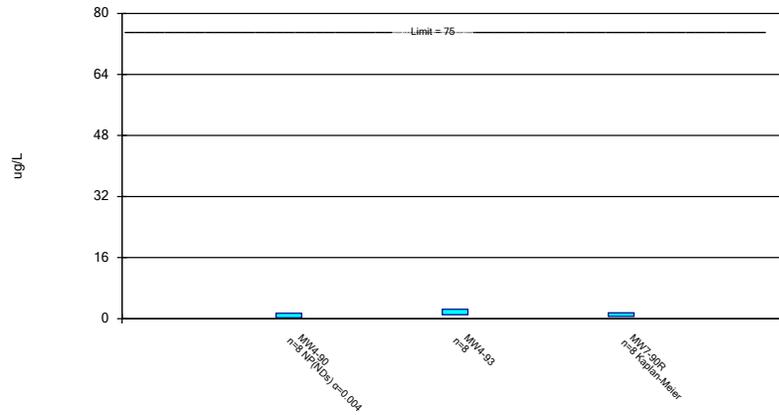
Compliance Limit is not exceeded.



Constituent: 1,2-Dichloropropane Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

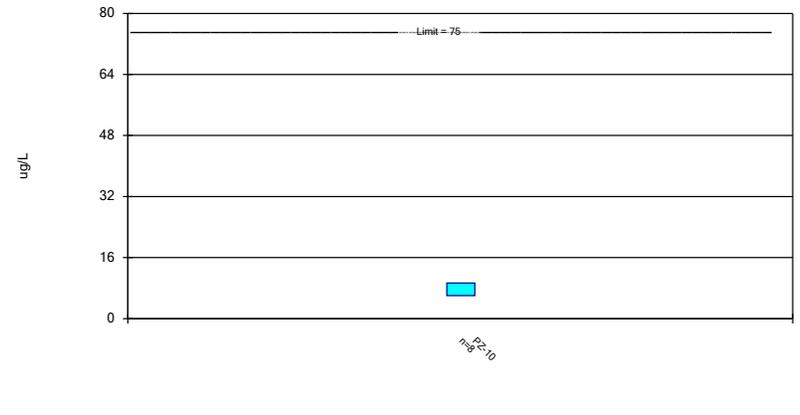
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Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

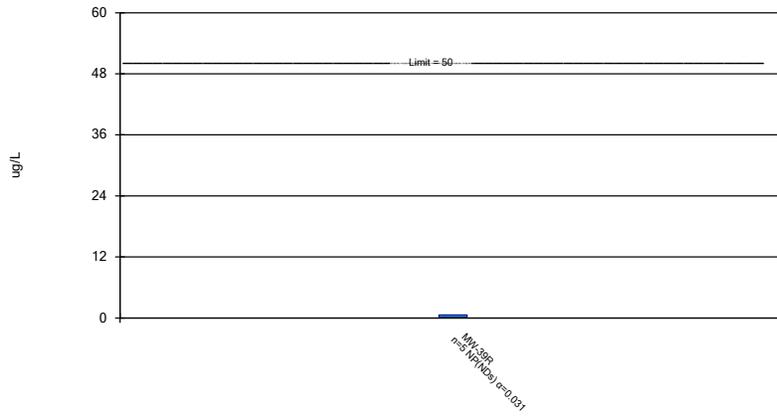
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Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

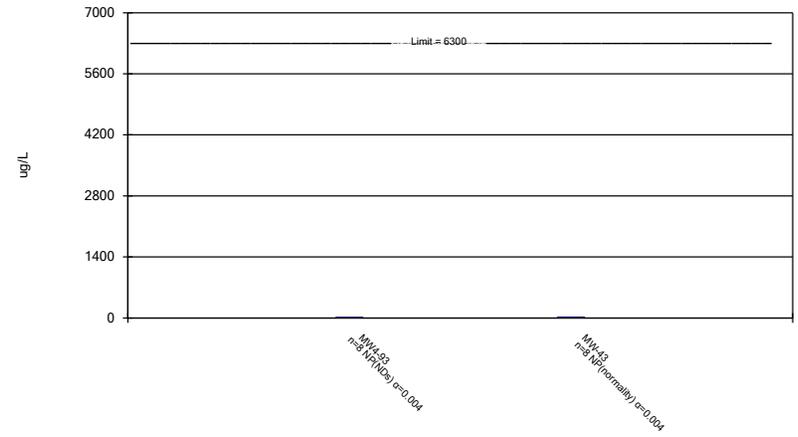
Compliance Limit is not exceeded.



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

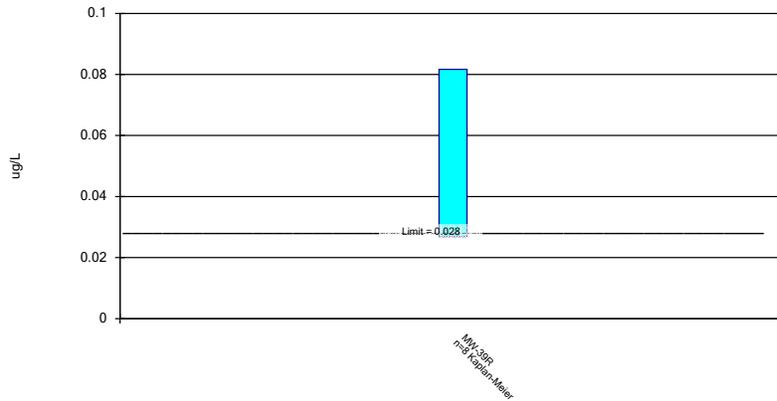
Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

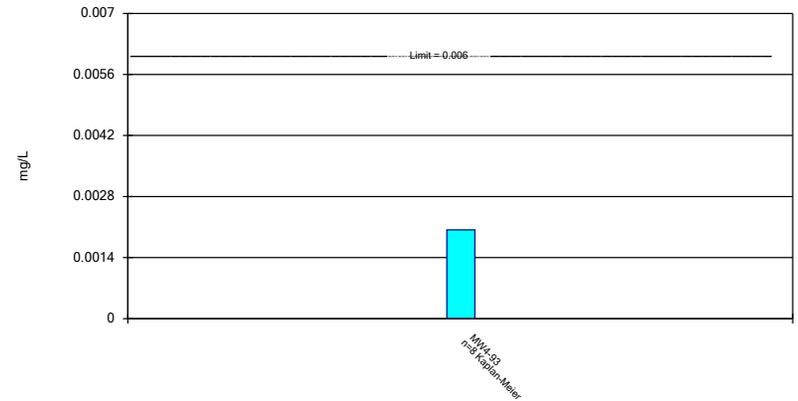
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: alpha-BHC Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

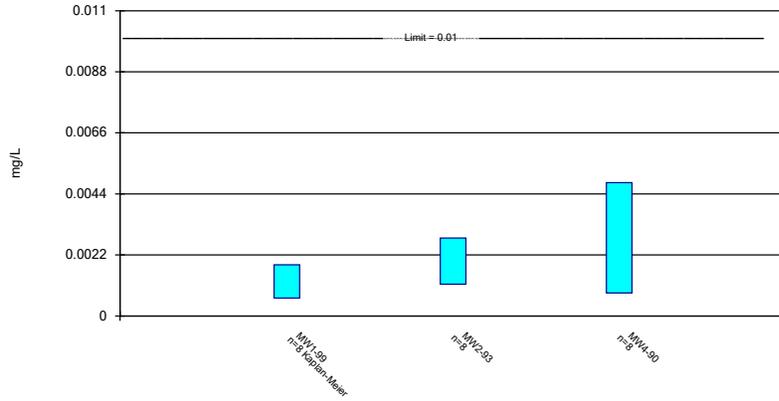
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Antimony Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

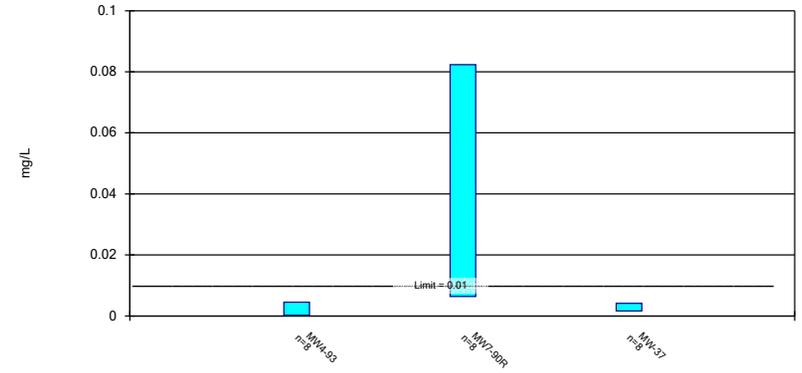
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Constituent: Arsenic Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

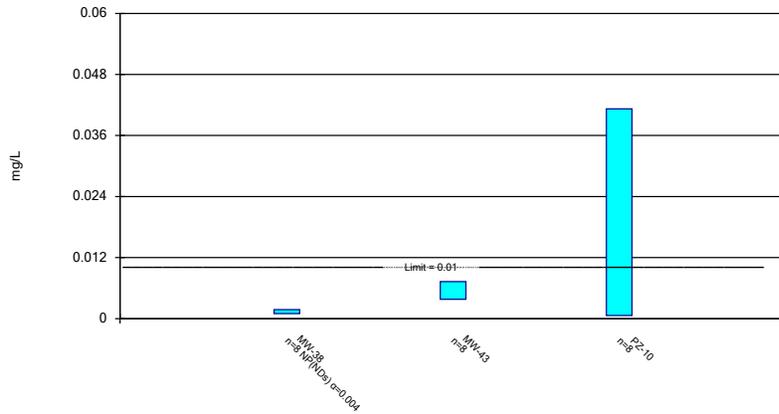
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Constituent: Arsenic Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

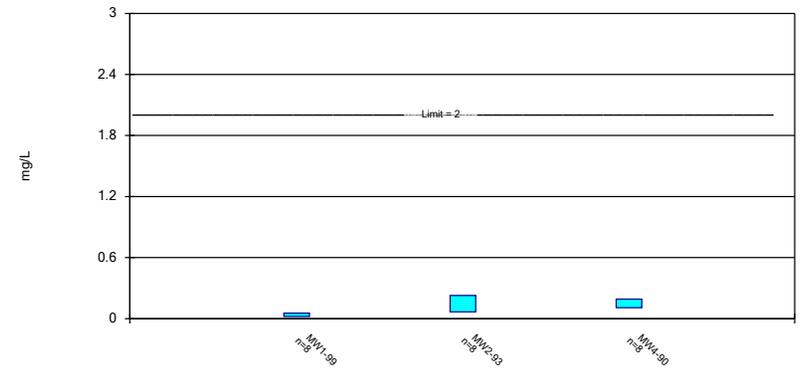
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Constituent: Arsenic Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

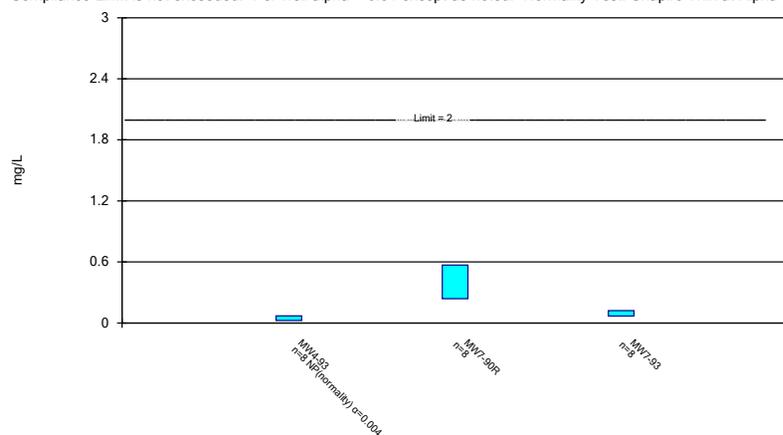
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Constituent: Barium Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

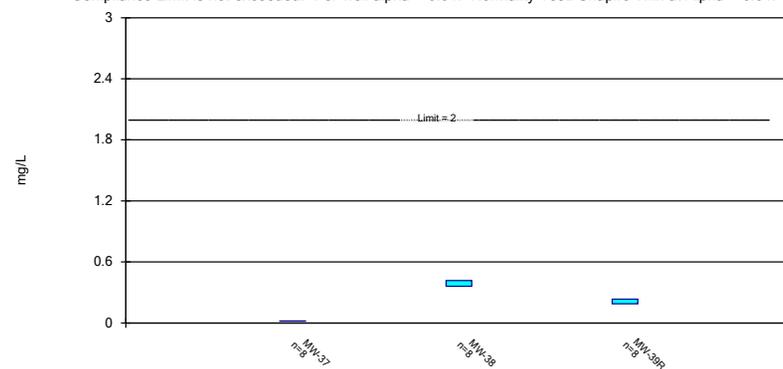
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Constituent: Barium Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

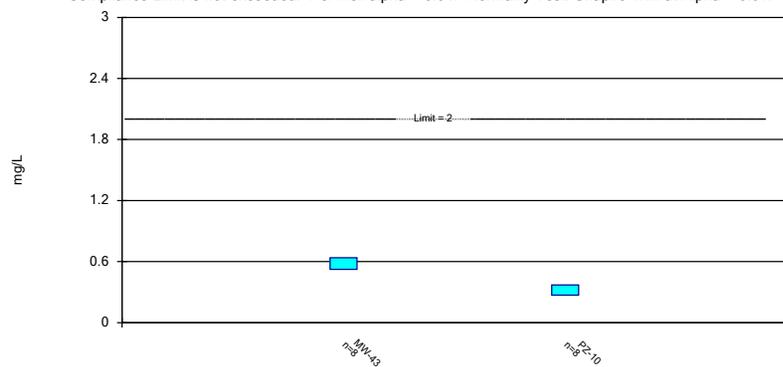
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Constituent: Barium Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

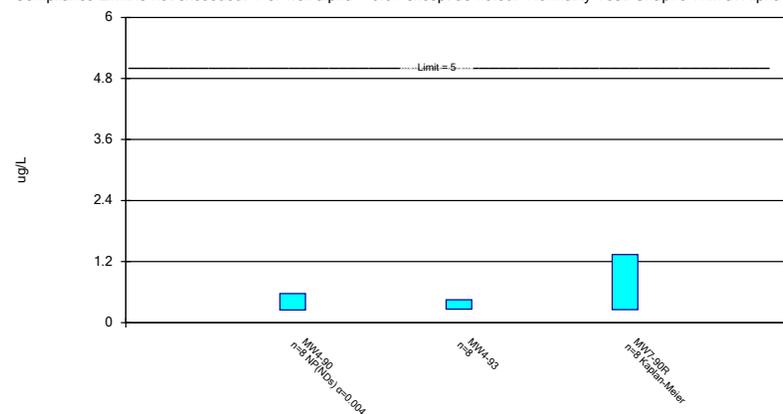
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Constituent: Barium Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

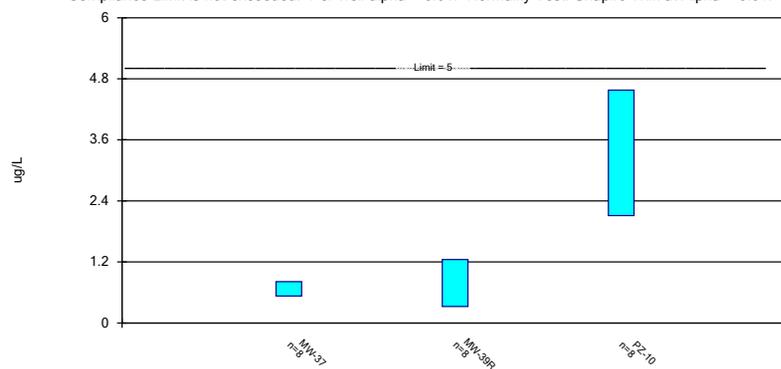
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Constituent: Benzene Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

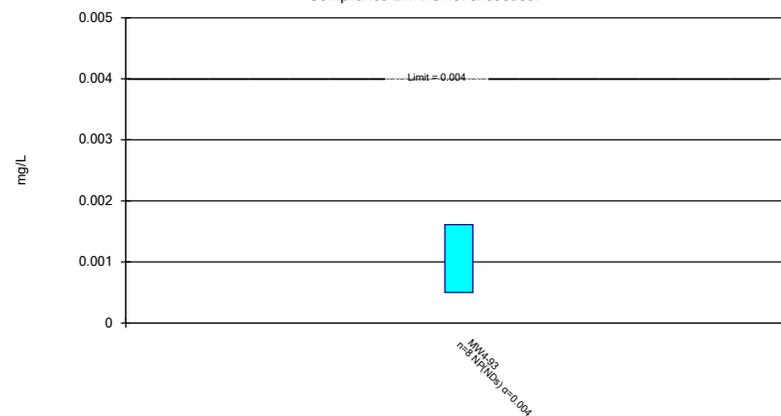
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

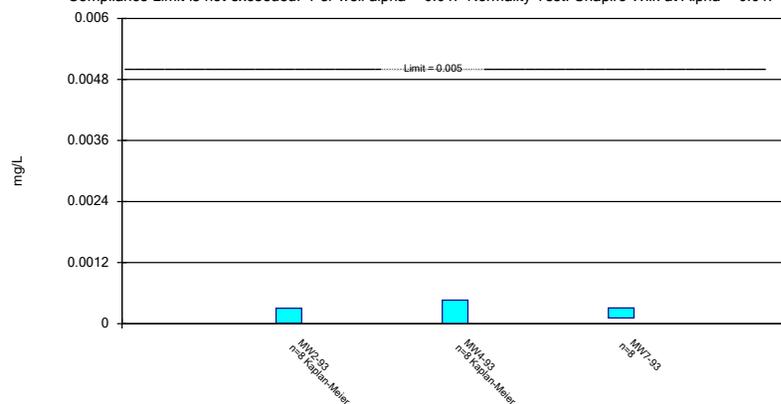
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

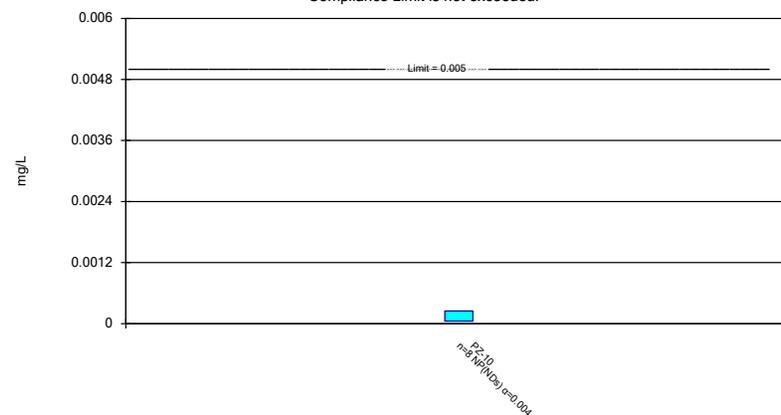
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 10/16/2025 2:18 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

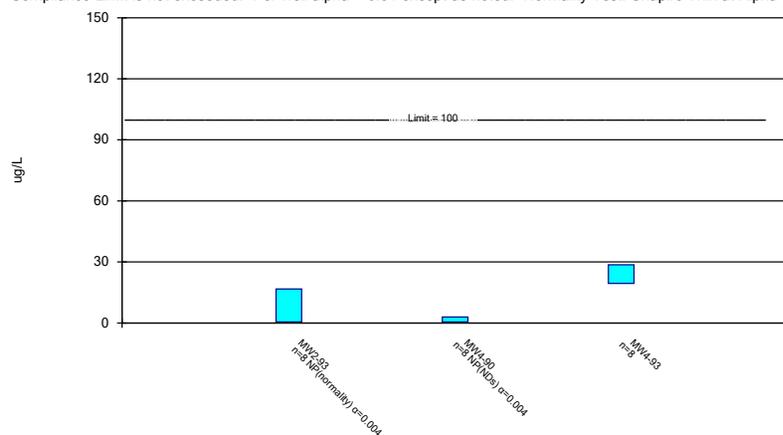
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

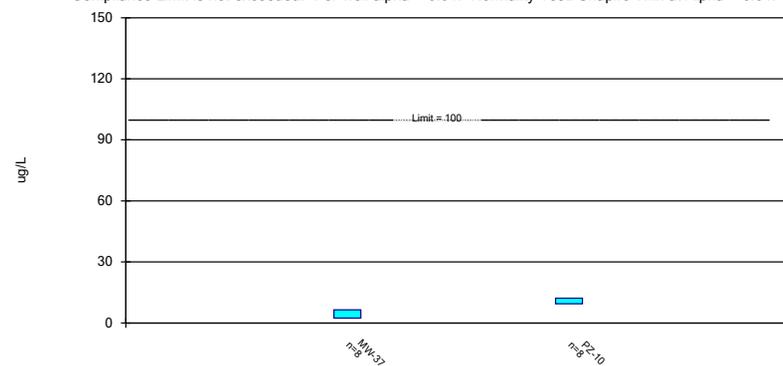
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chlorobenzene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

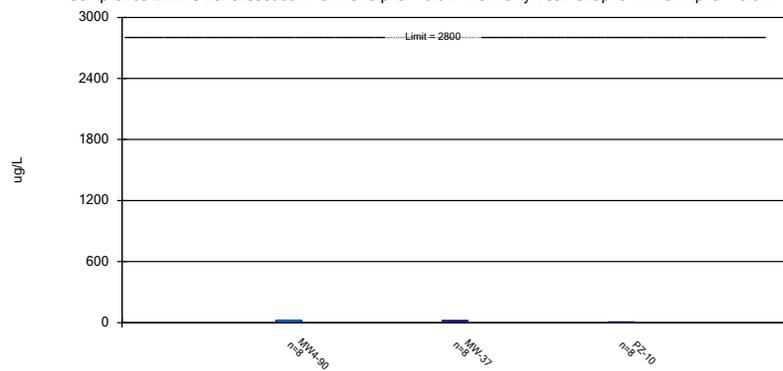
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chlorobenzene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

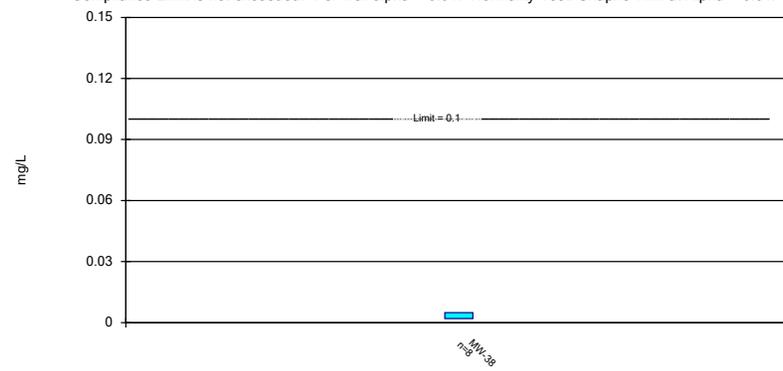
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chloroethane Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

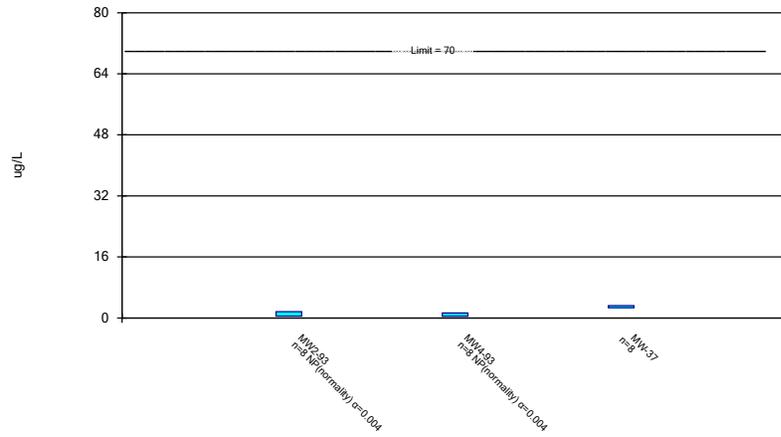
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chromium Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

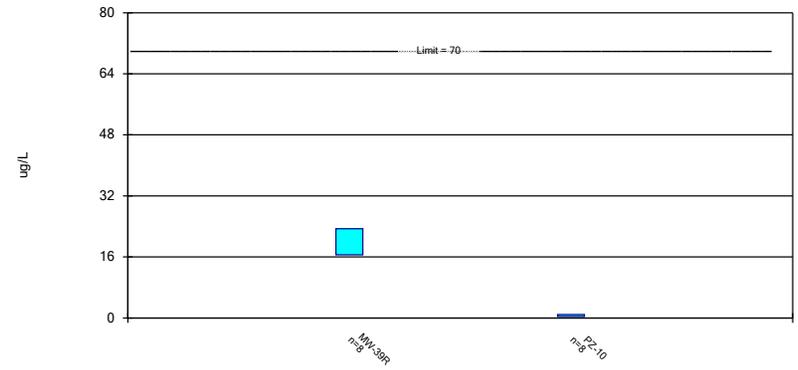
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Inter
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

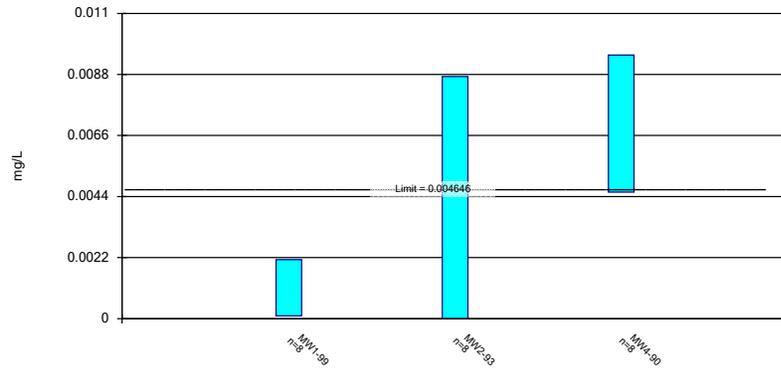
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Inter
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

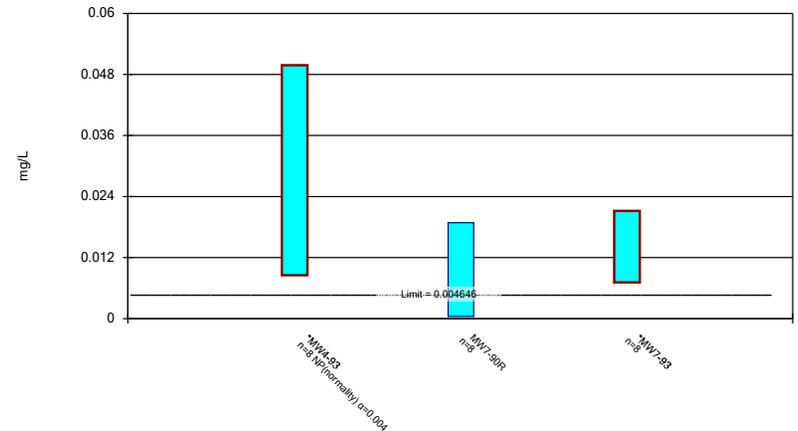
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

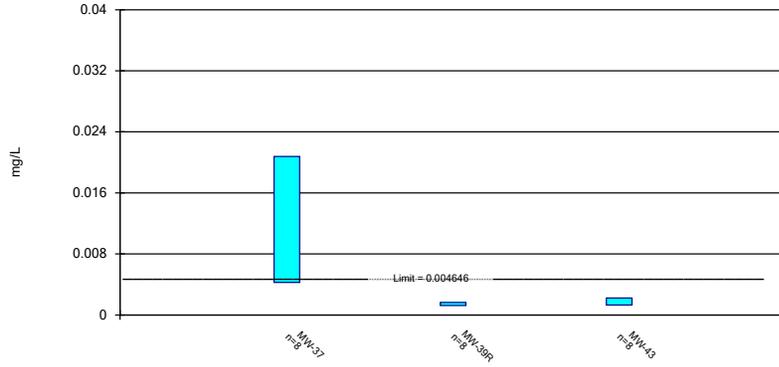
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

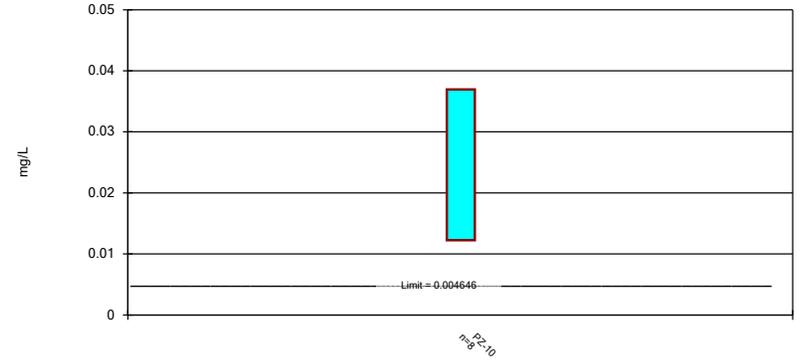
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

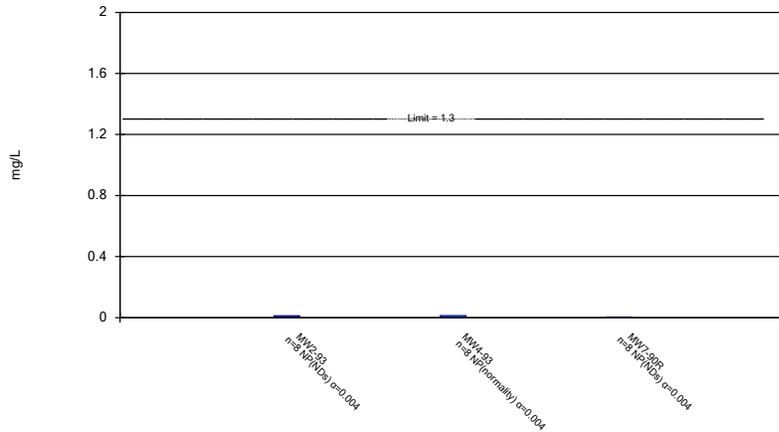
Compliance limit is exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

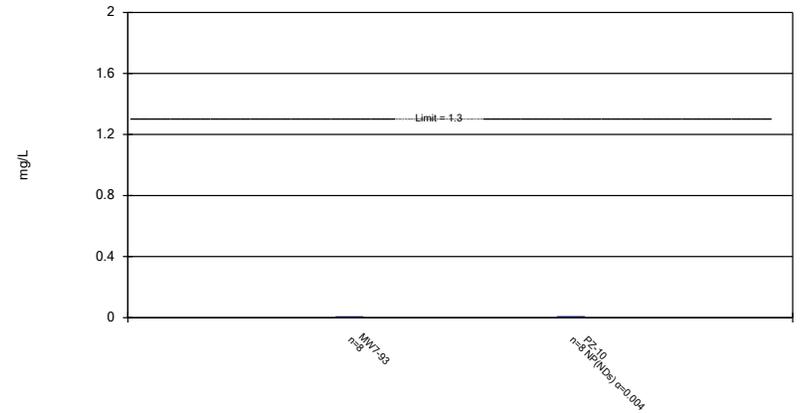
Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

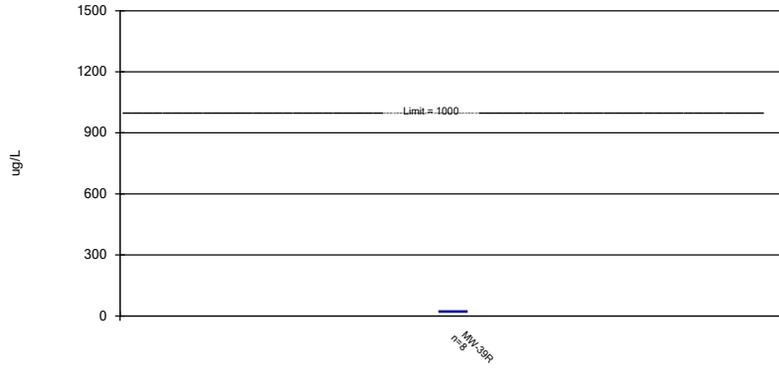
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Copper Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

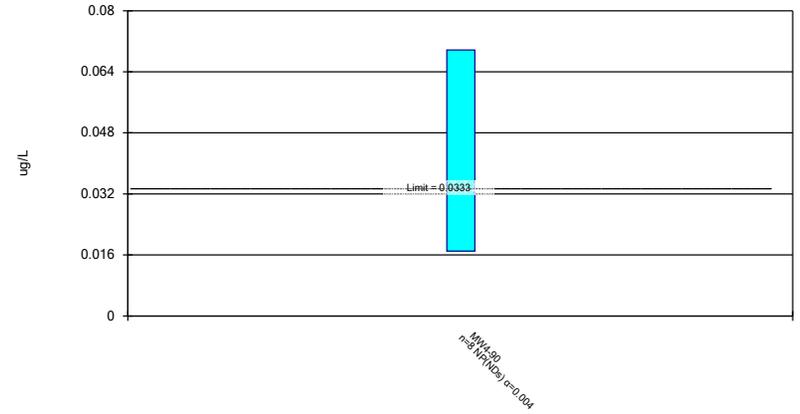
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Dichlorodifluoromethane Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Int
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

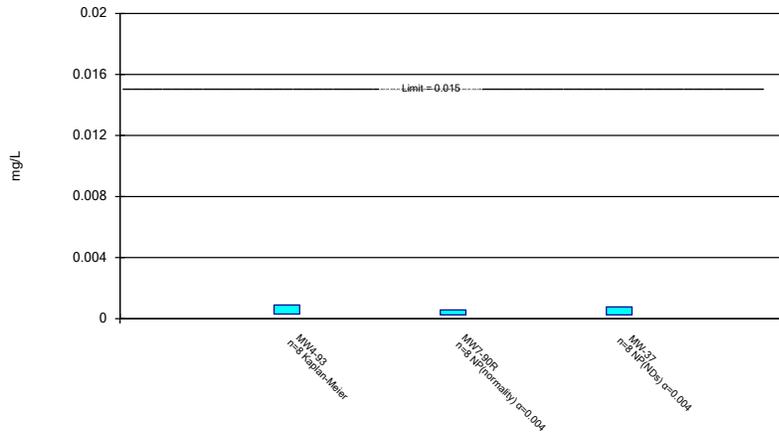
Compliance Limit is not exceeded.



Constituent: Endosulfan sulfate Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

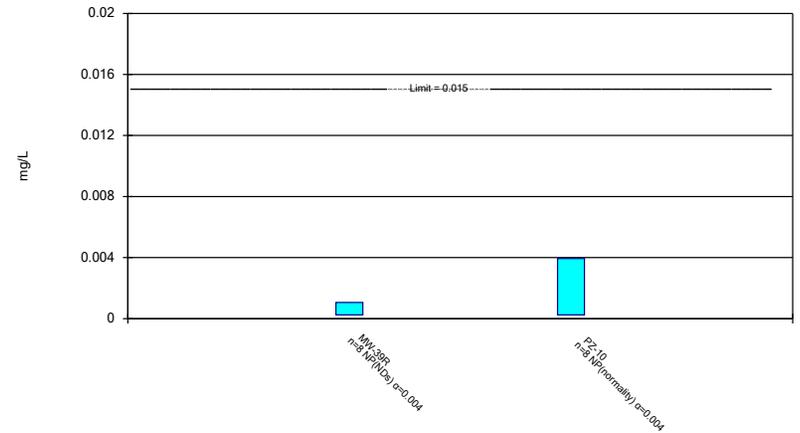
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Lead Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

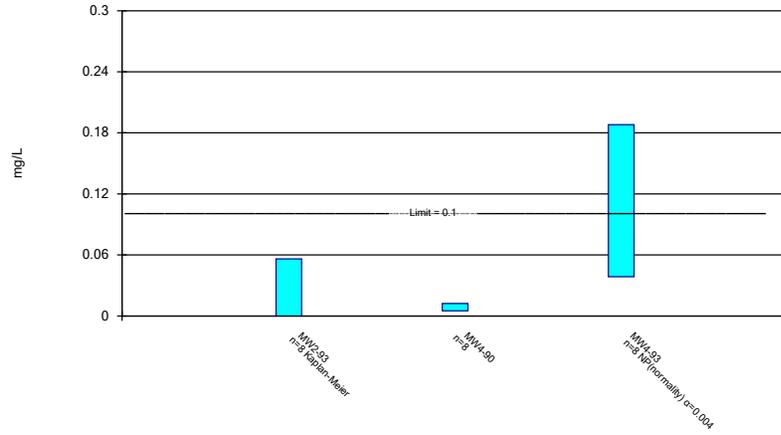
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric and Non-Parametric (NP) Confidence Interval

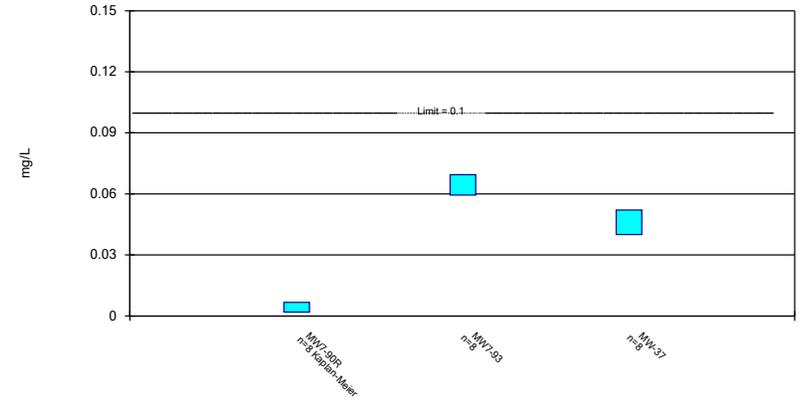
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

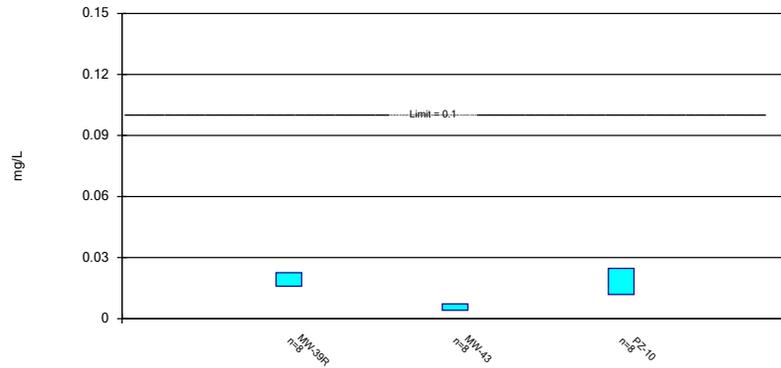
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

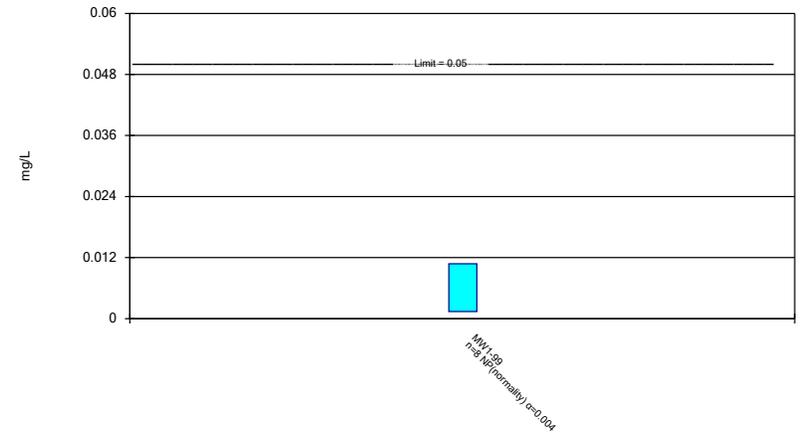
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

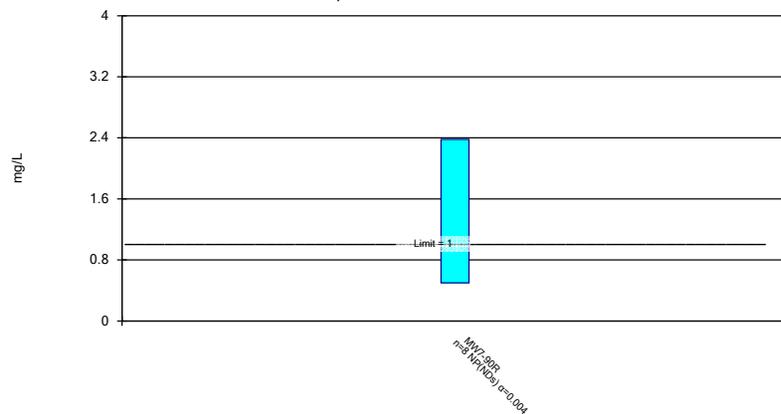
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

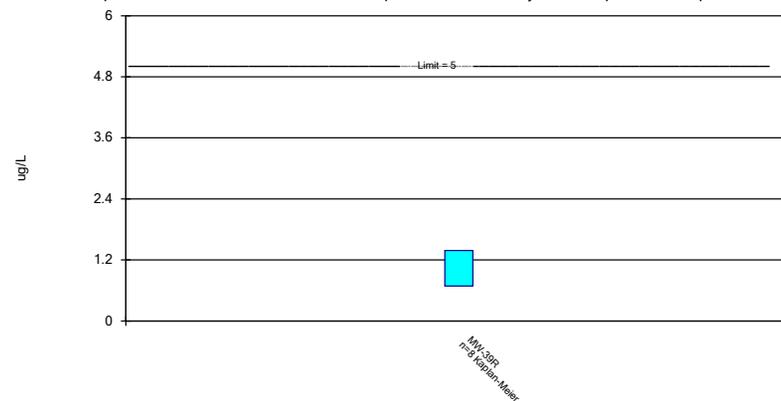
Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

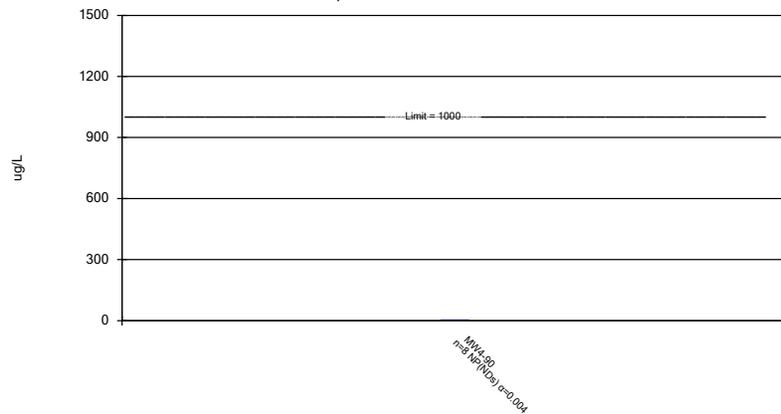
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Tetrachloroethene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

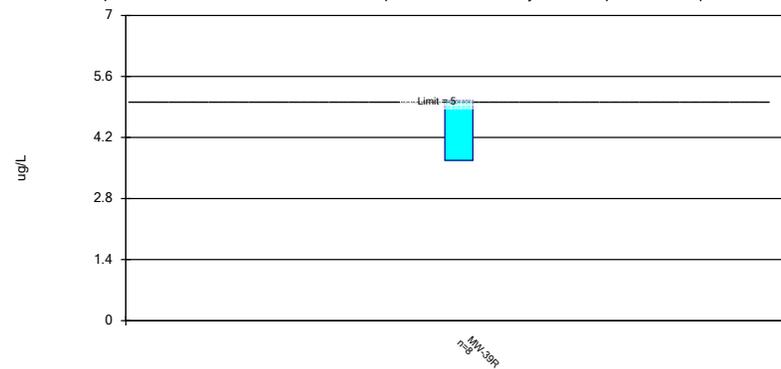
Compliance Limit is not exceeded.



Constituent: Toluene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

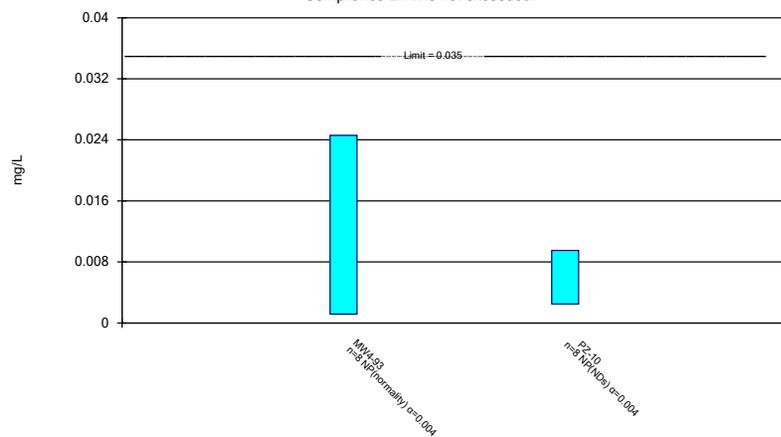
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Trichloroethene Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

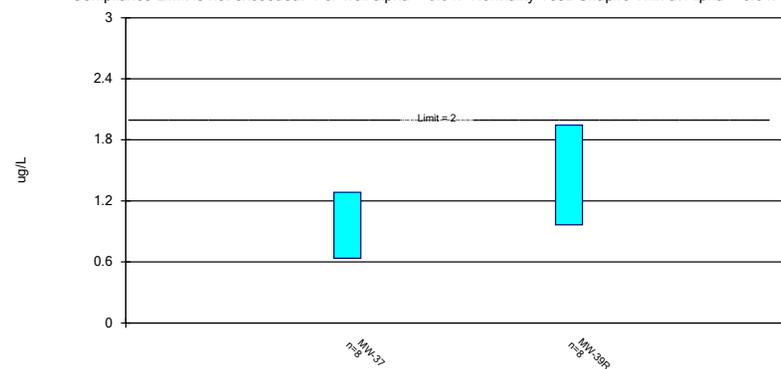
Compliance Limit is not exceeded.



Constituent: Vanadium Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Parametric Confidence Interval

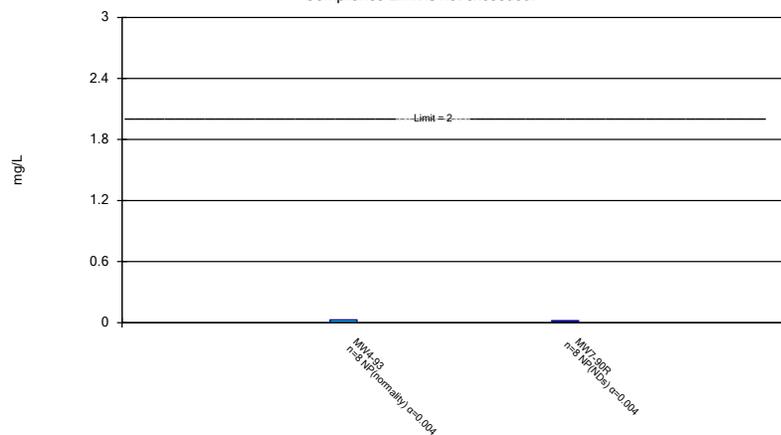
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Vinyl Chloride Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 10/16/2025 2:19 PM View: 2025_SSN-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Theil-Sen Confidence Bands Summary Table and Graphs

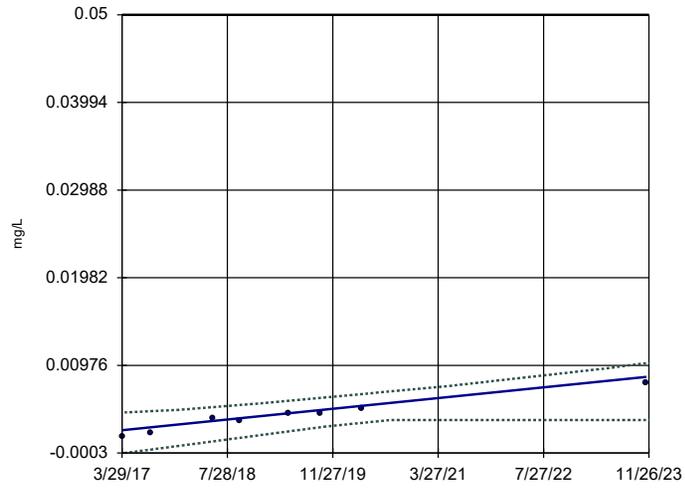
Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN Printed 10/9/2025, 2:29 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Selenium (mg/L)	MW-38	0.0009226	24	21	Yes	8	0	0.01	NP

Sen's Slope and 99% Confidence Band

MW-38



n = 8

Slope = 0.0009226
units per year.

Mann-Kendall
statistic = 24
critical = 21

Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Confidence band is
below mg/L (0.05).

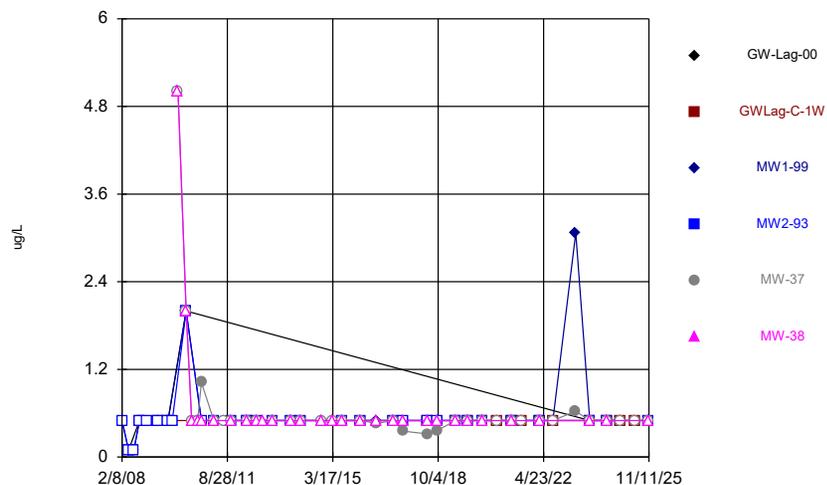
Constituent: Selenium Analysis Run 10/9/2025 2:26 PM View: 2025_SSN-Theil_Sen
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_SSN

Attachment B

2nd 2025 Semi-Annual Statistical Output

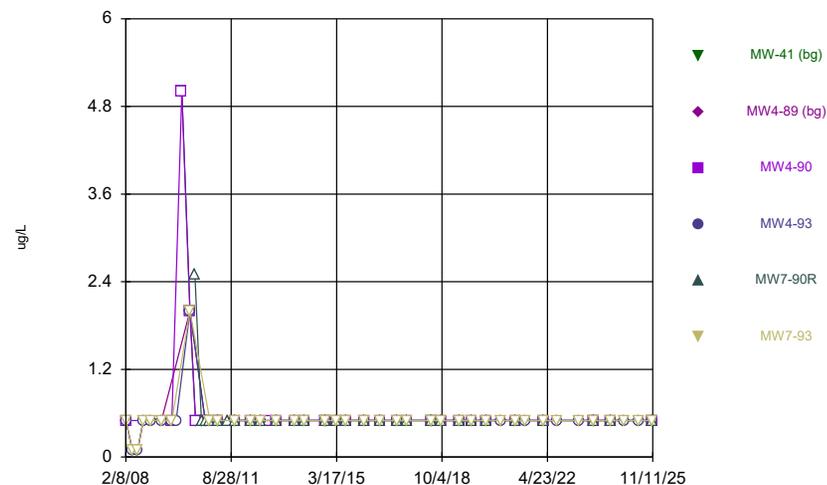
Time Series Table and Graphs

Time Series



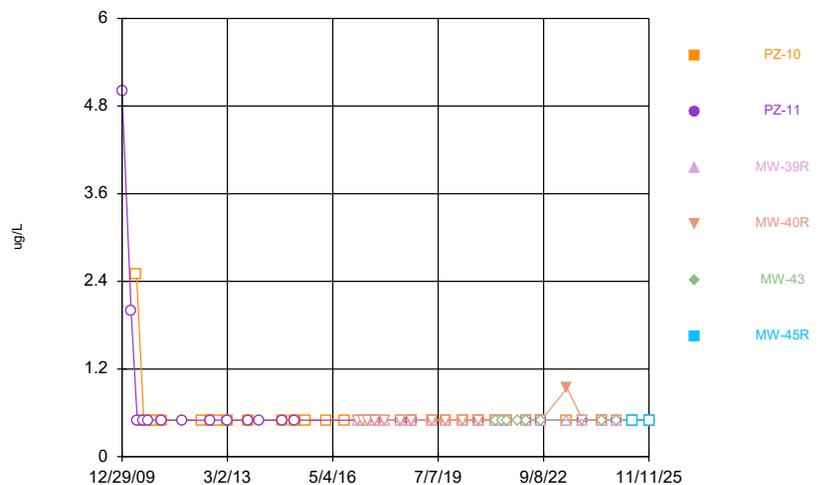
Constituent: 1,1,1-Trichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



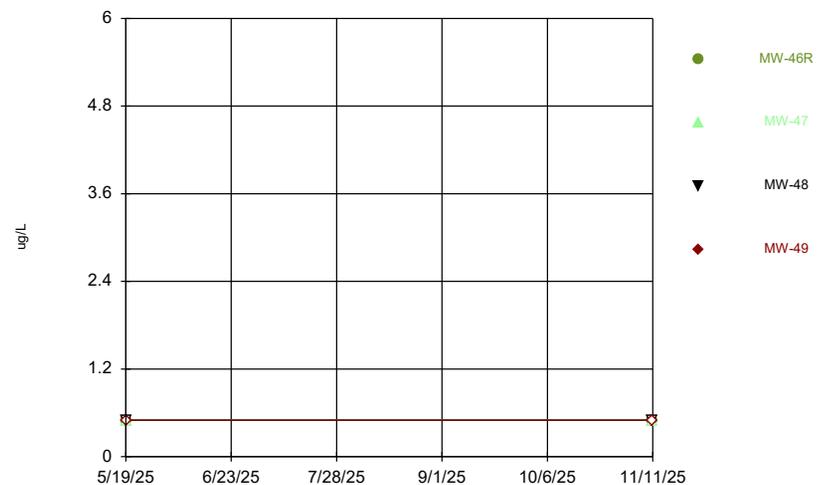
Constituent: 1,1,1-Trichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



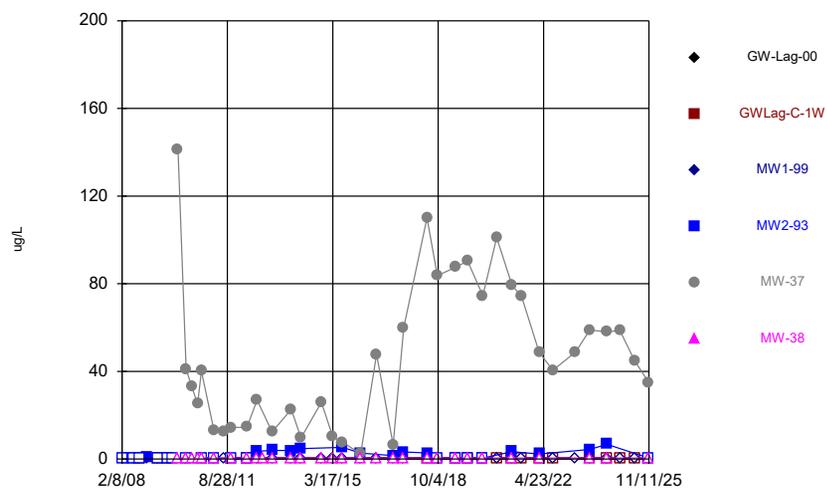
Constituent: 1,1,1-Trichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



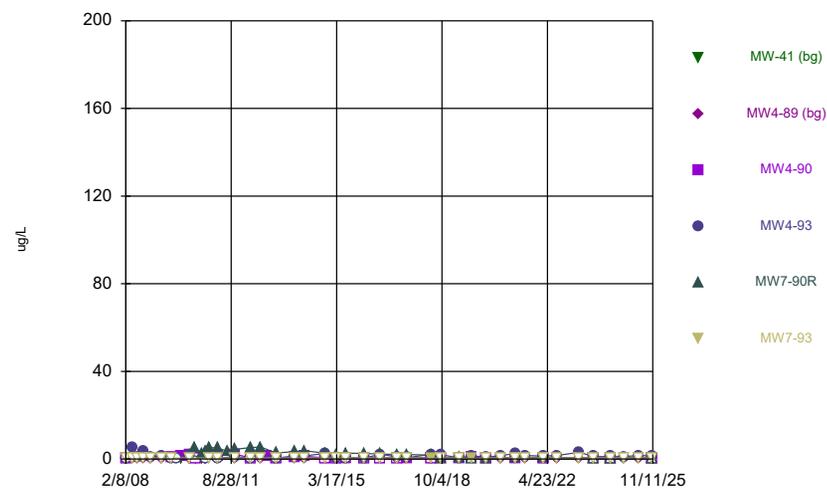
Constituent: 1,1,1-Trichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



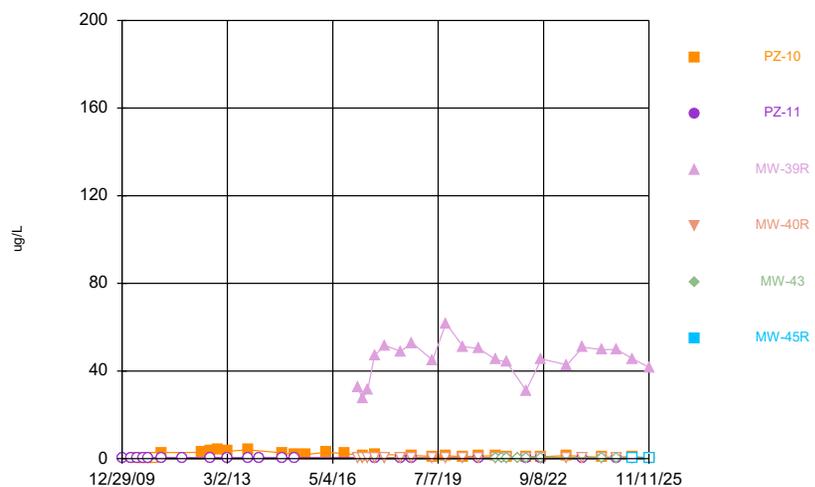
Constituent: 1,1-Dichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



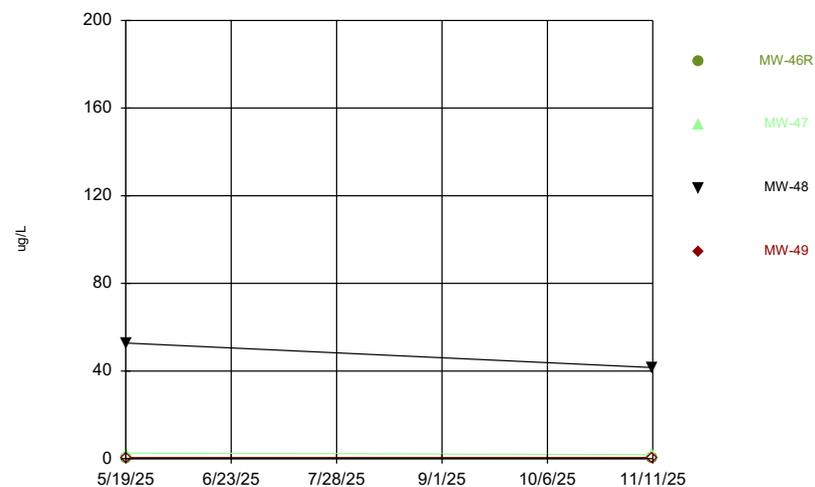
Constituent: 1,1-Dichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



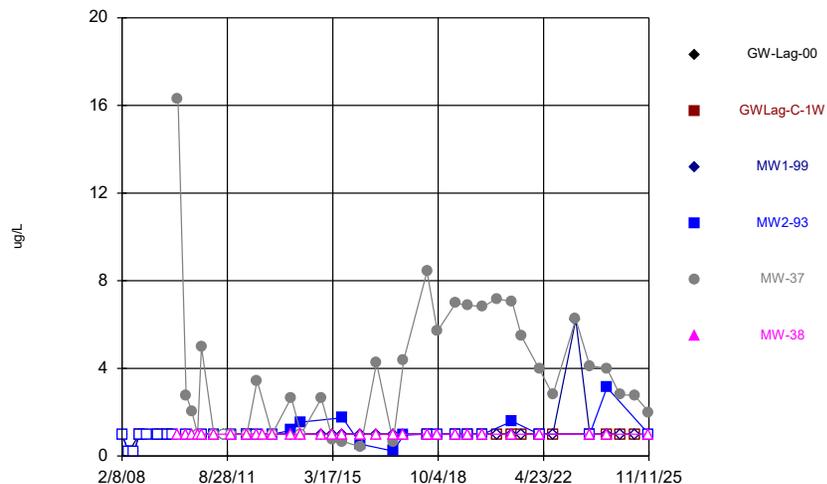
Constituent: 1,1-Dichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



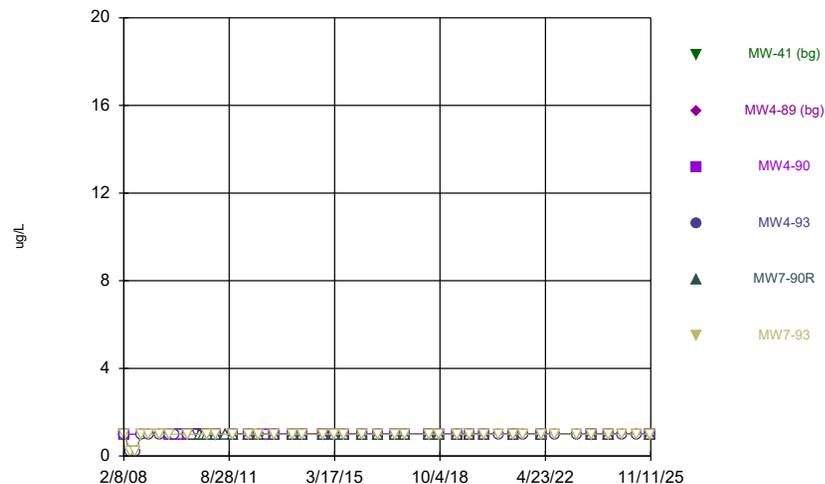
Constituent: 1,1-Dichloroethane Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



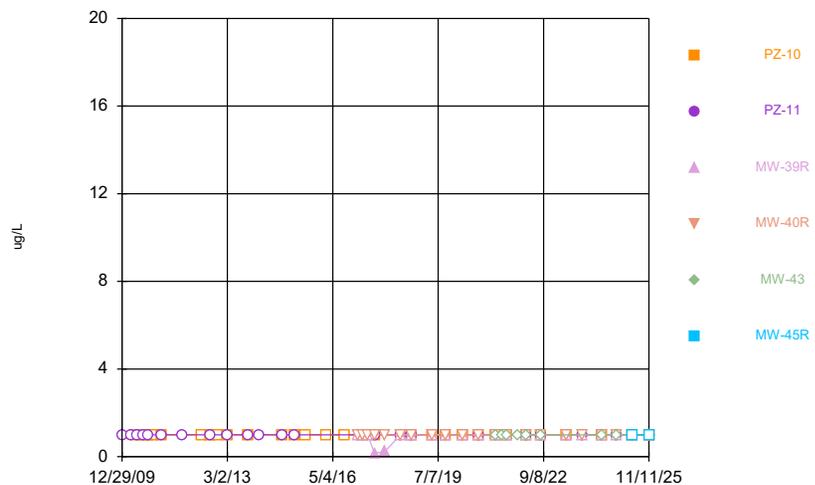
Constituent: 1,1-Dichloroethene Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



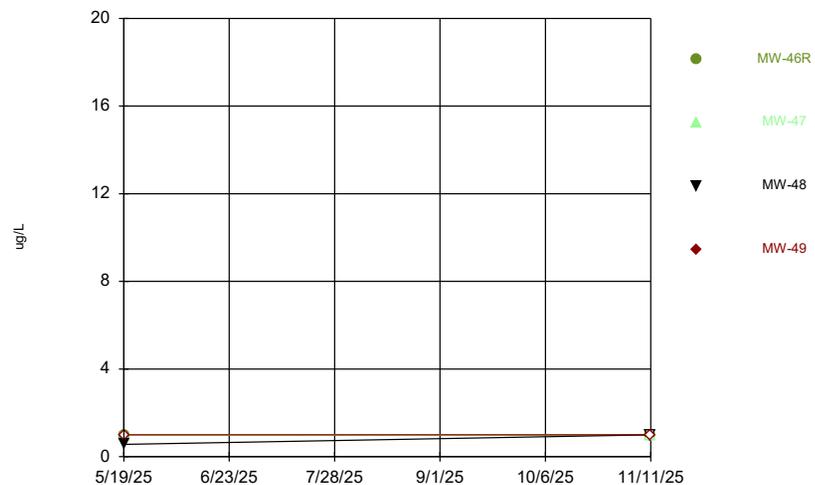
Constituent: 1,1-Dichloroethene Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



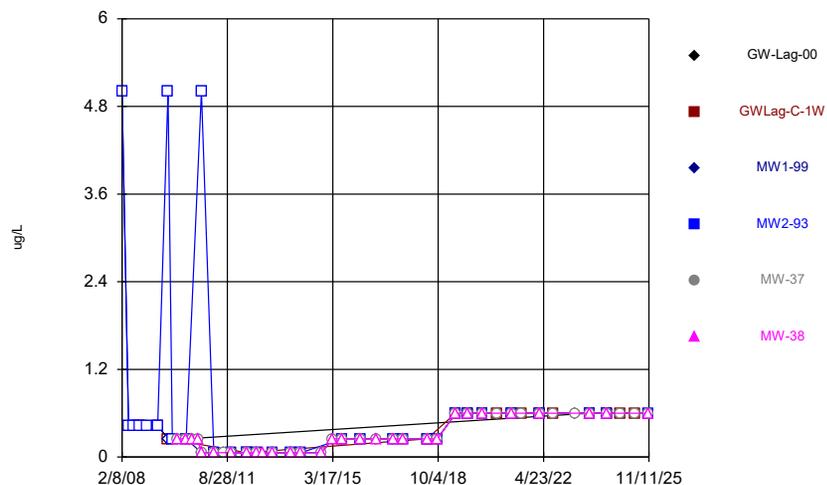
Constituent: 1,1-Dichloroethene Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



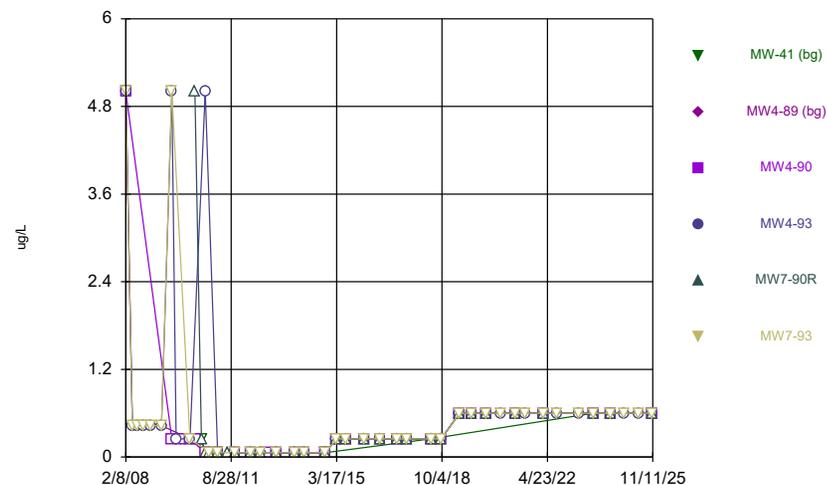
Constituent: 1,1-Dichloroethene Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



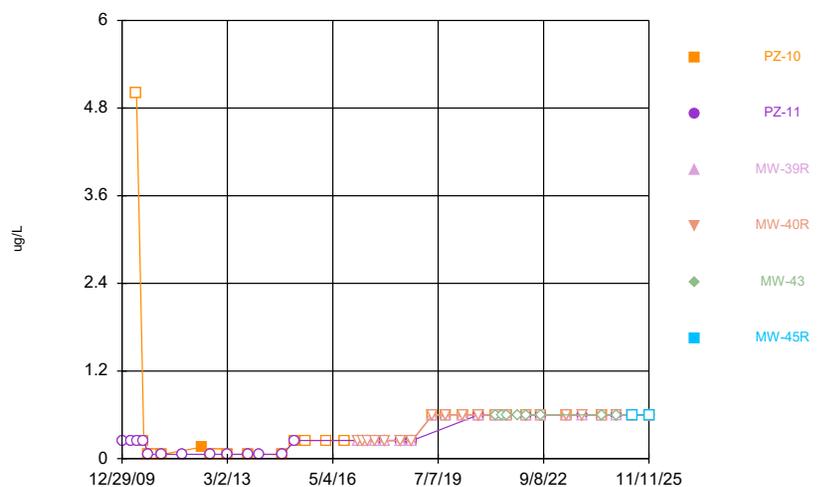
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



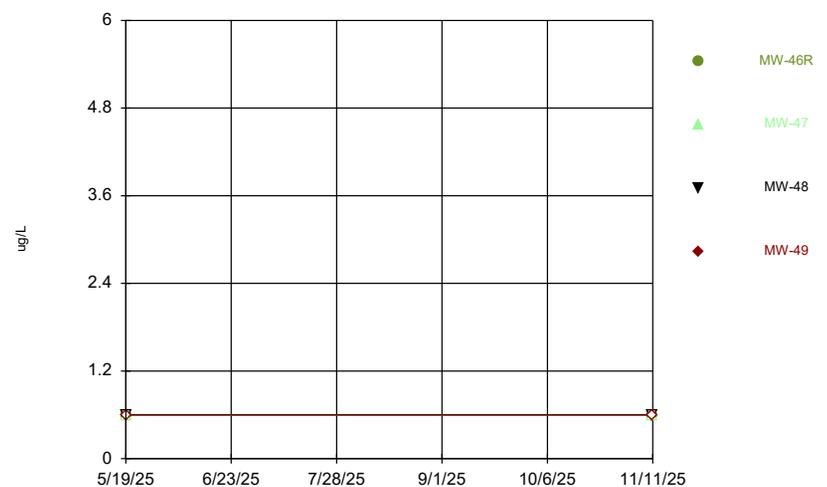
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Time Series



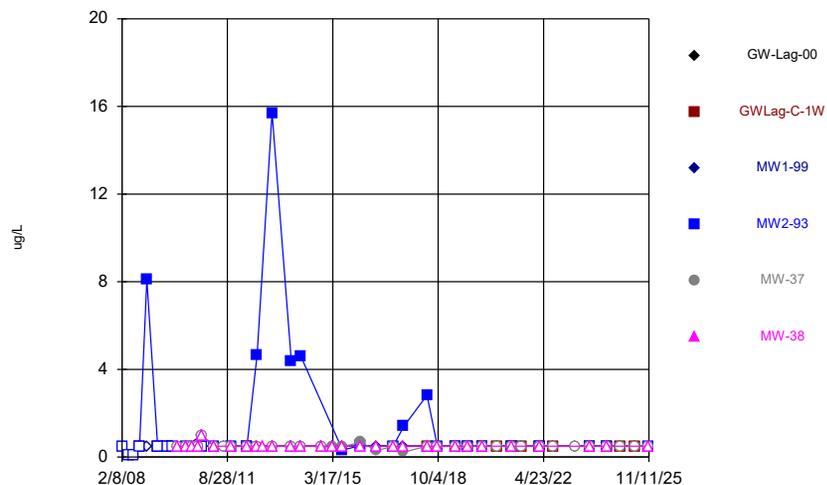
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



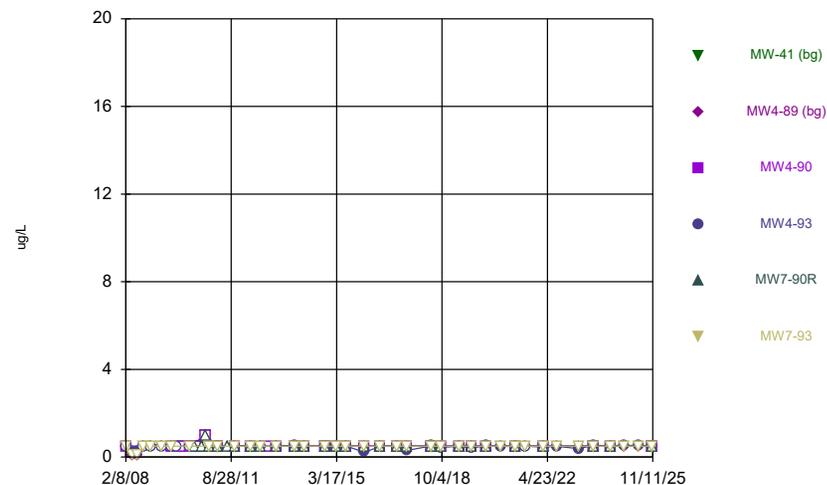
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Time Series



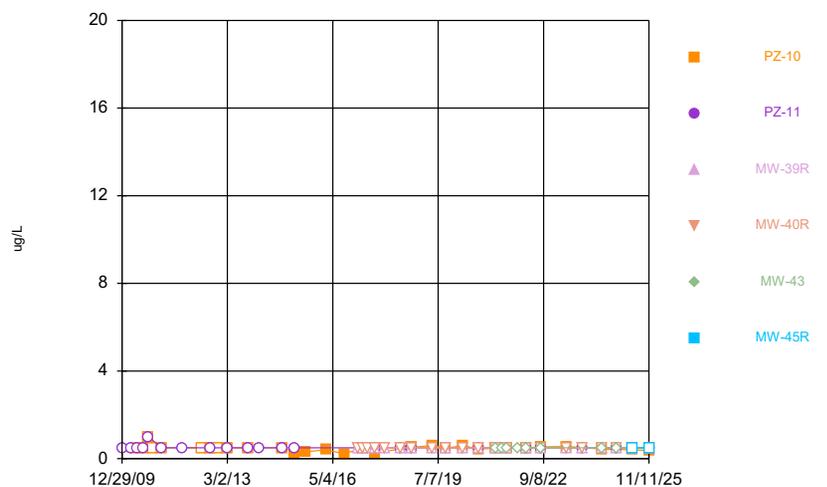
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Time Series



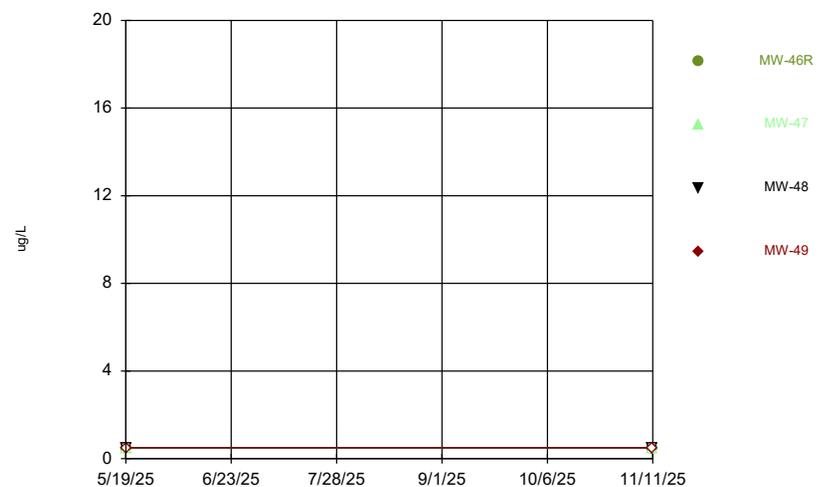
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Time Series



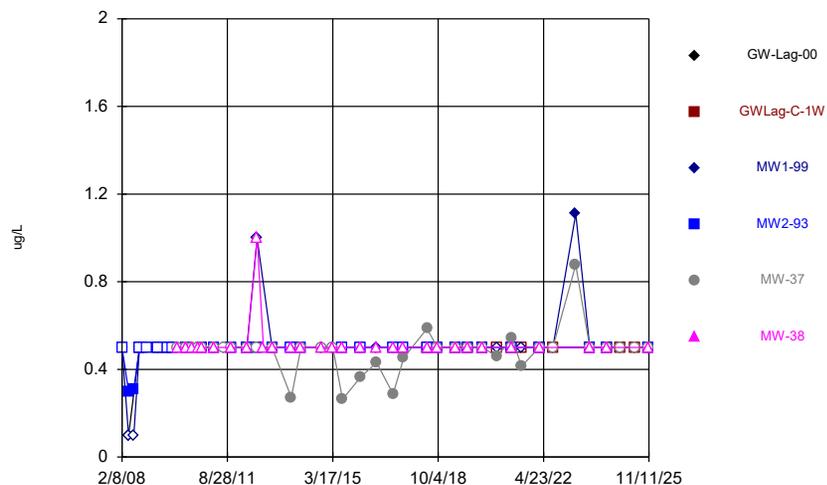
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Time Series



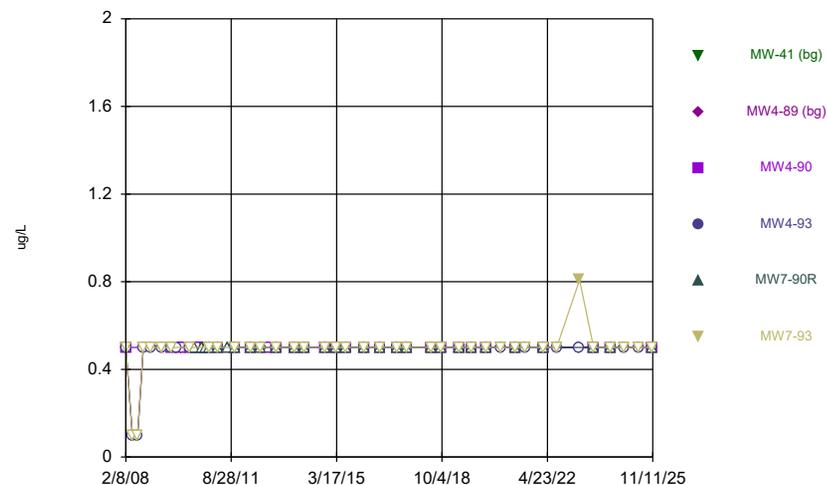
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Time Series



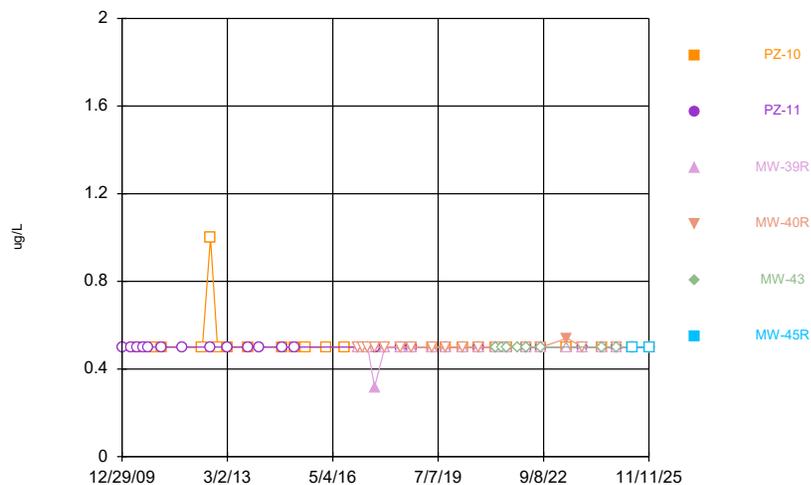
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Time Series



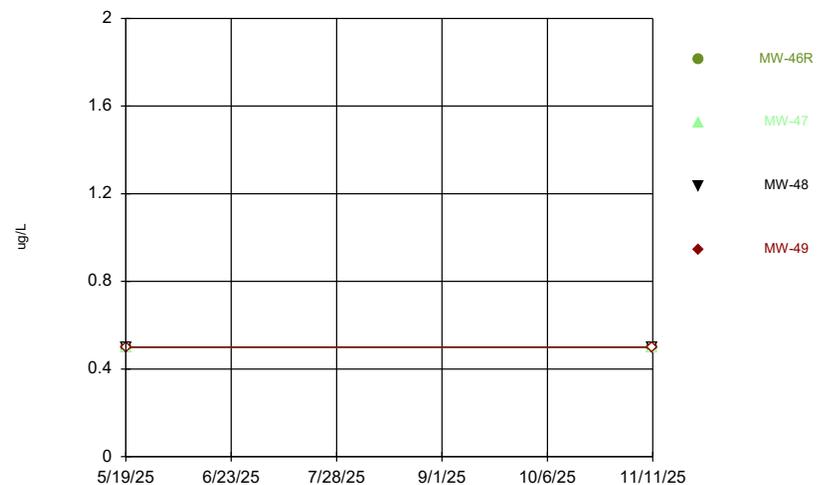
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Time Series



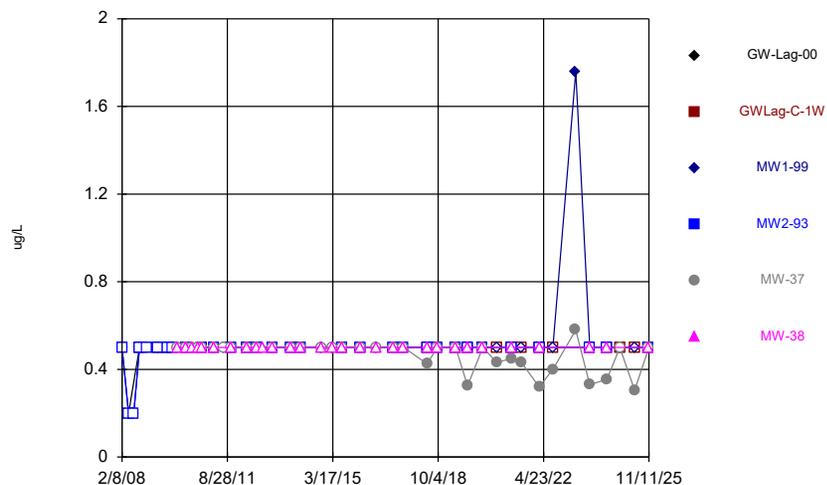
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Time Series



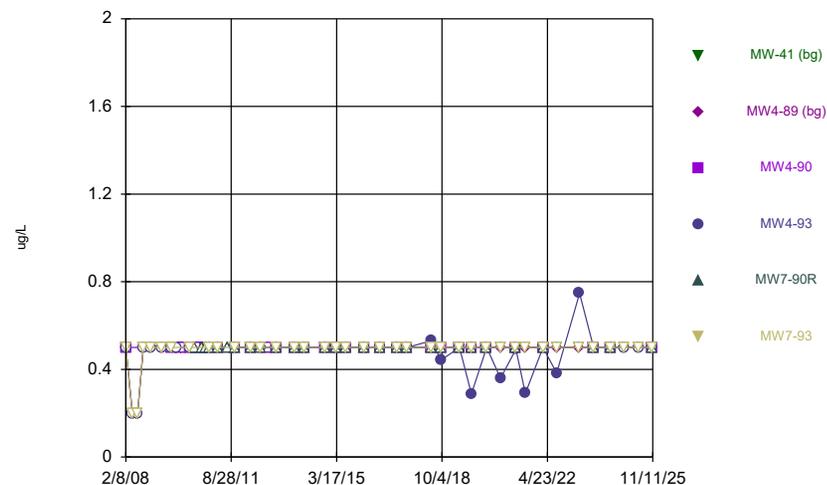
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Time Series



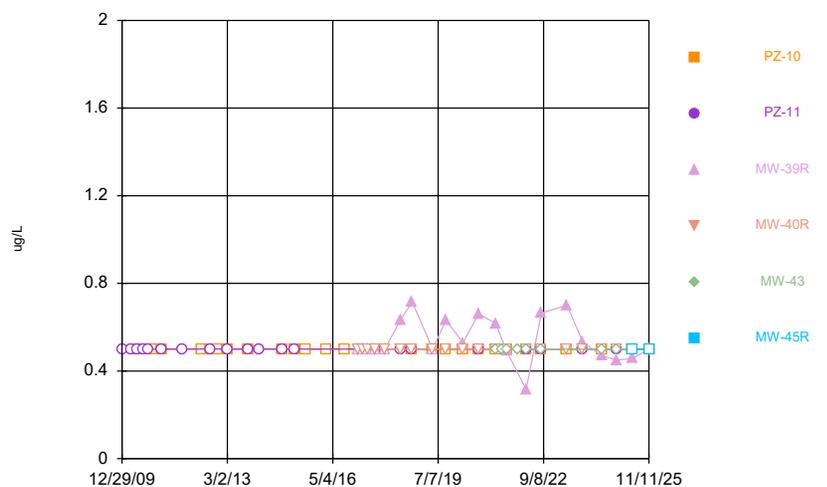
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



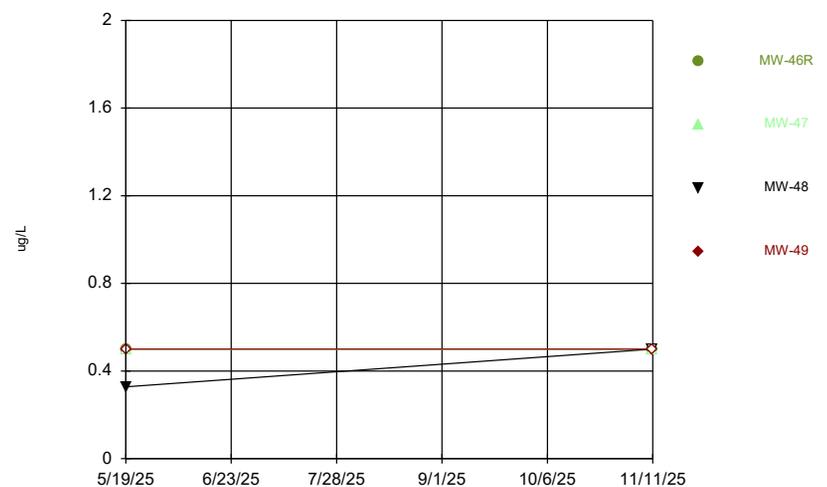
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Time Series



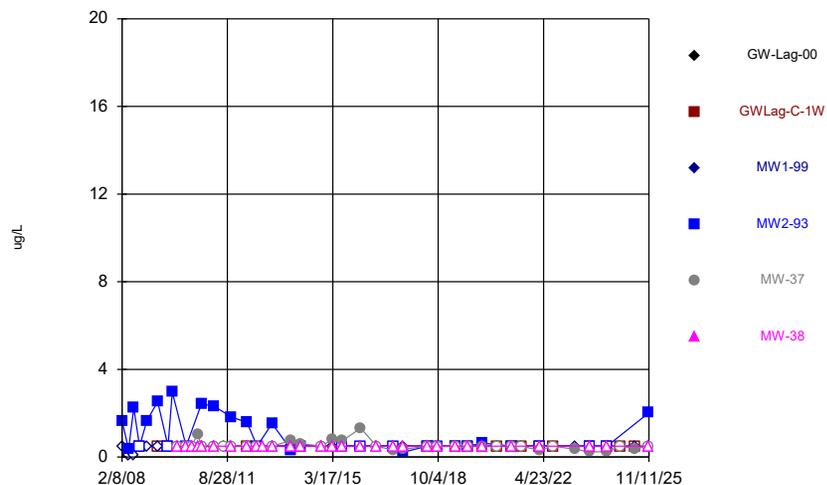
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Time Series



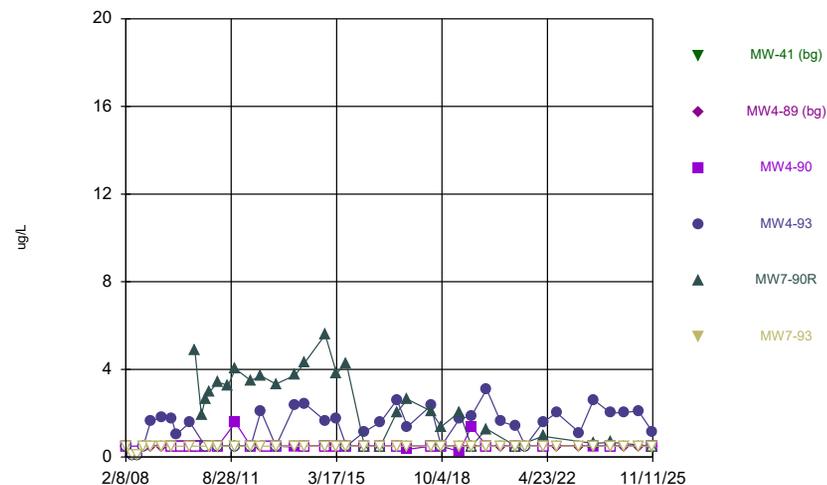
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Time Series



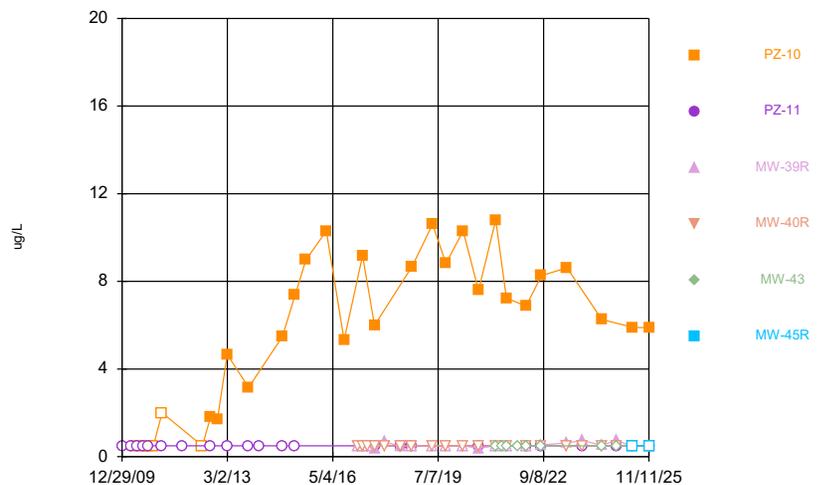
Constituent: 1,4-Dichlorobenzene Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



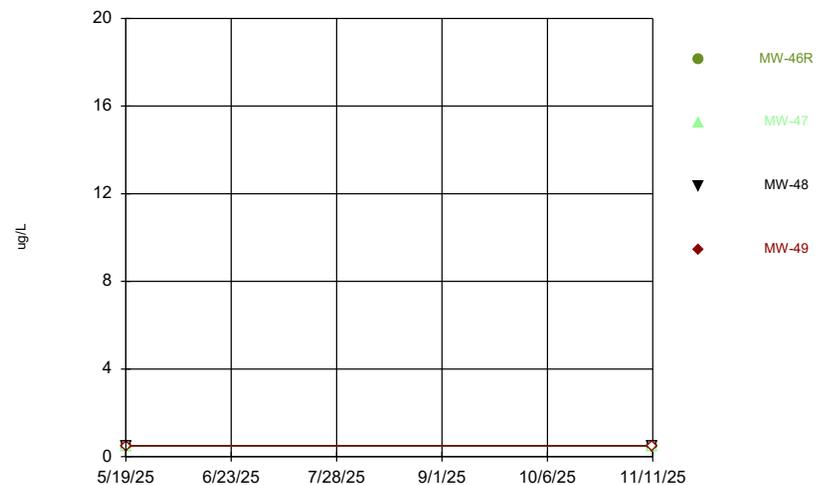
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



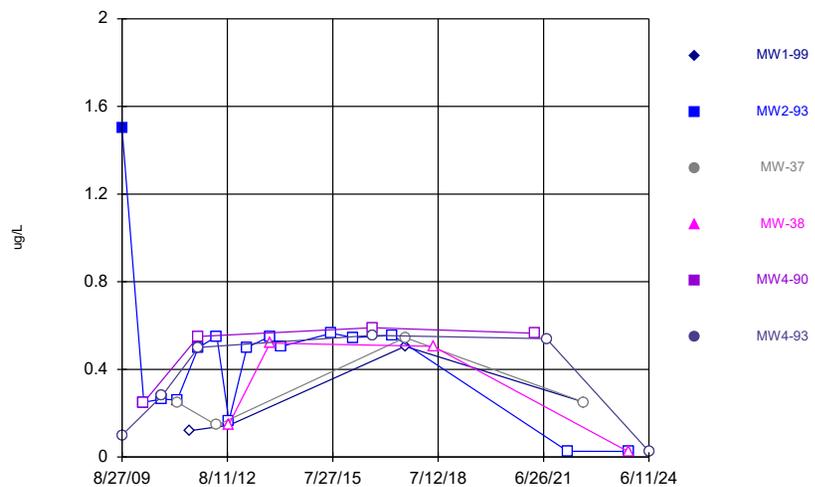
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Time Series



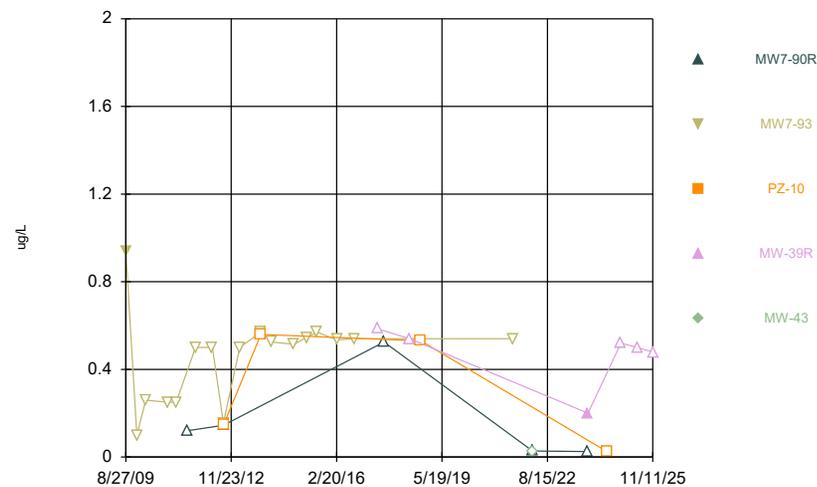
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Time Series



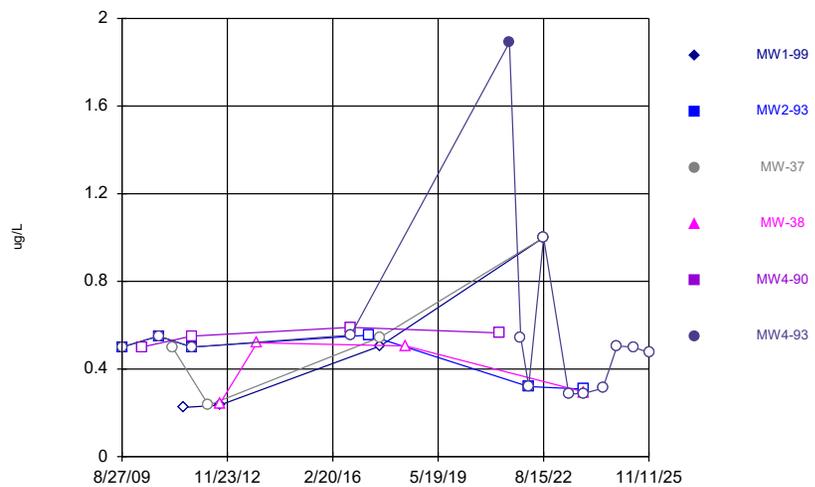
Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 12/5/2025 1:59 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



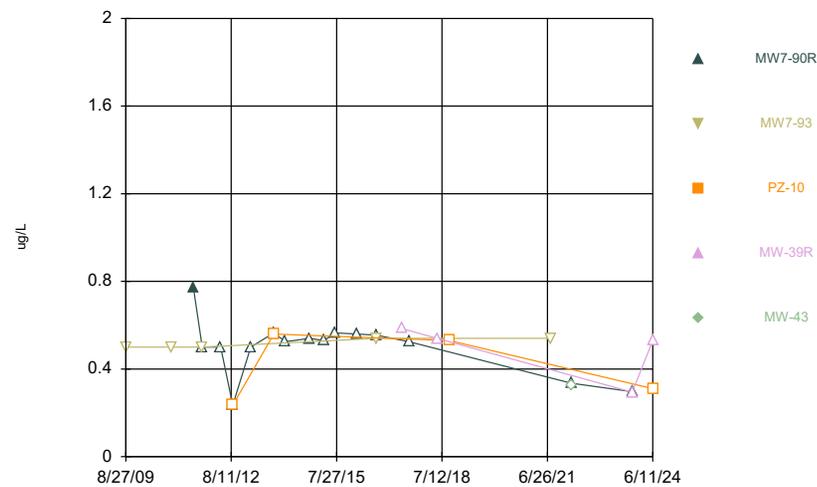
Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



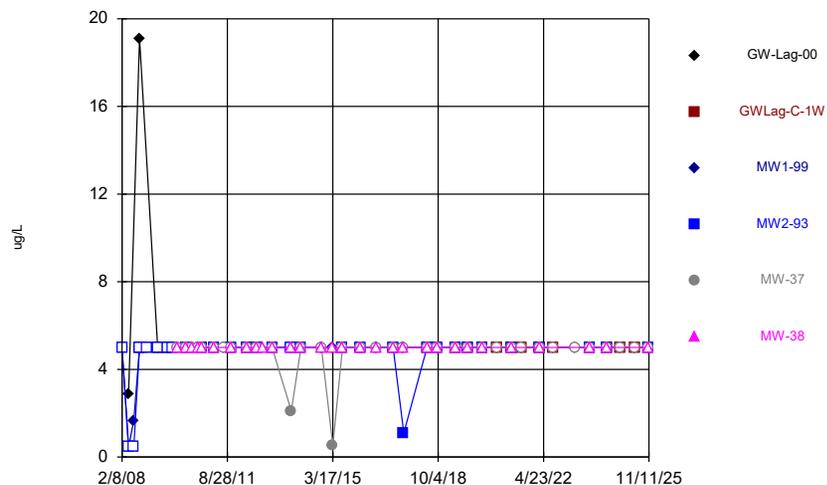
Constituent: 2,4-D [2C] Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
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Time Series



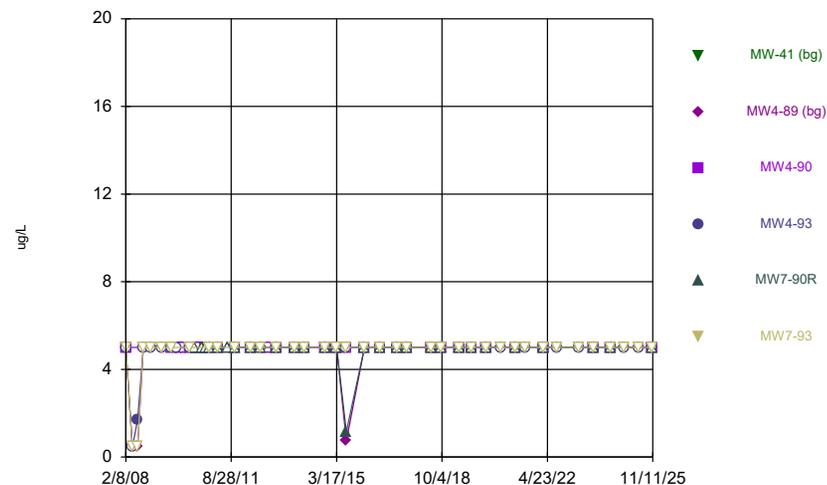
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Time Series



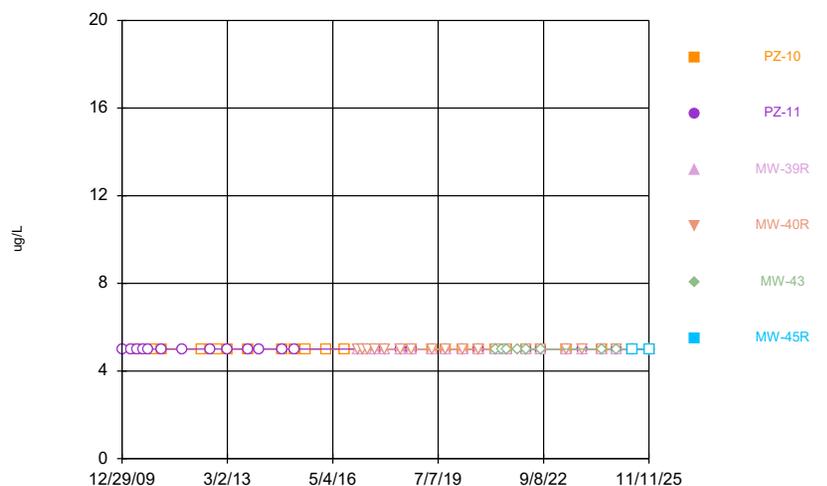
Constituent: 2-Butanone Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



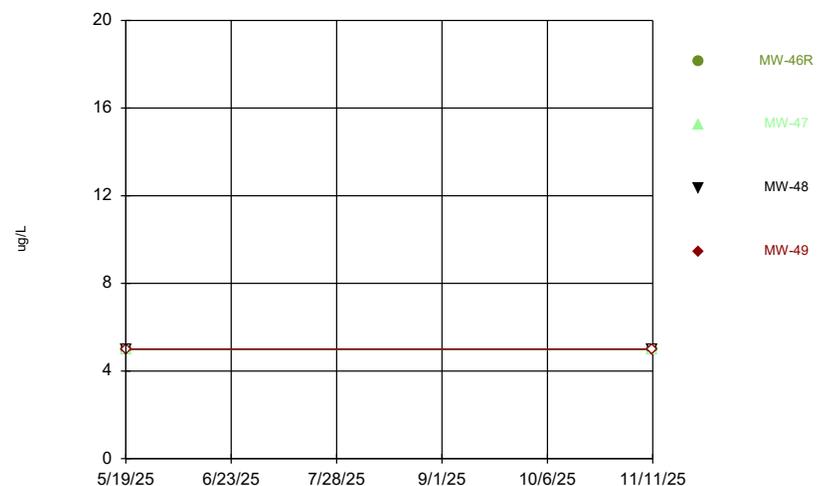
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Time Series



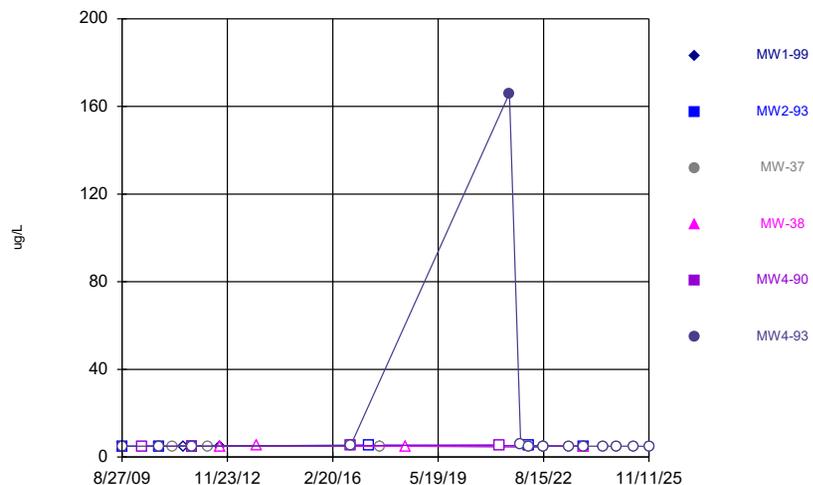
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Time Series



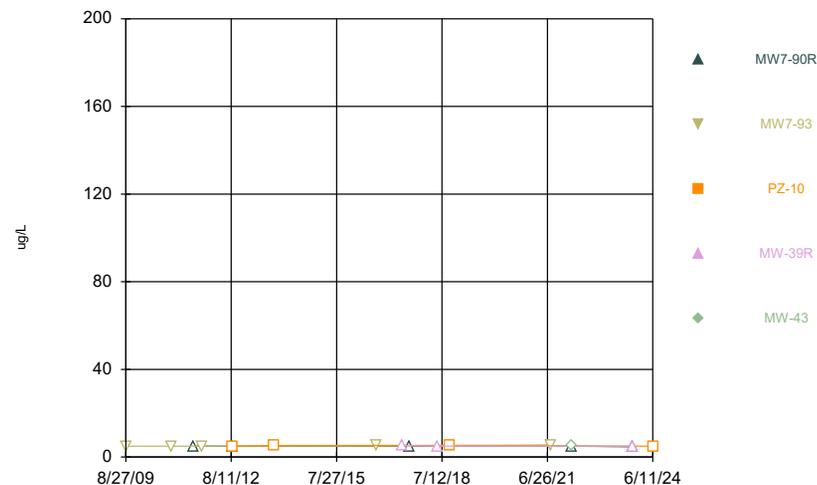
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Time Series



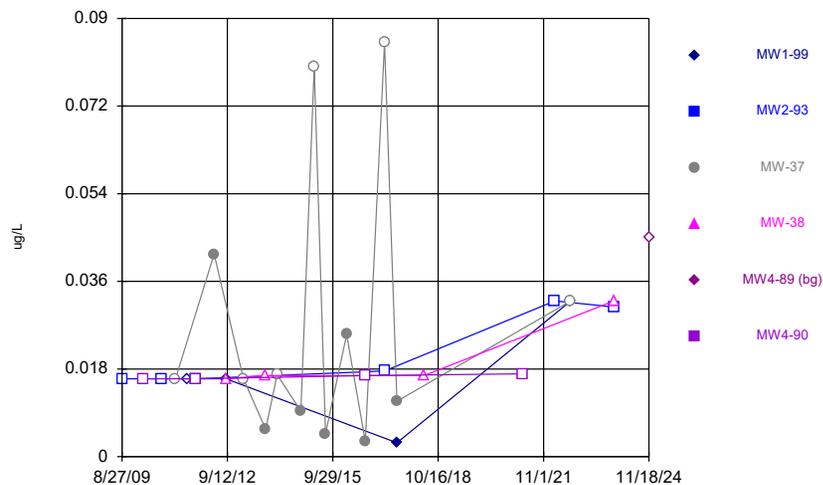
Constituent: 3/4-Methylphenol Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



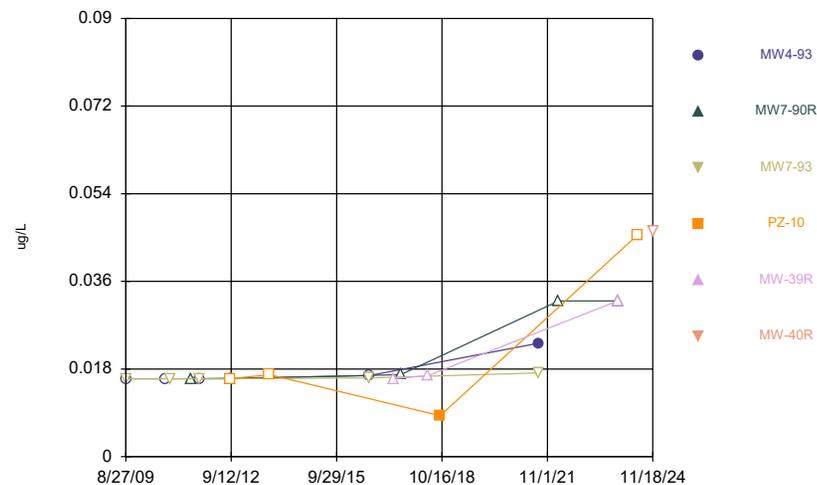
Constituent: 3/4-Methylphenol Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: 4,4'-DDE Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



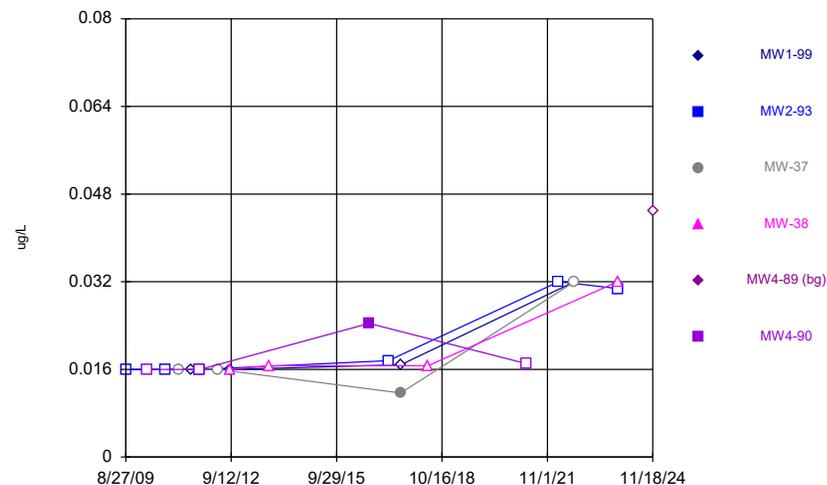
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



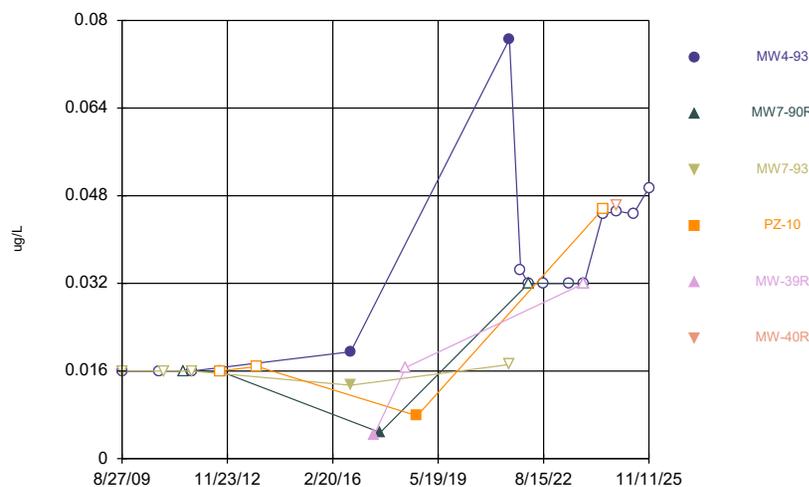
Constituent: 4,4'-DDE Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



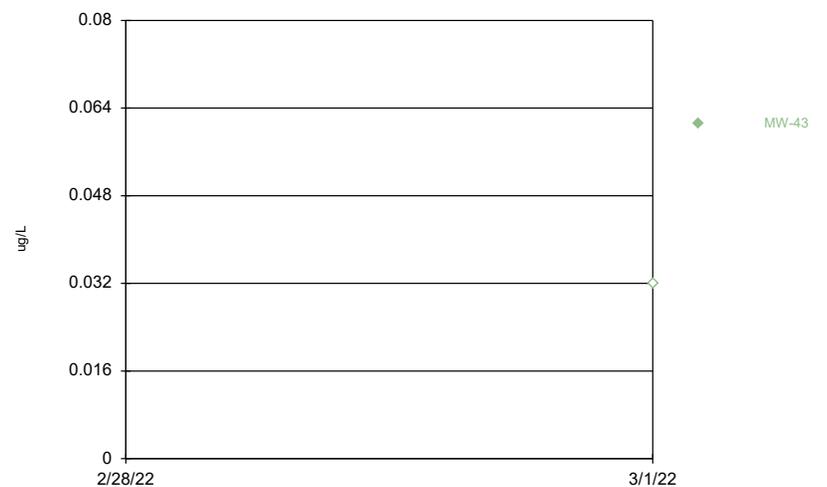
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Time Series



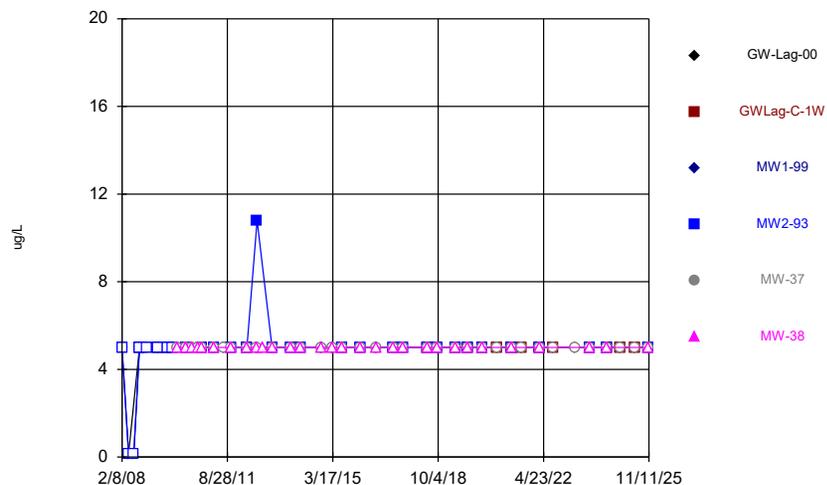
Constituent: 4,4'-DDT Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



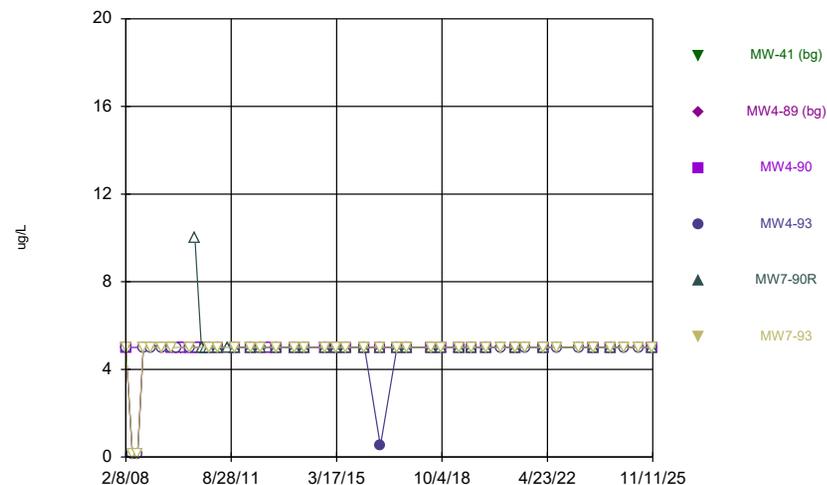
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



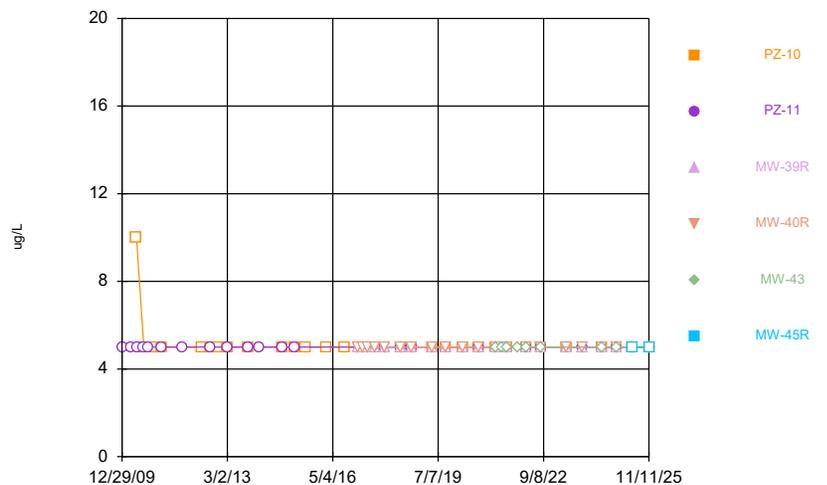
Constituent: 4-Methyl-2-Pentanone Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



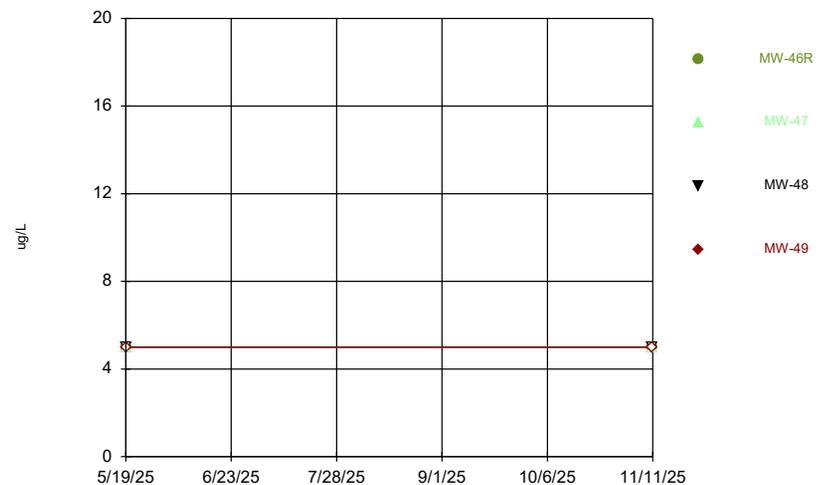
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



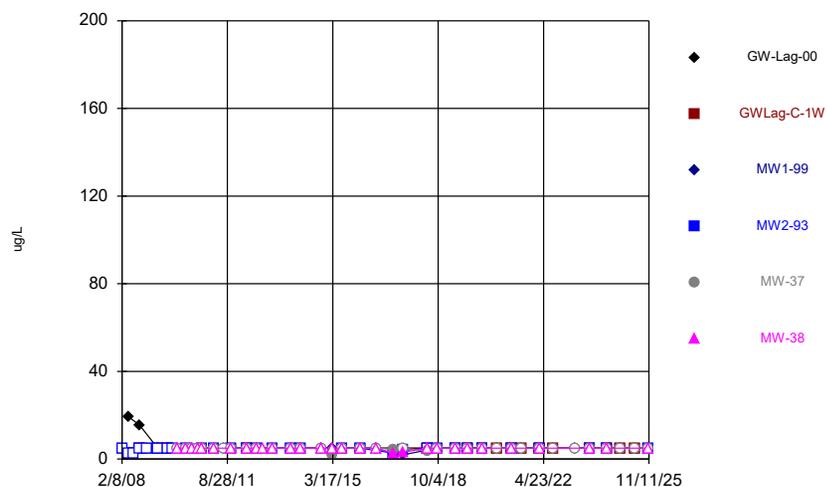
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



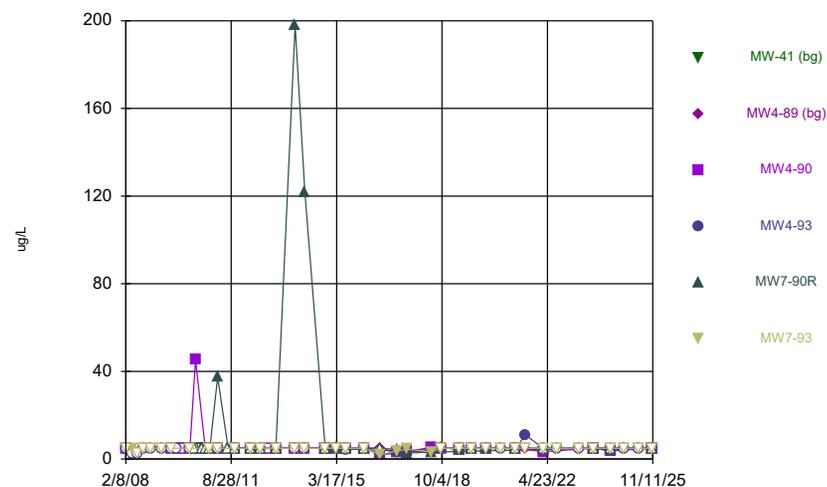
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



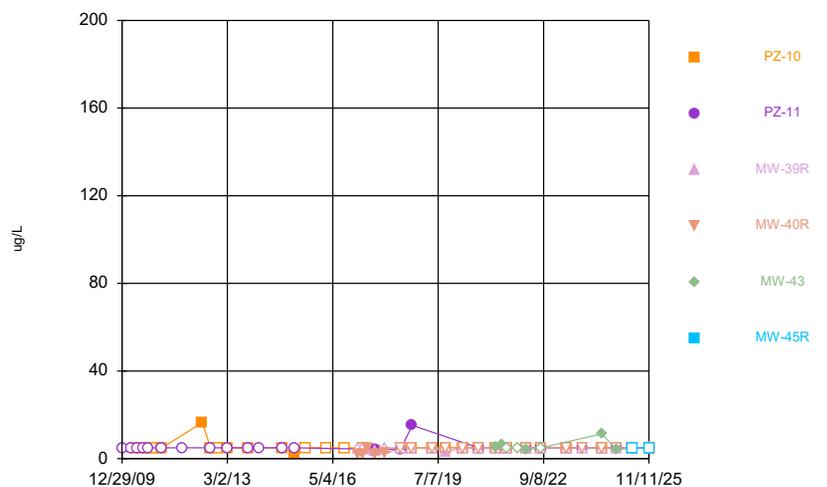
Constituent: Acetone Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



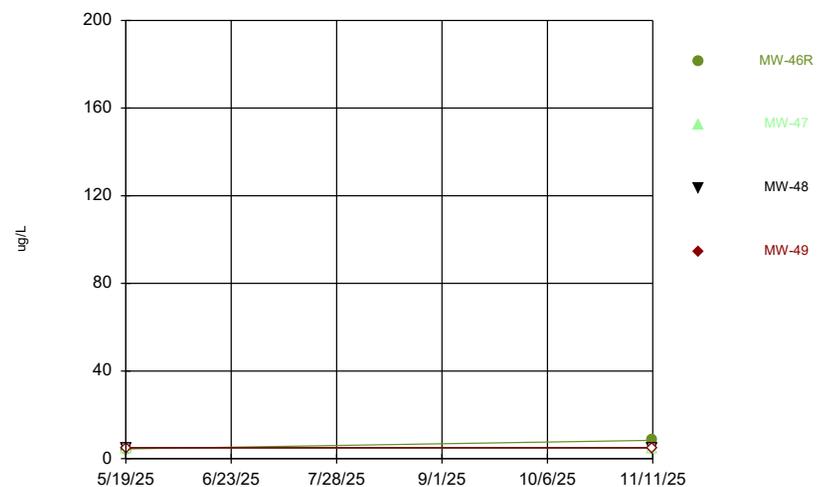
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



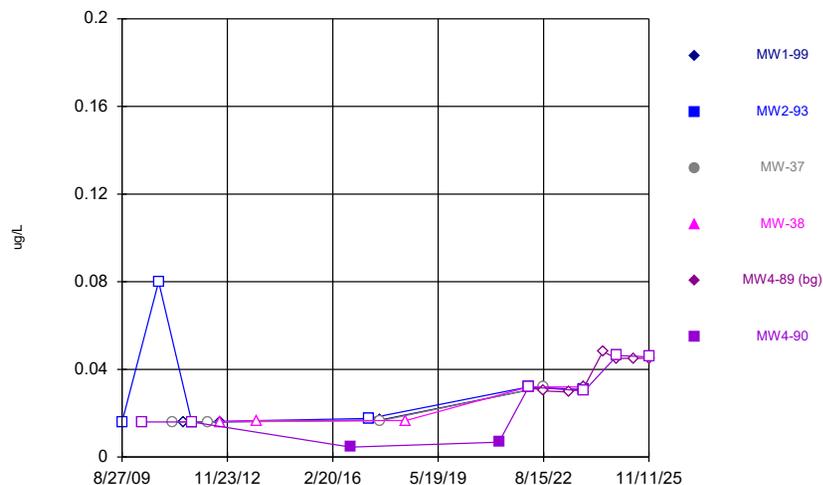
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



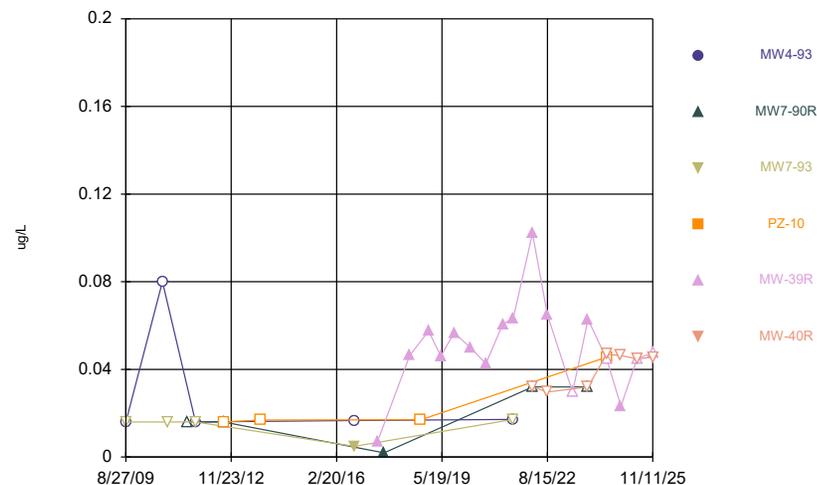
Constituent: Acetone Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: alpha-BHC Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



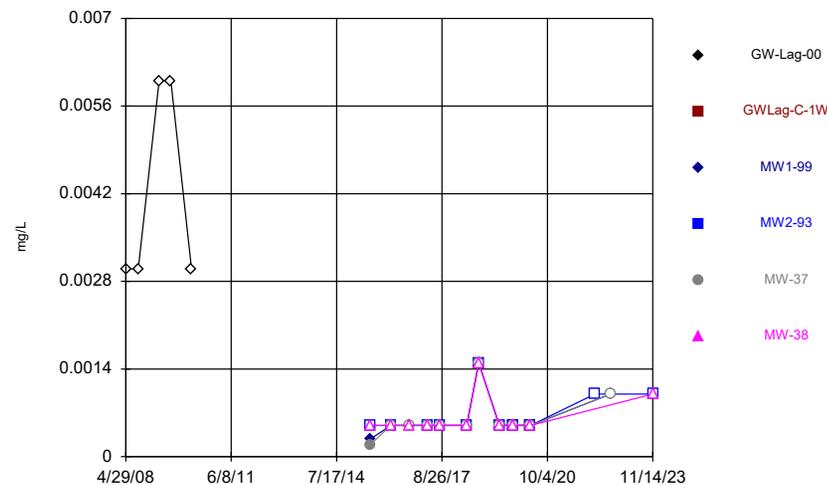
Constituent: alpha-BHC Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



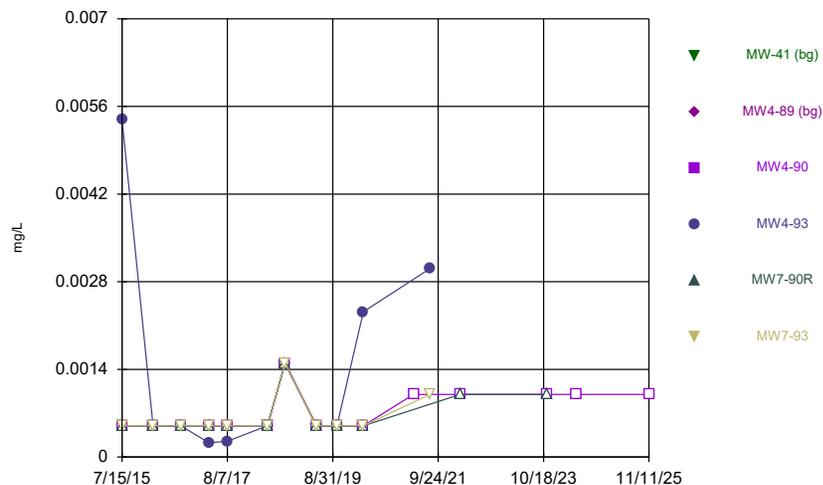
Constituent: alpha-BHC Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



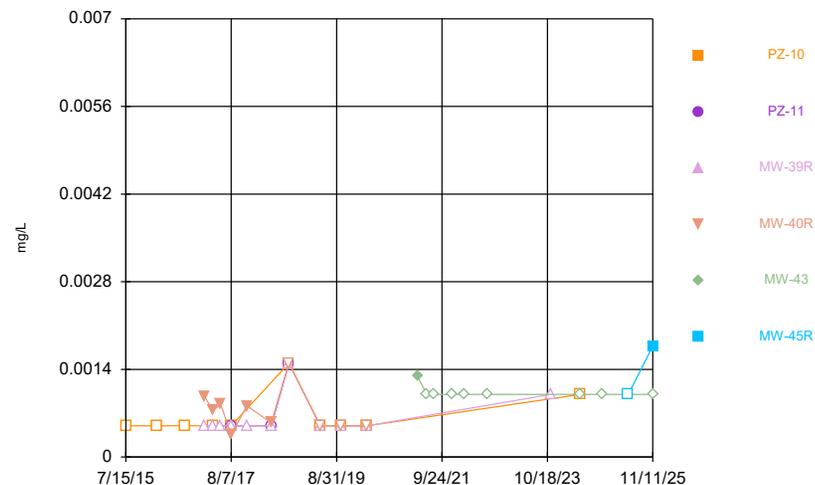
Constituent: Antimony Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



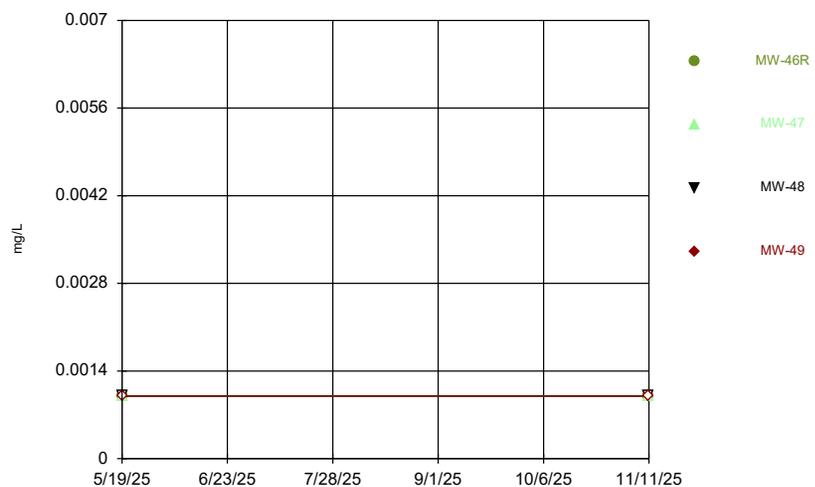
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



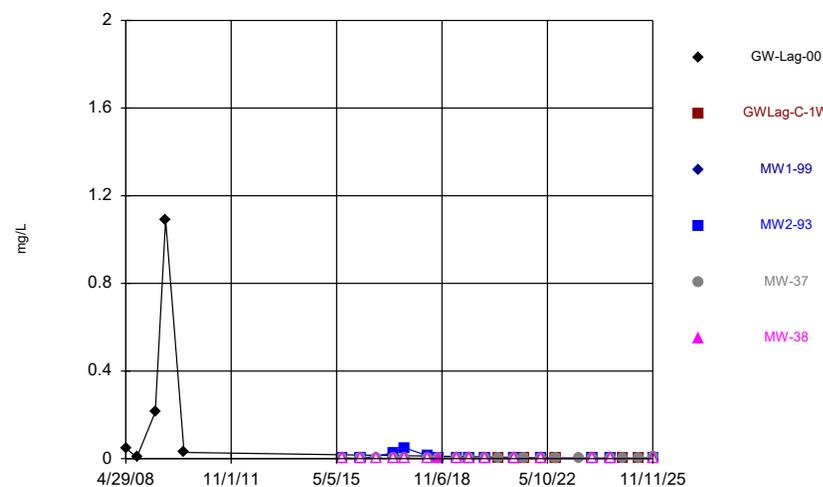
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



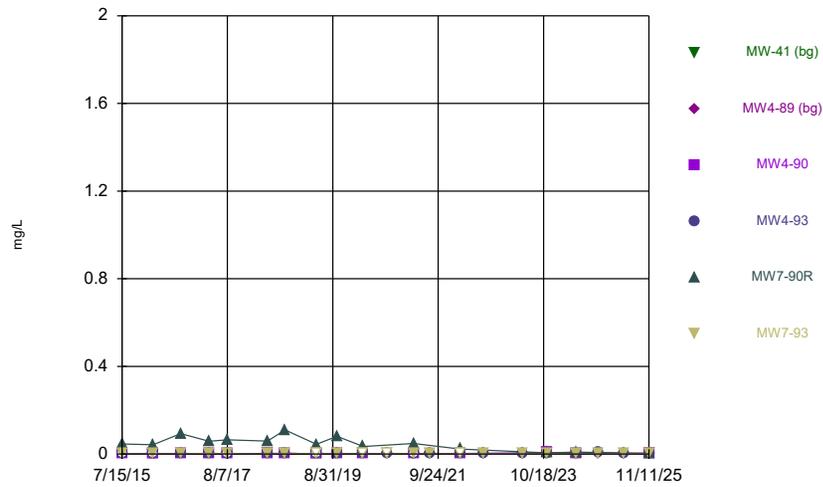
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Time Series



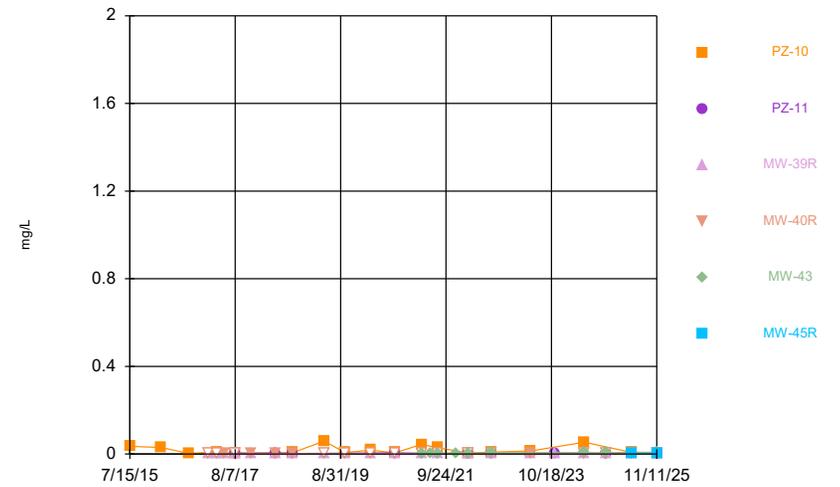
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



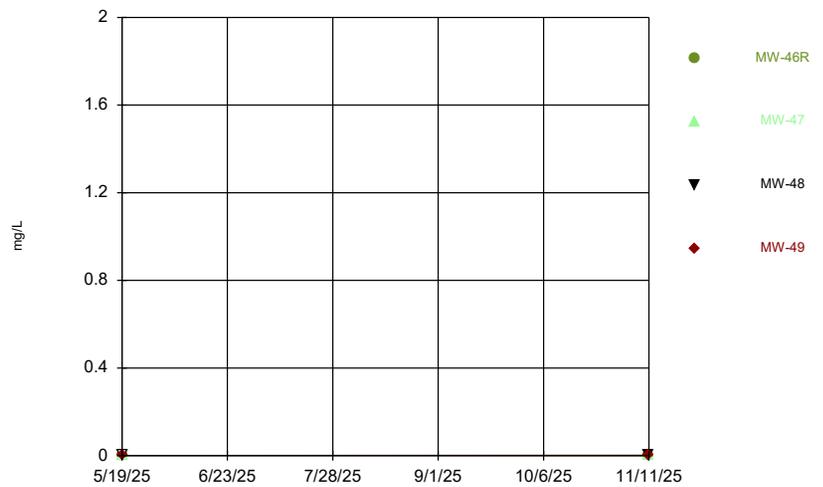
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Time Series



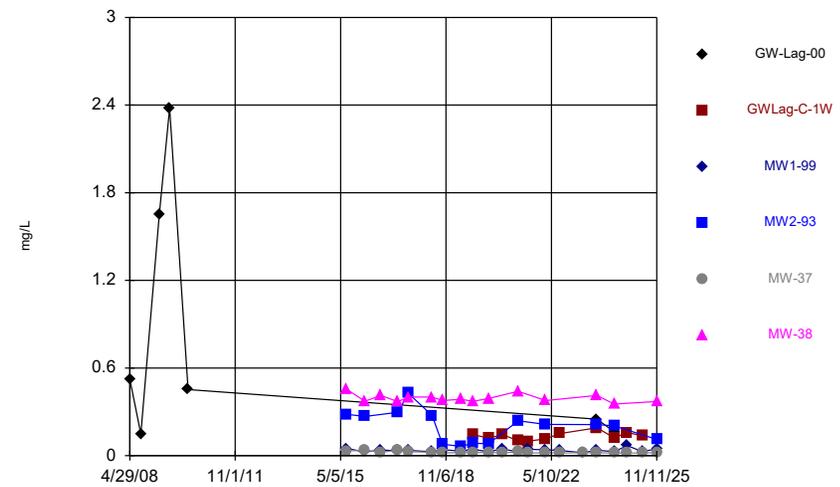
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Time Series



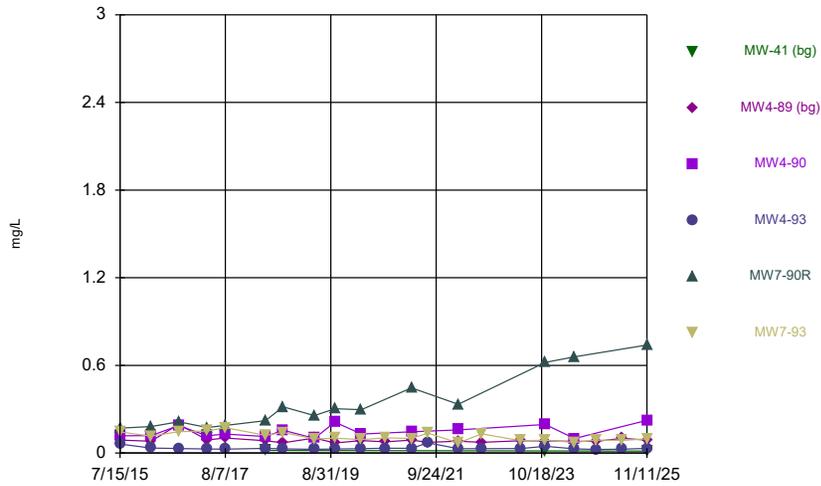
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



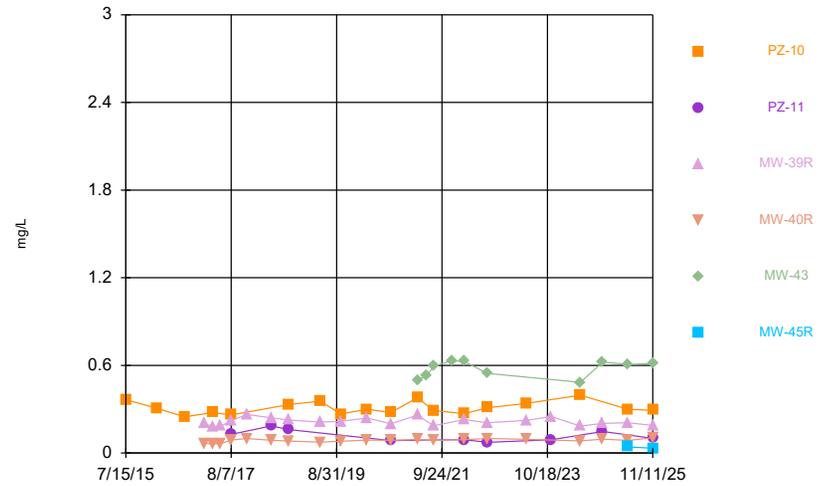
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Time Series



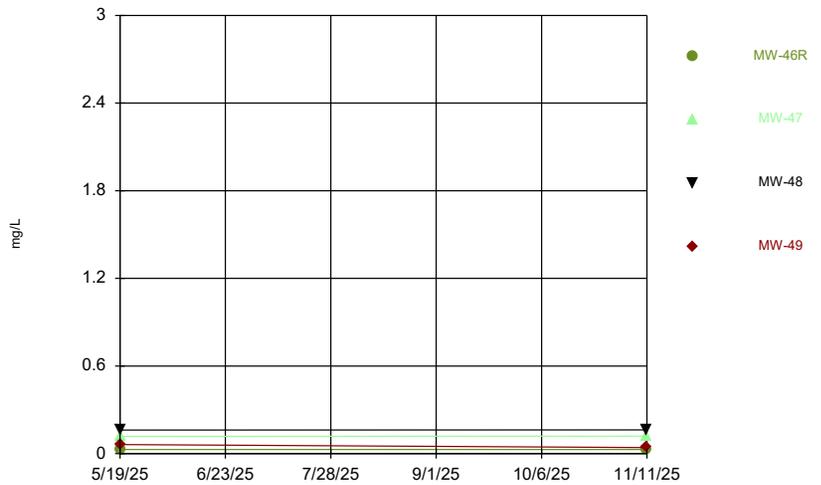
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Time Series



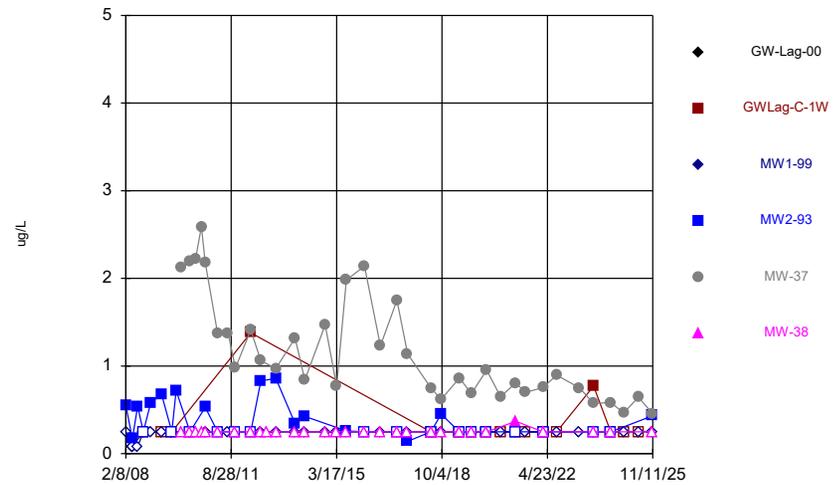
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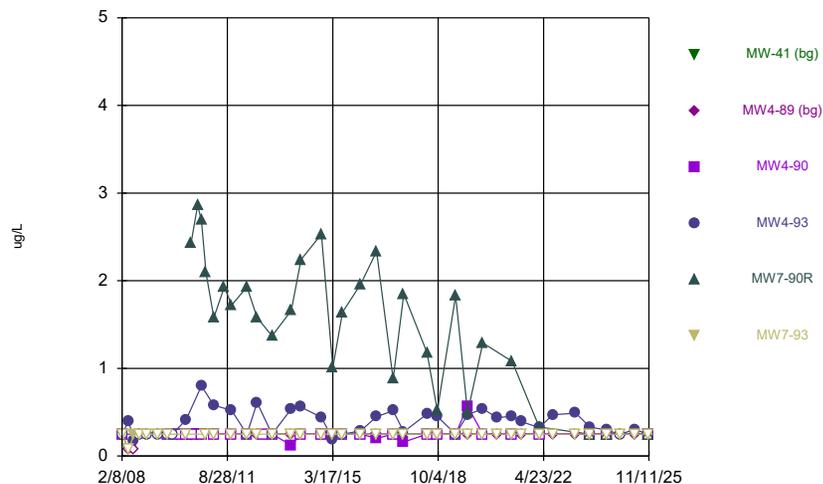
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Time Series



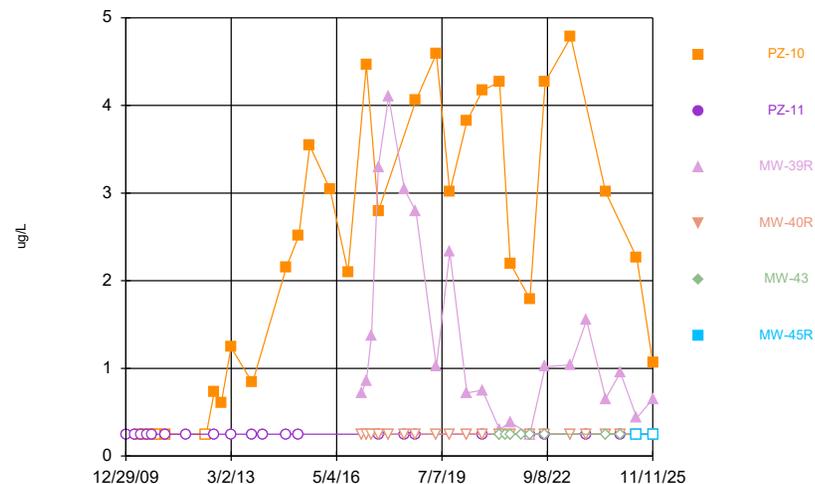
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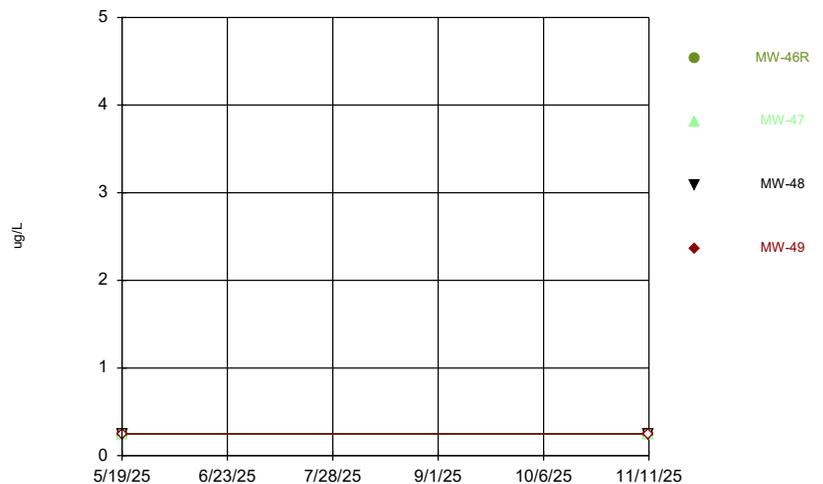
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Time Series



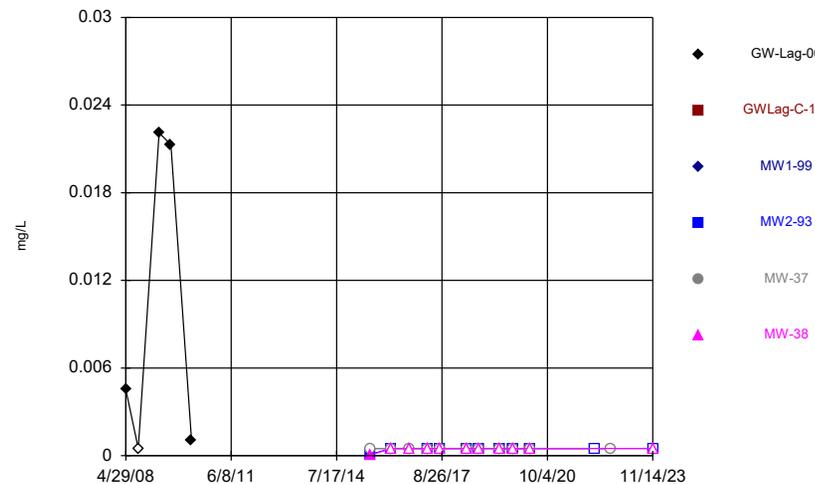
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Time Series



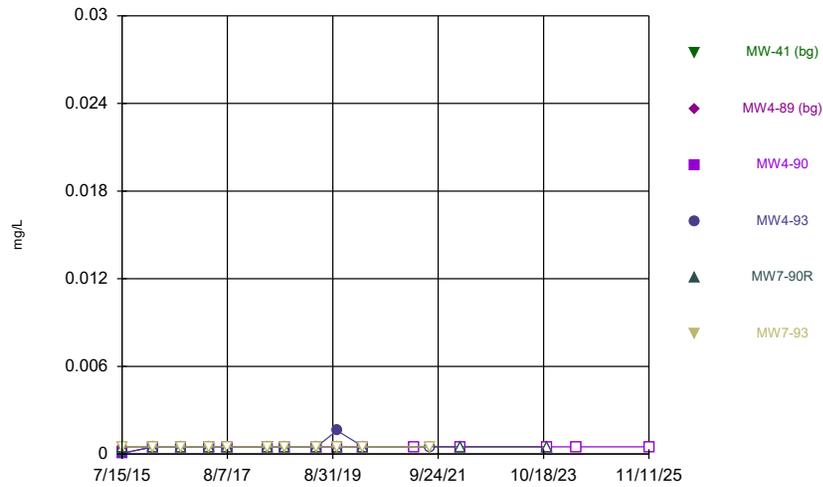
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Time Series



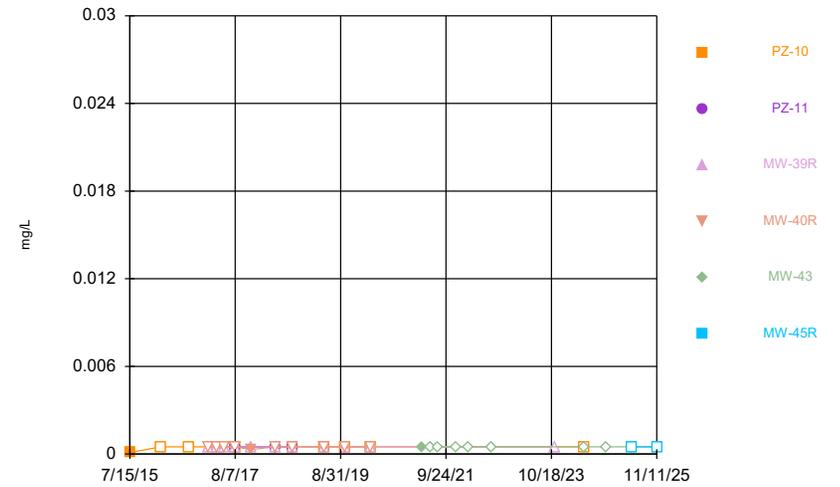
Constituent: Beryllium Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
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Time Series



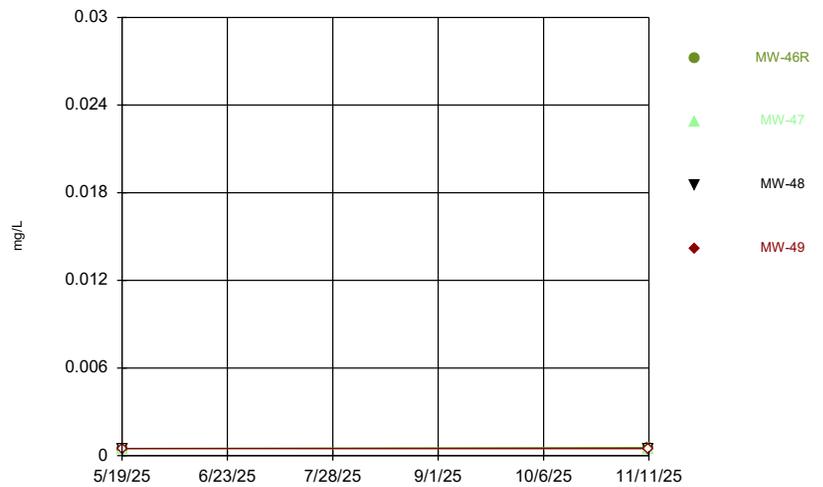
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Time Series



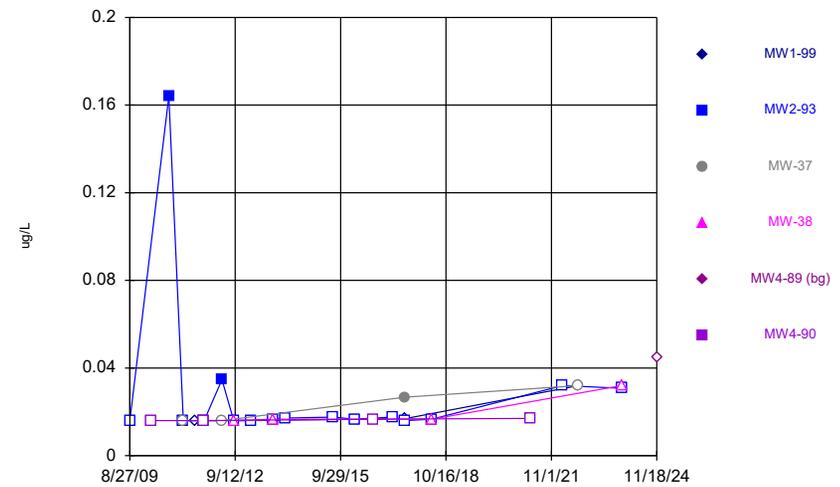
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Time Series



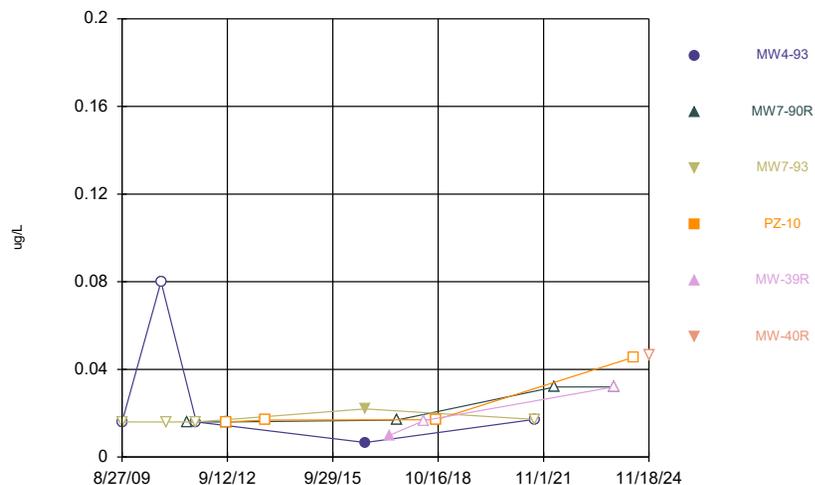
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Time Series



Constituent: beta-BHC Analysis Run 12/5/2025 2:00 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



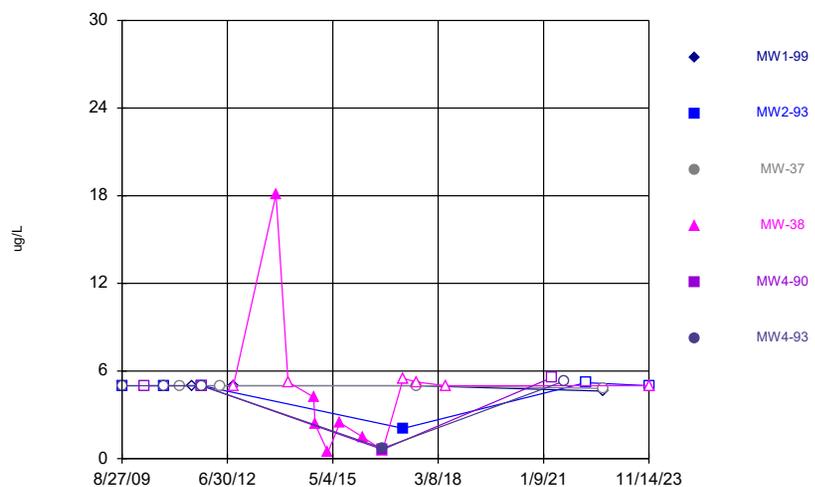
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Time Series



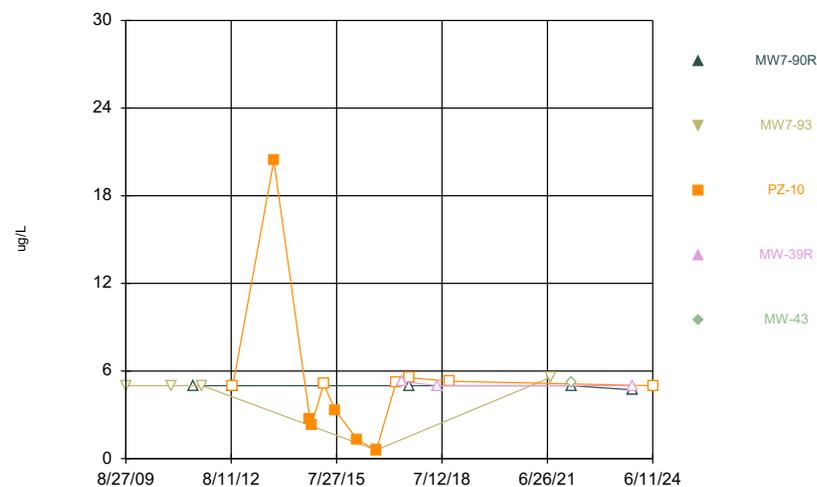
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Time Series



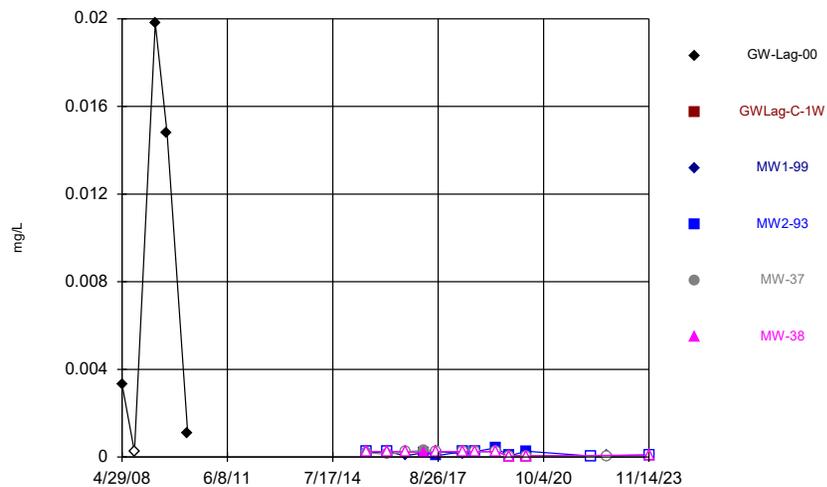
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



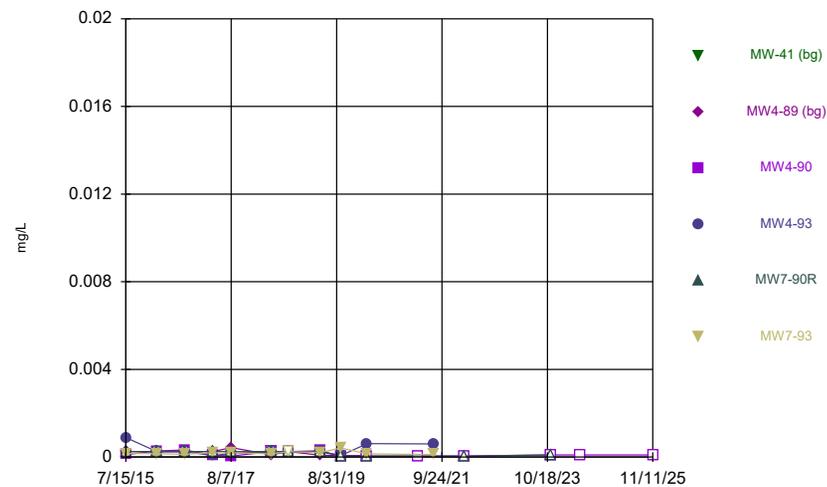
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Time Series



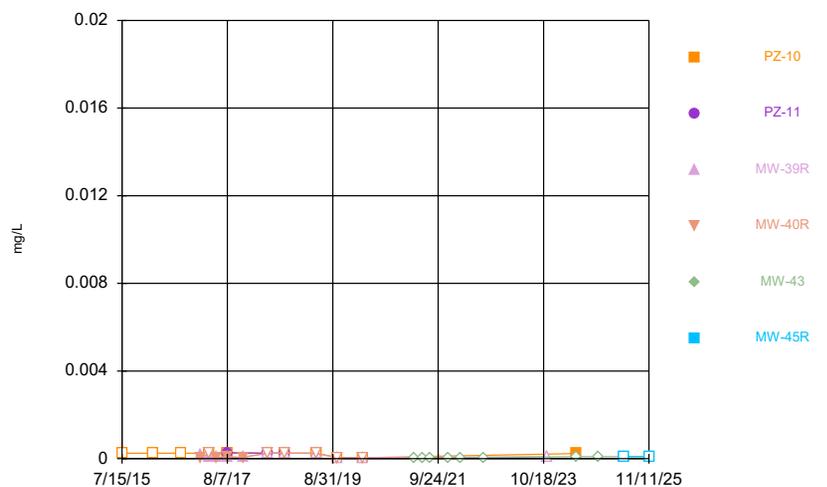
Constituent: Cadmium Analysis Run 12/5/2025 2:01 PM View: 2025_AWQR-Time_Series
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Time Series



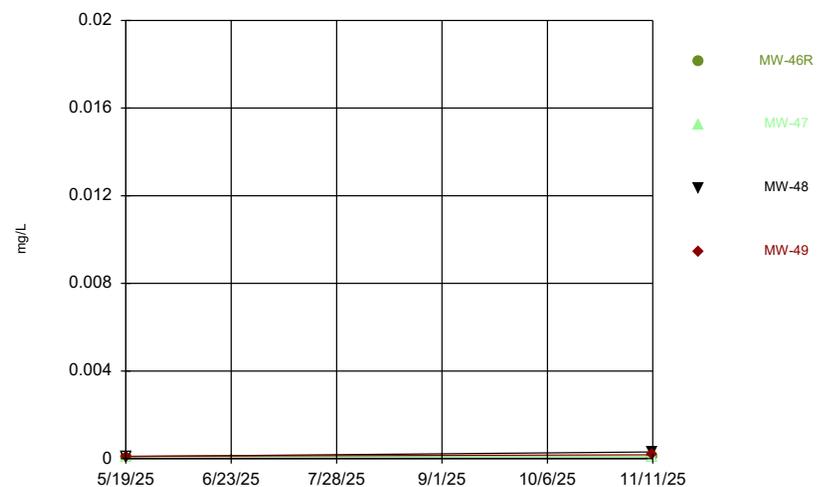
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Time Series



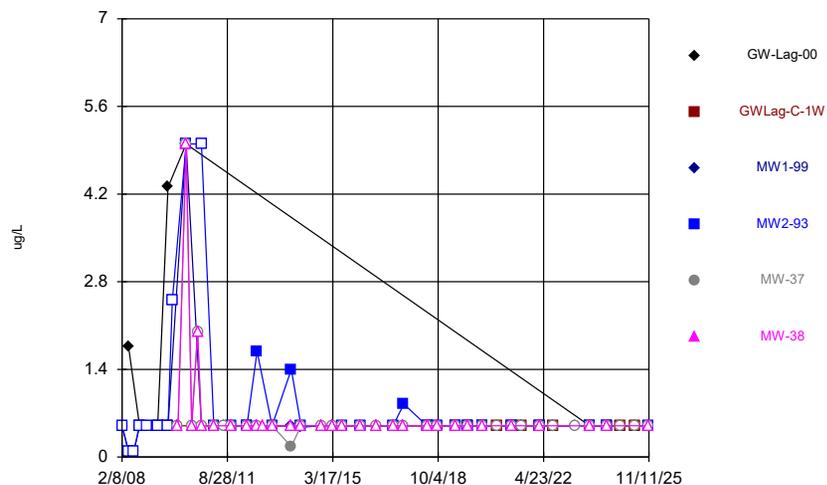
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Time Series



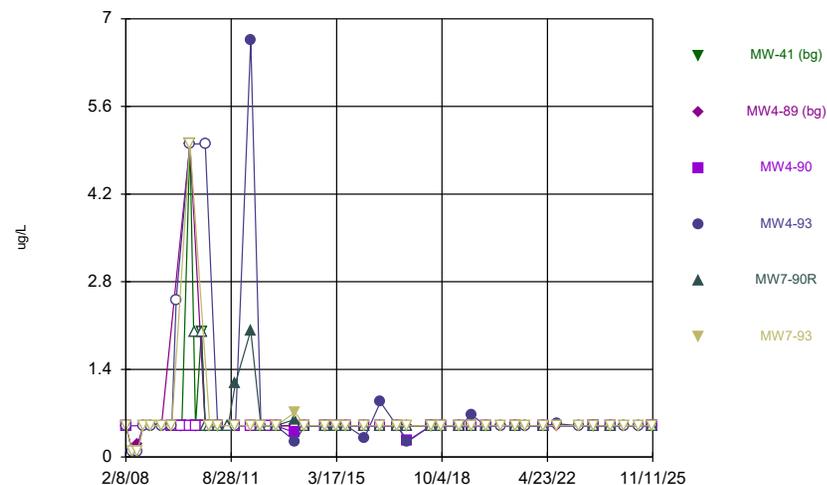
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Time Series



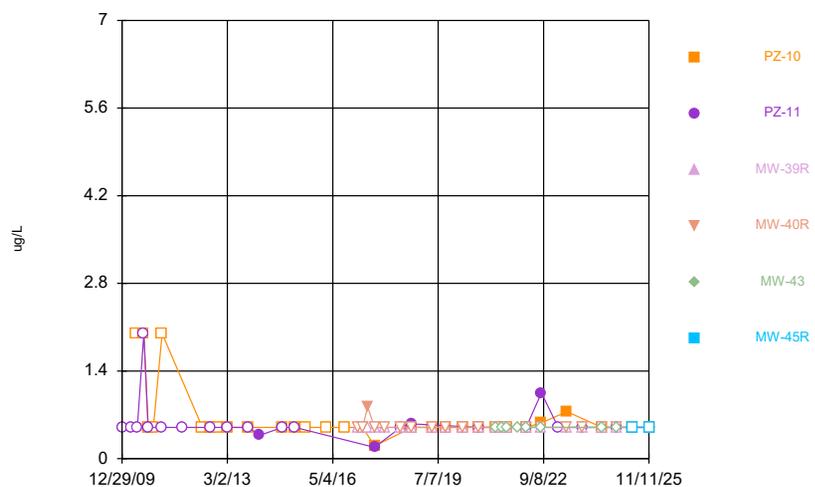
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Time Series



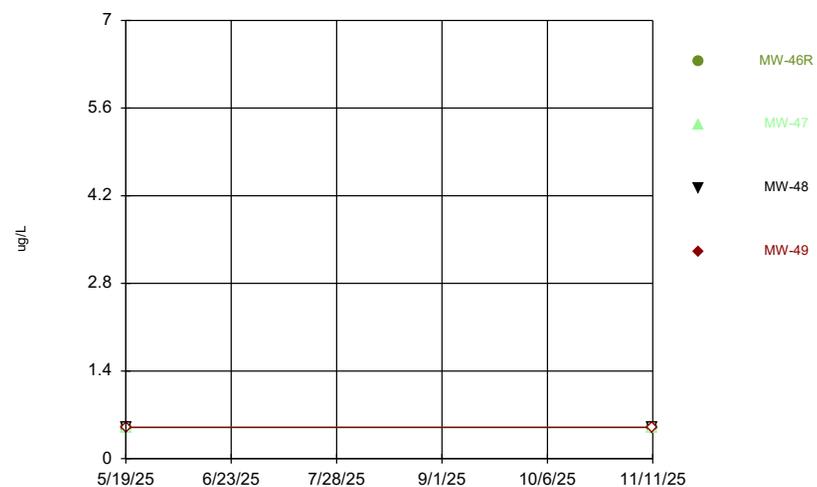
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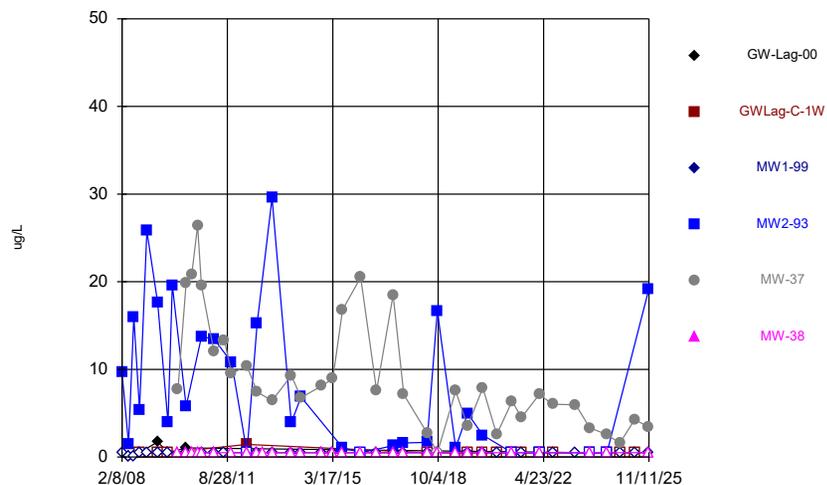
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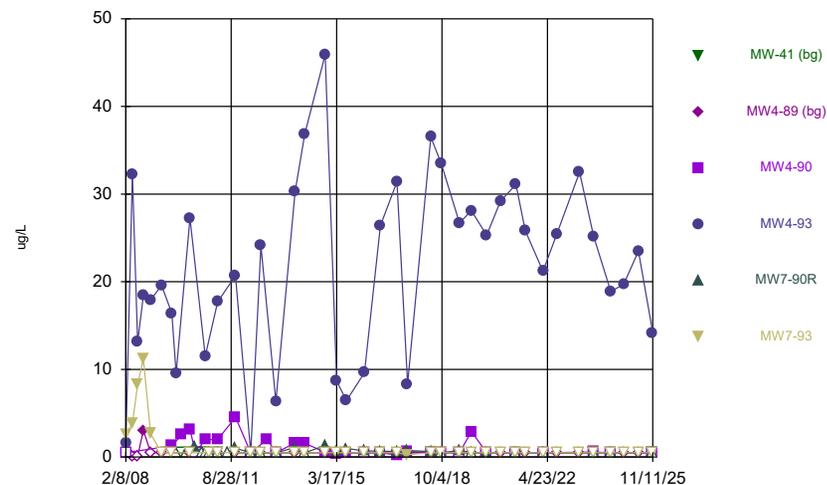
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Time Series



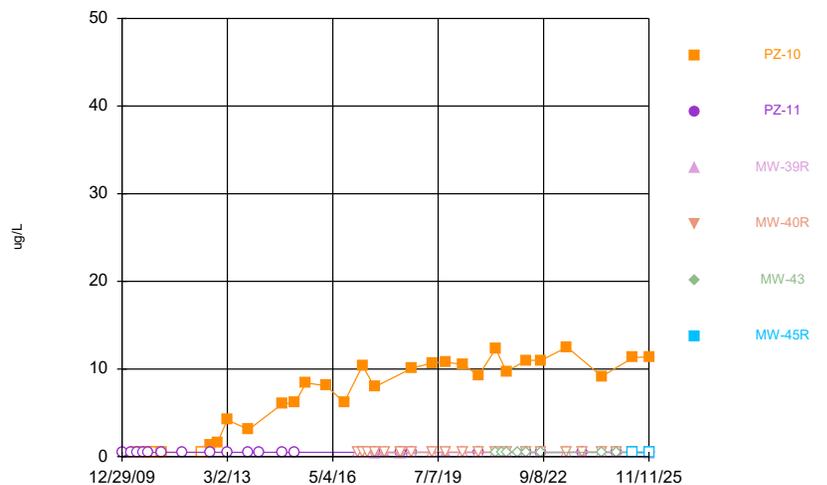
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Time Series



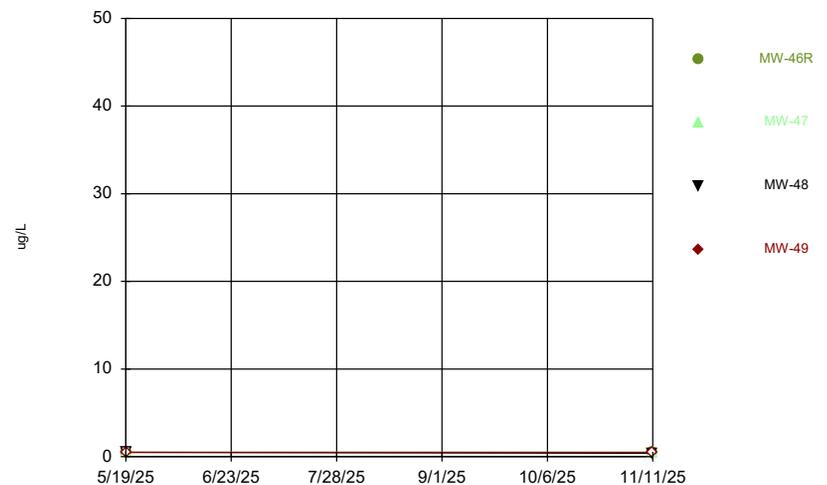
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Time Series



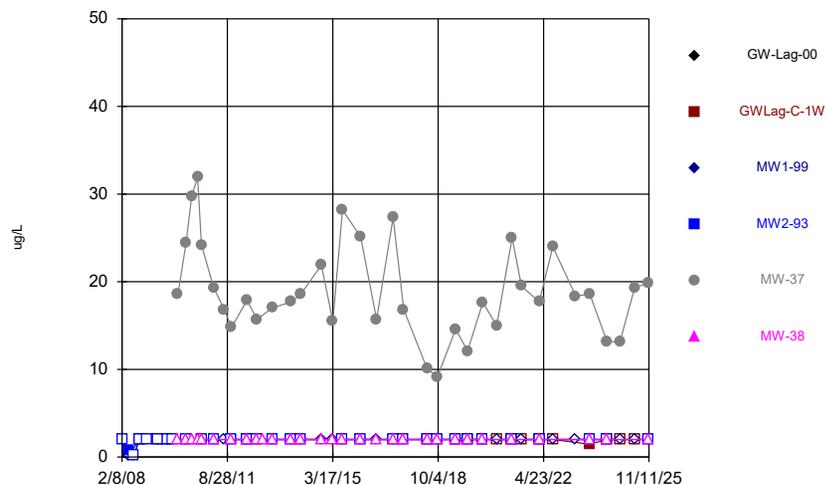
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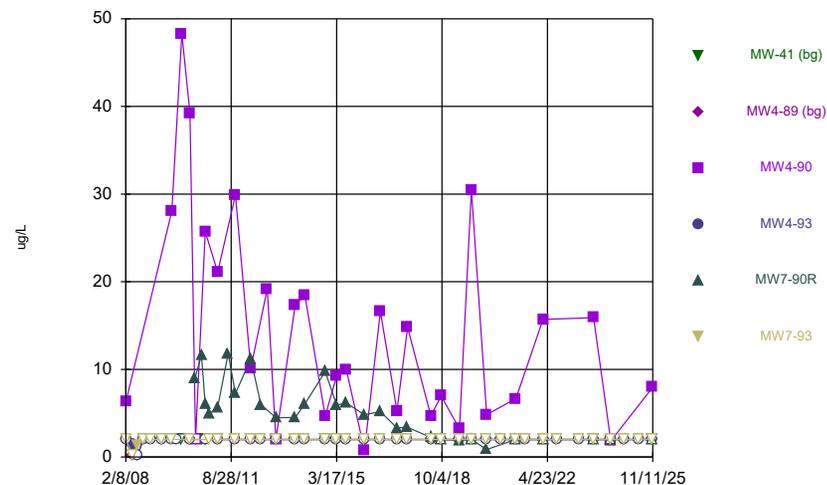
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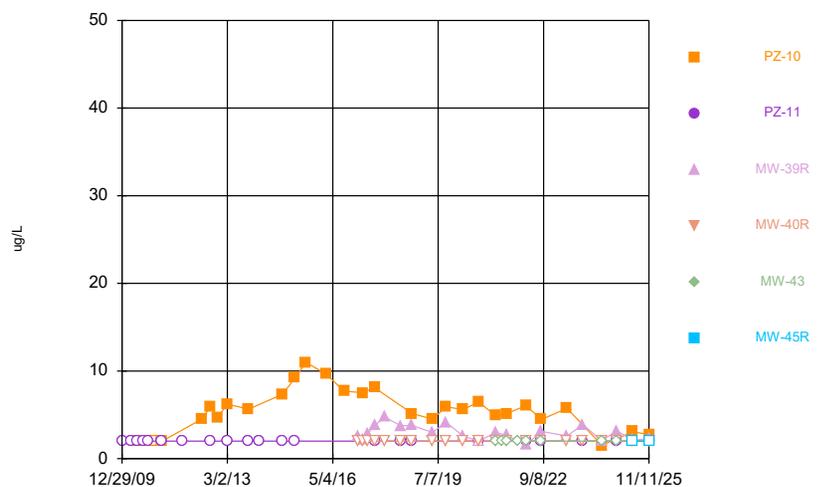
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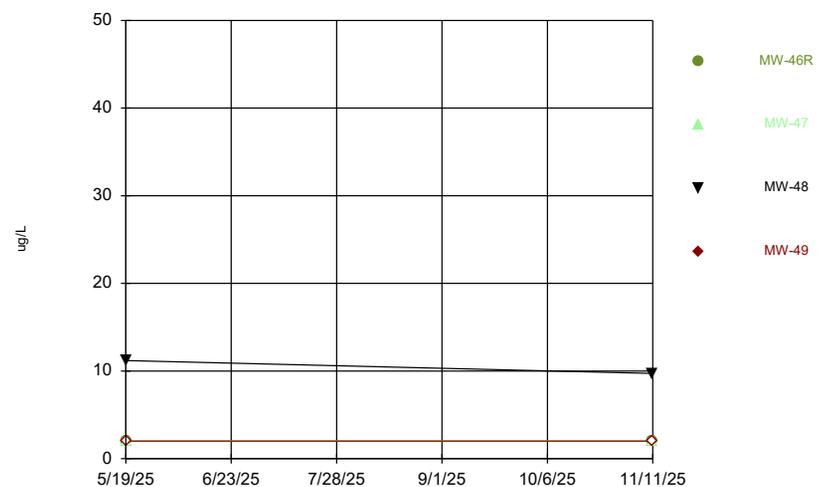
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Time Series



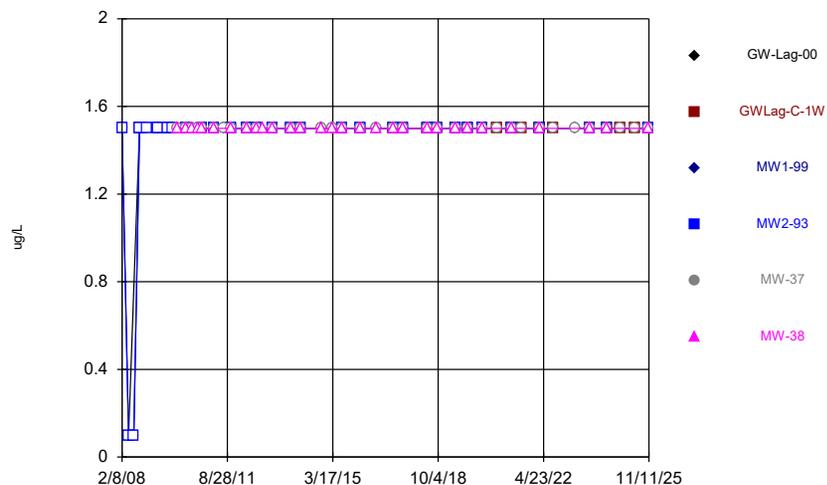
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Time Series



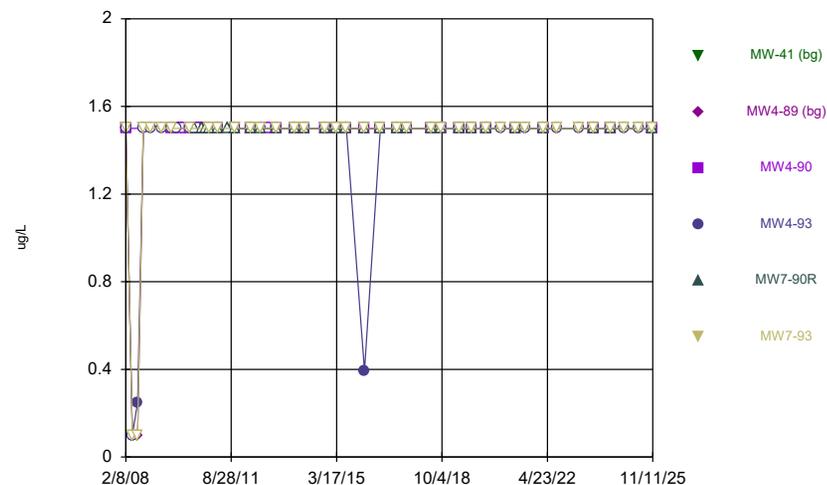
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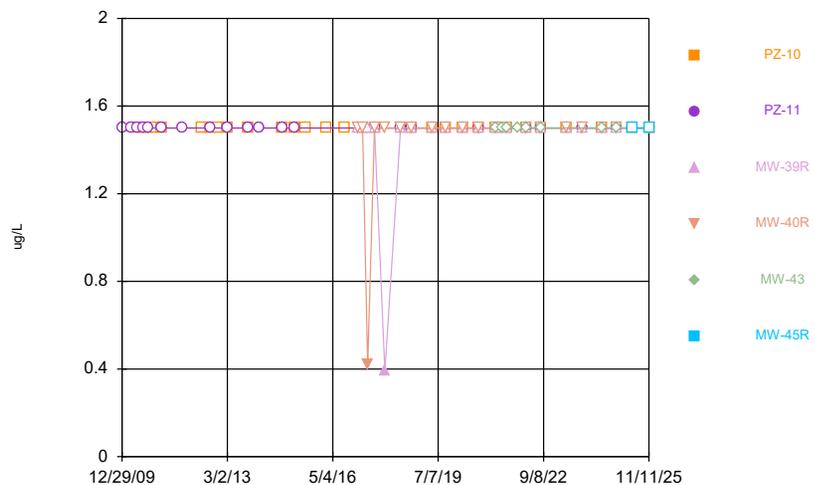
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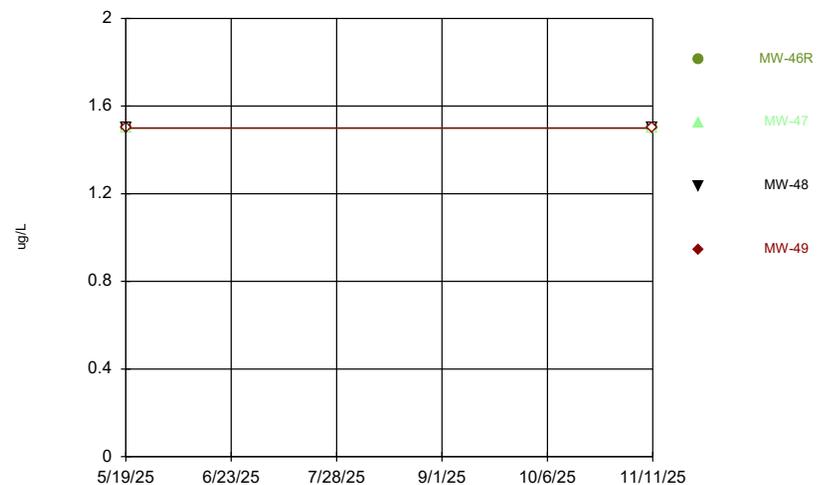
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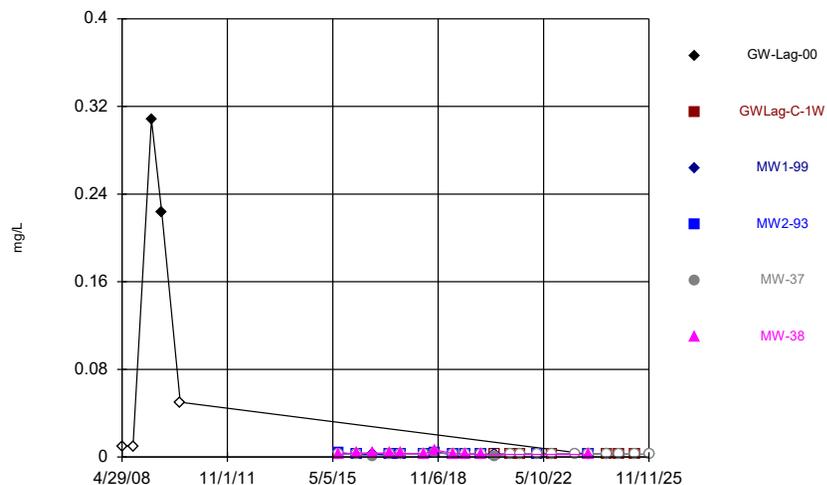
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Time Series



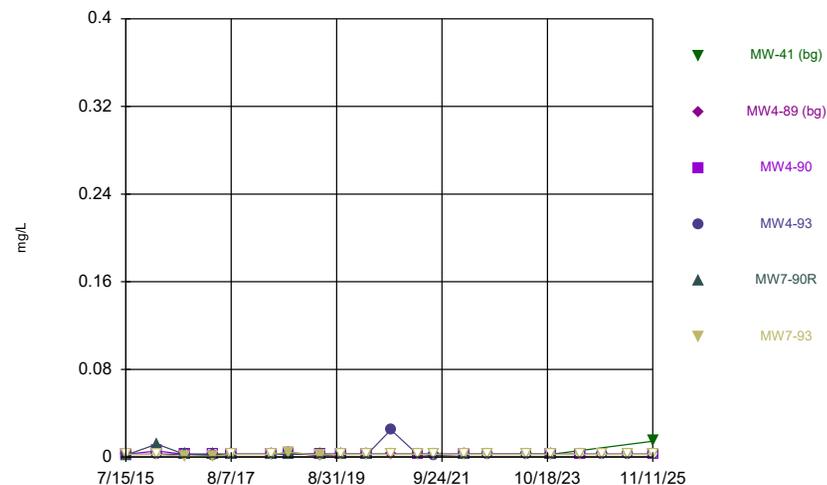
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Time Series



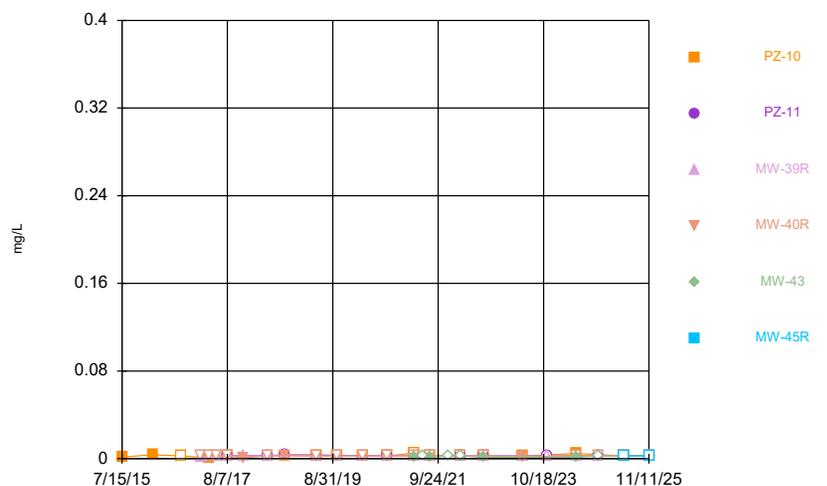
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



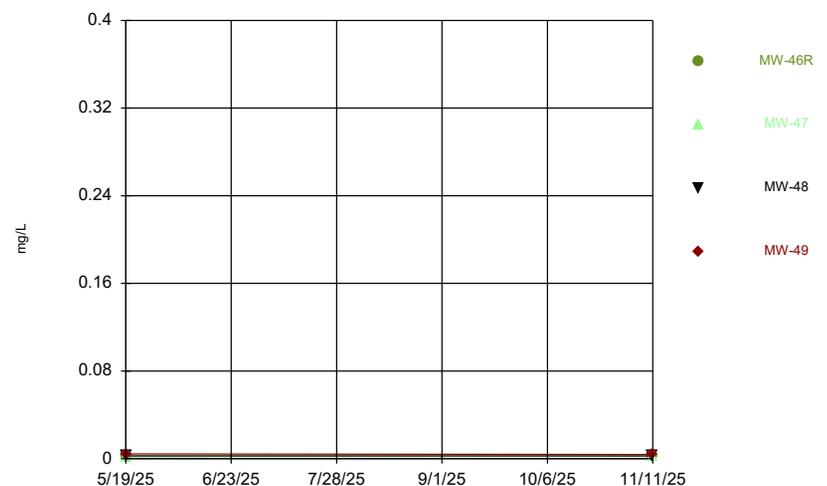
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Time Series



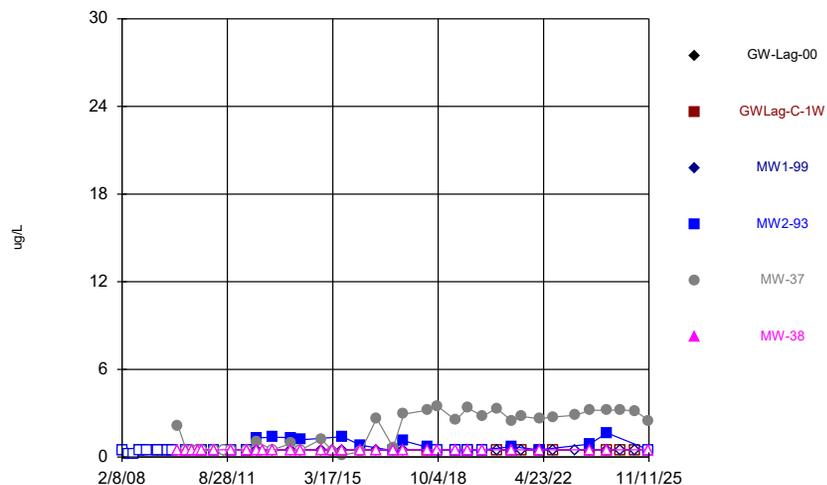
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: Chromium Analysis Run 12/5/2025 2:01 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



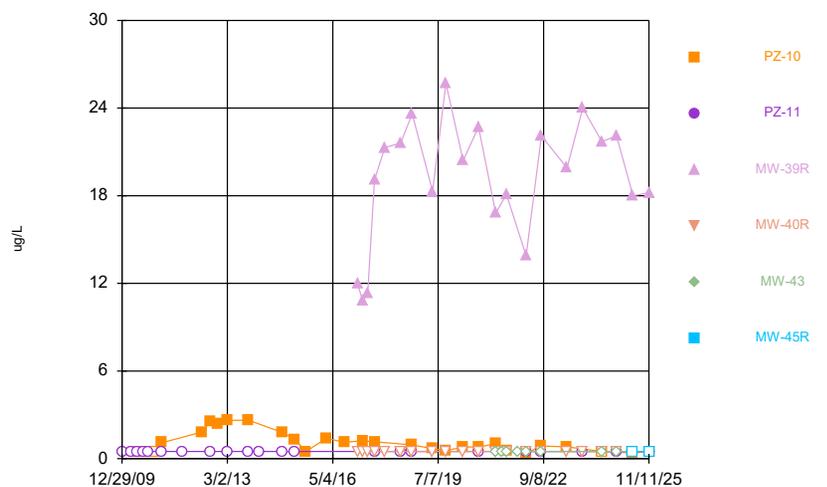
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



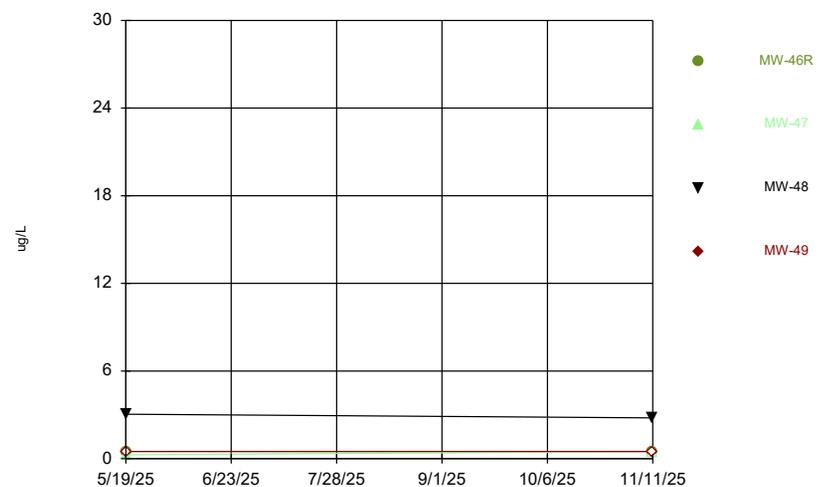
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Time Series



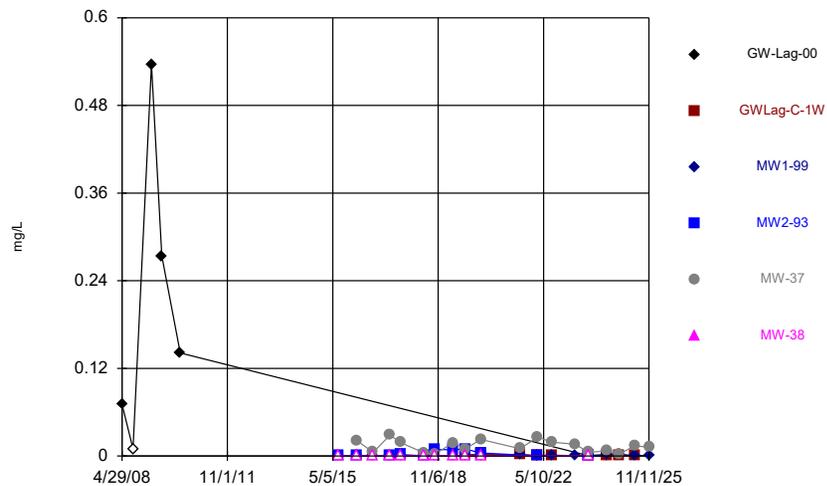
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Time Series



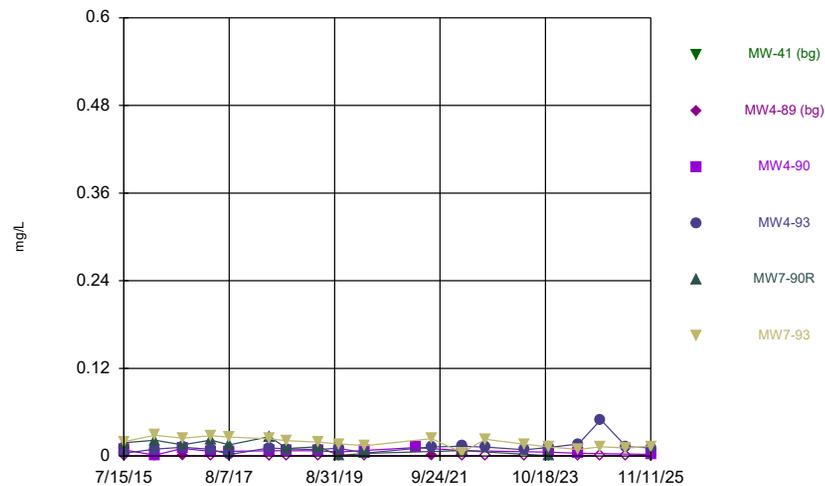
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



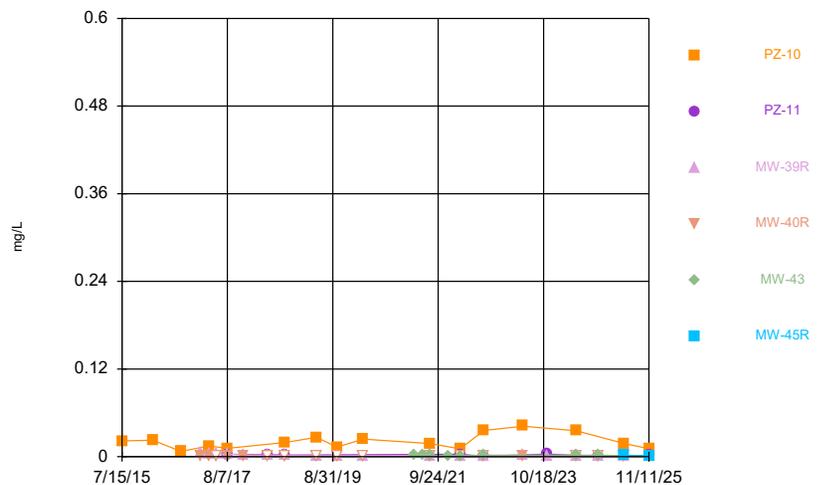
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



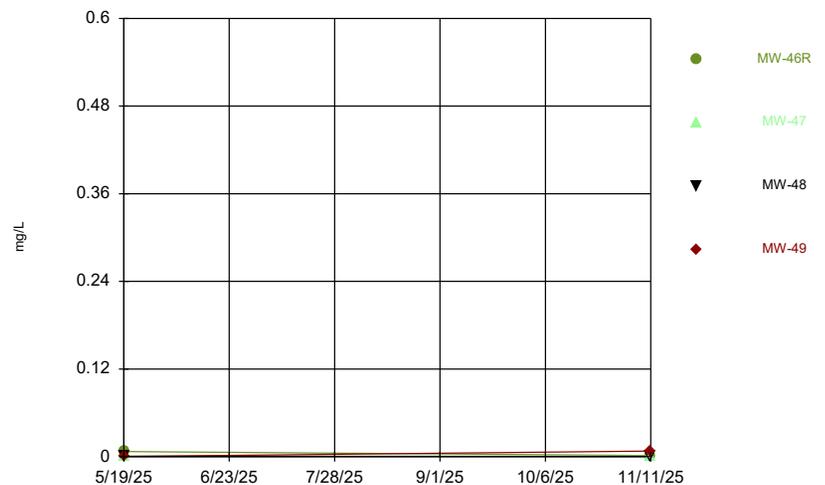
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



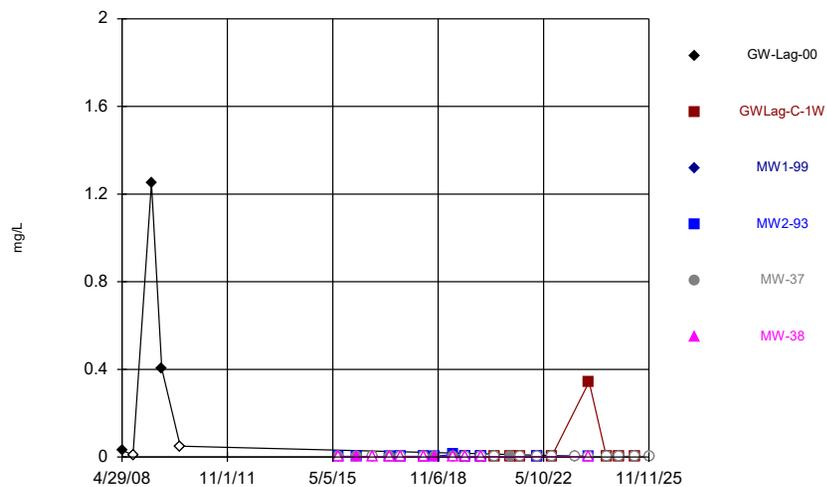
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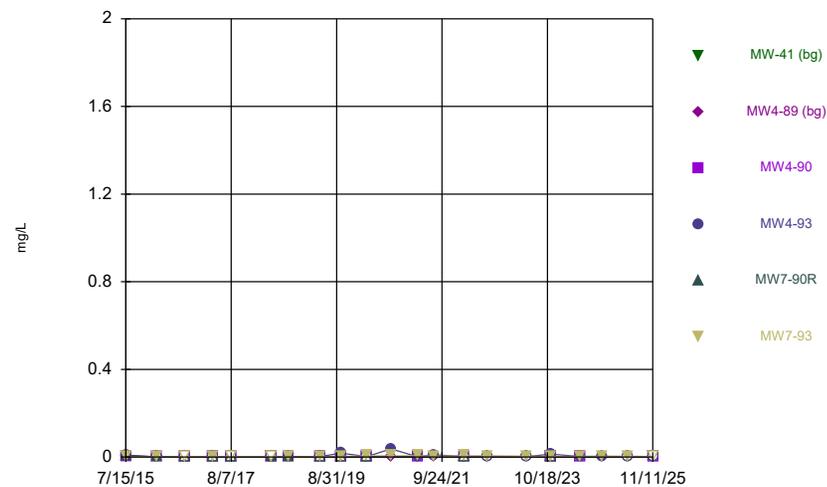
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Time Series



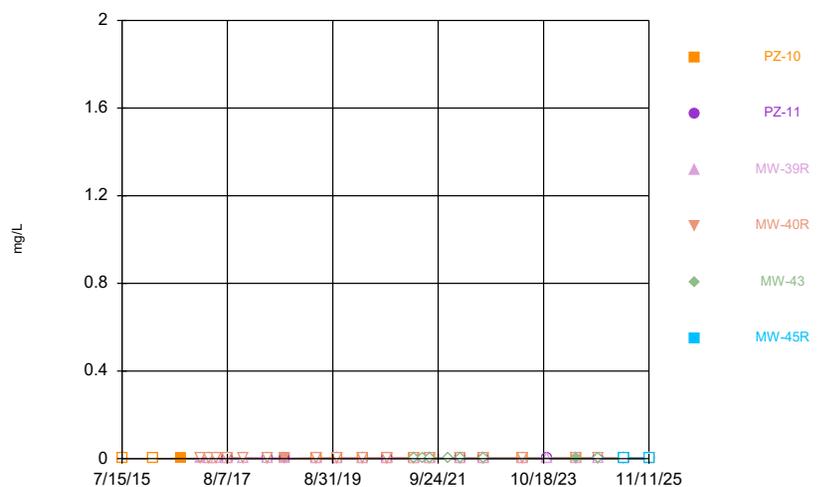
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



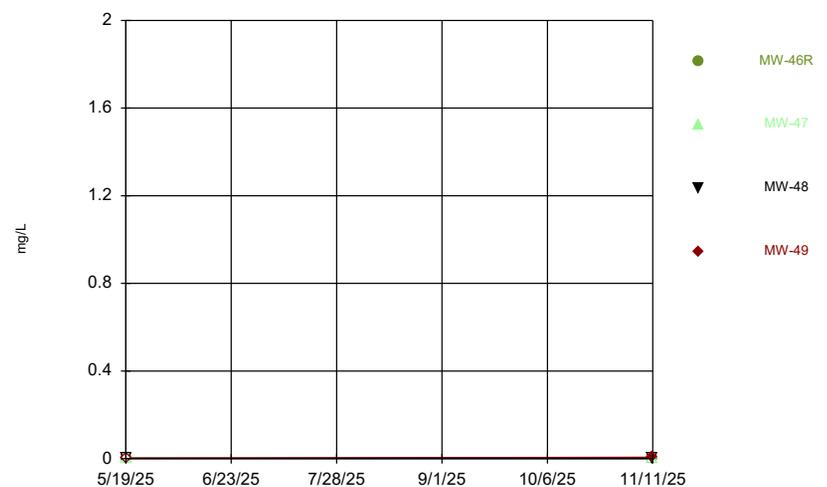
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



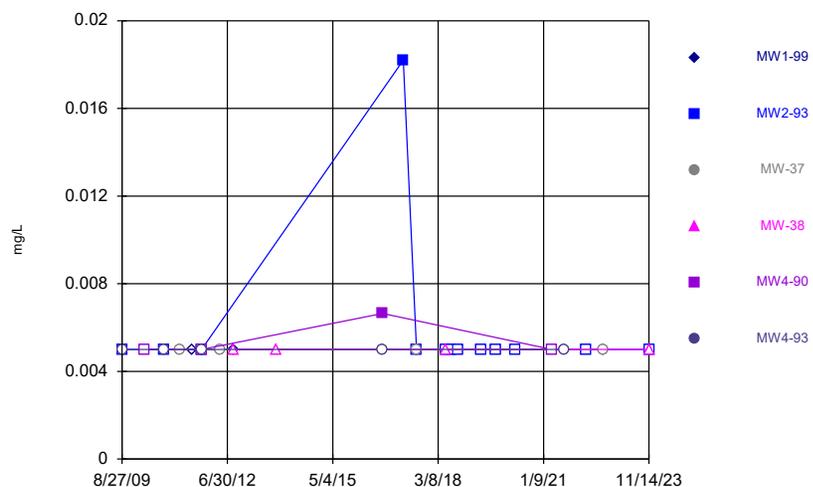
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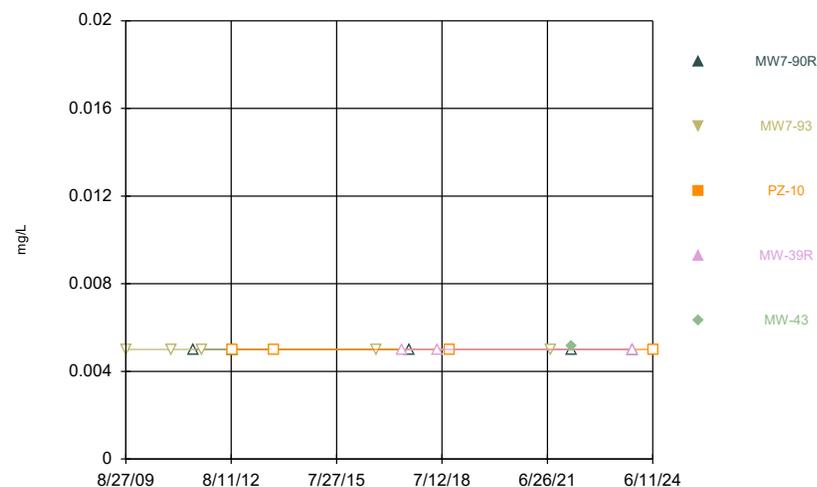
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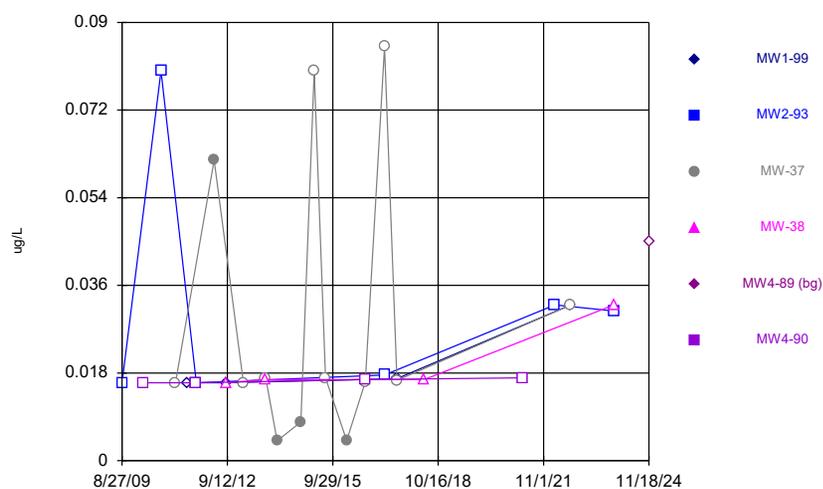
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Time Series



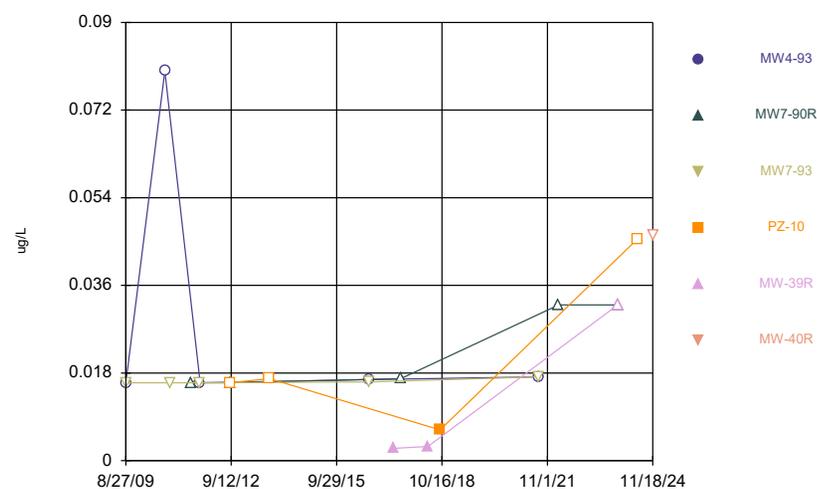
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: delta-BHC Analysis Run 12/5/2025 2:01 PM View: 2025_AWQR-Time_Series
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Time Series



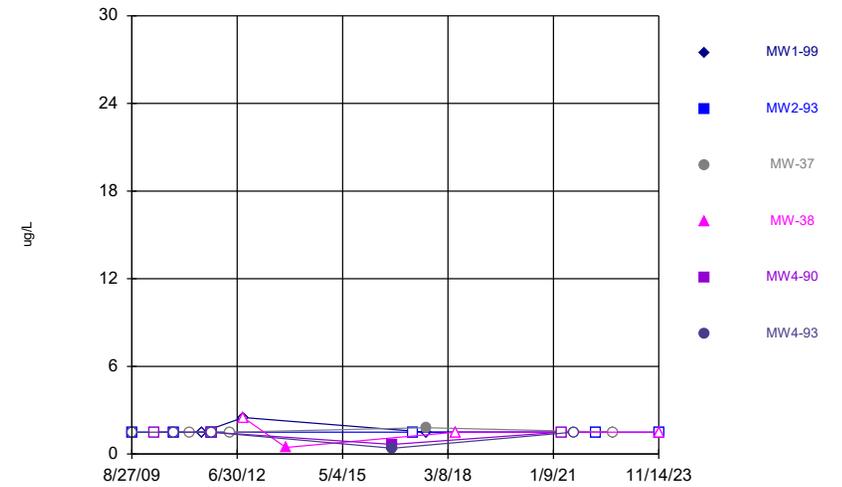
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Time Series



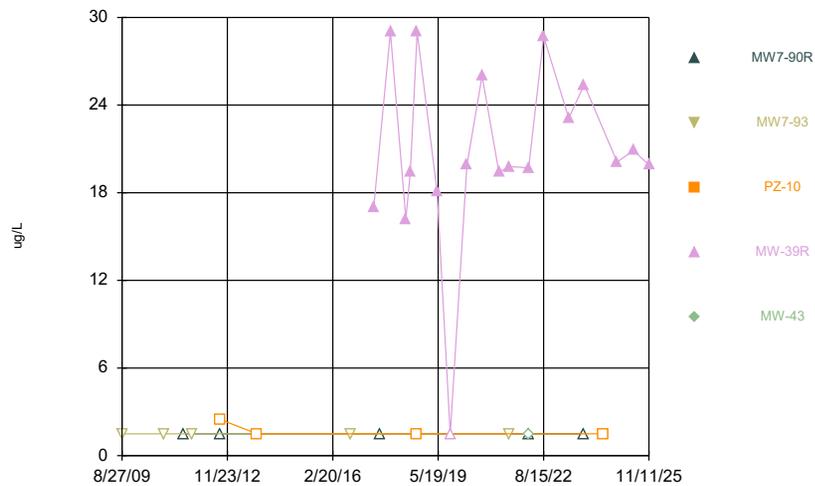
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Time Series



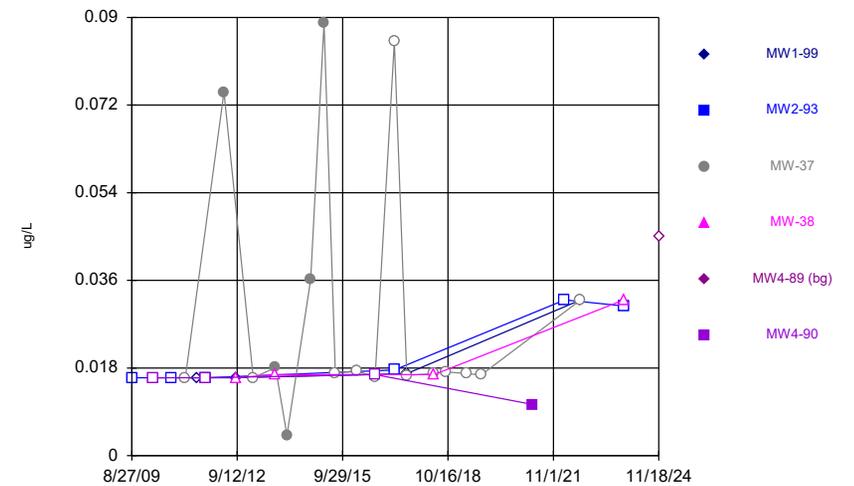
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



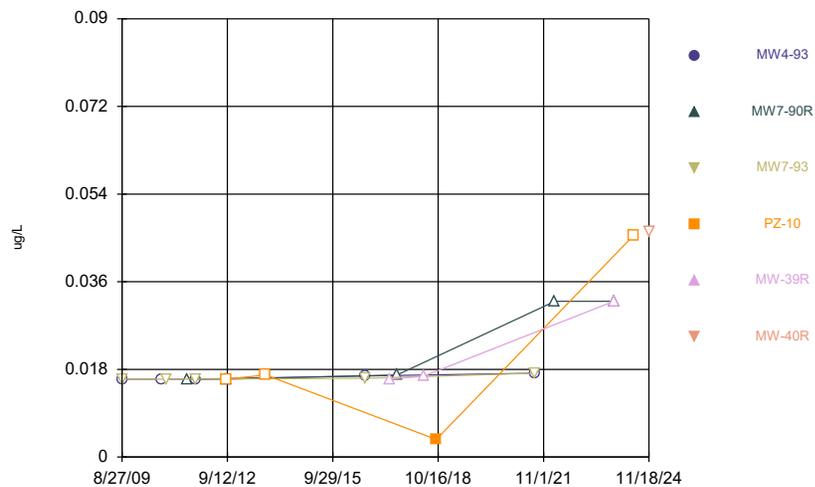
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: Endosulfan II Analysis Run 12/5/2025 2:01 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



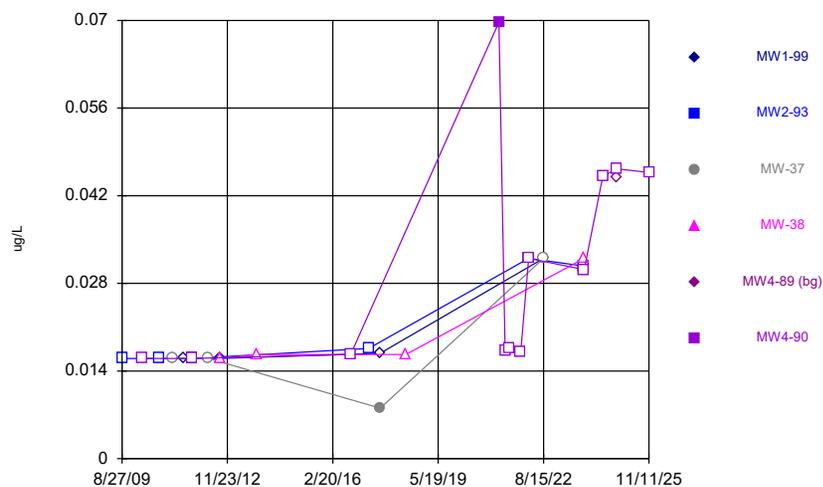
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Time Series



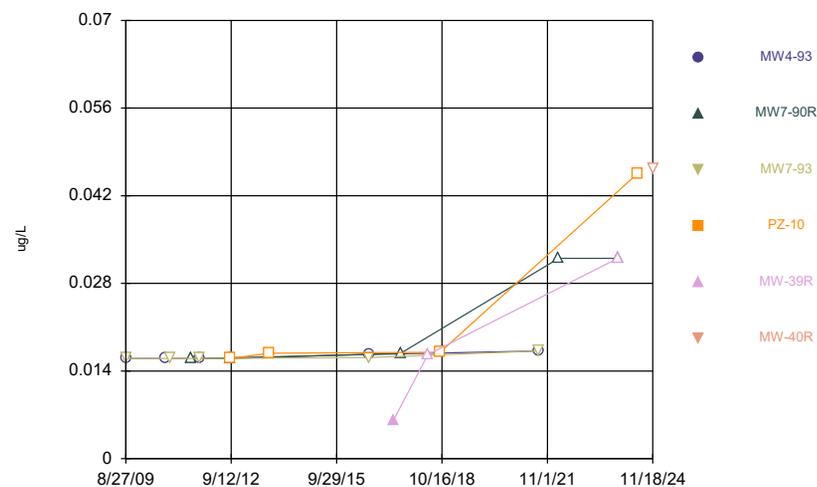
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: Endosulfan sulfate Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



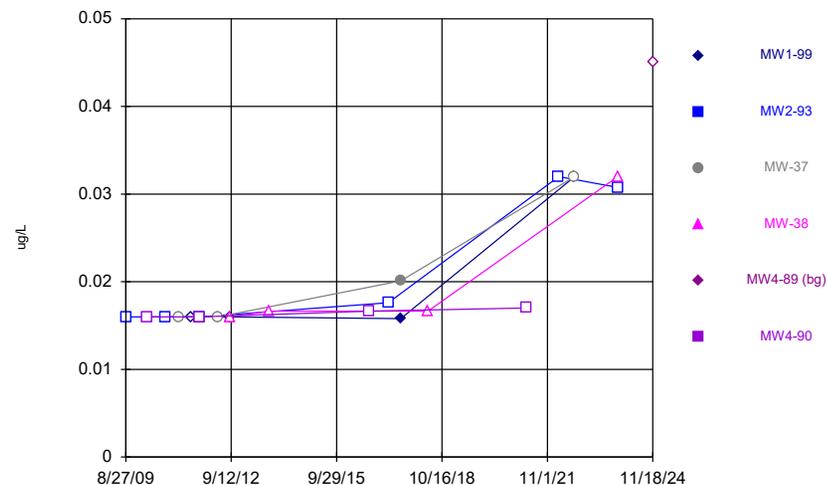
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Time Series



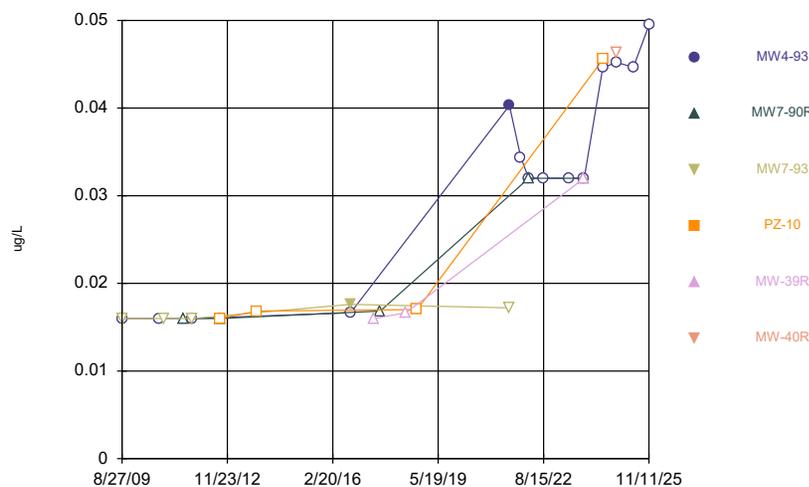
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Time Series



Constituent: Endrin aldehyde Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



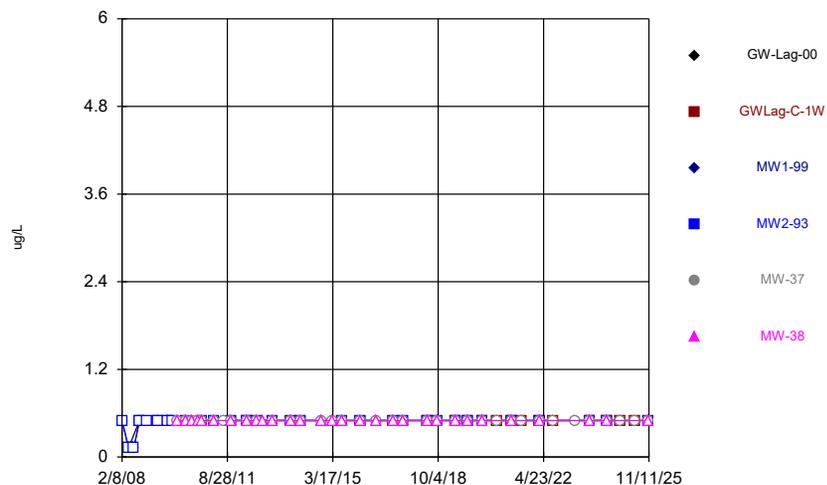
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Time Series



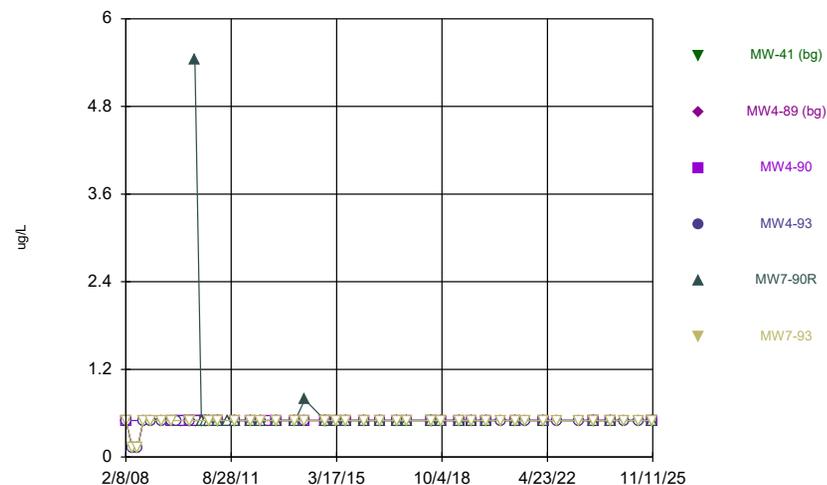
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Time Series



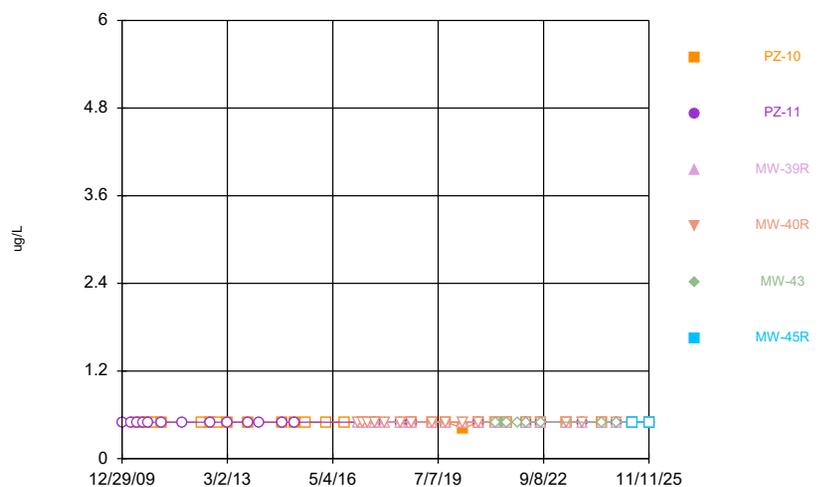
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Time Series



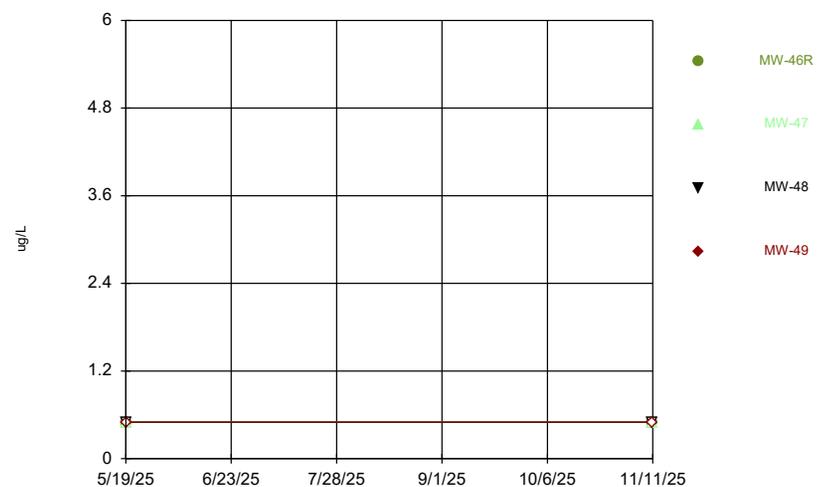
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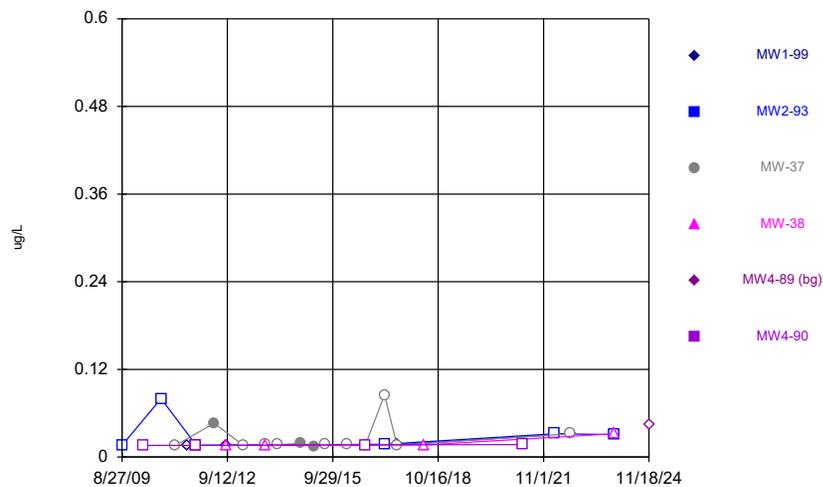
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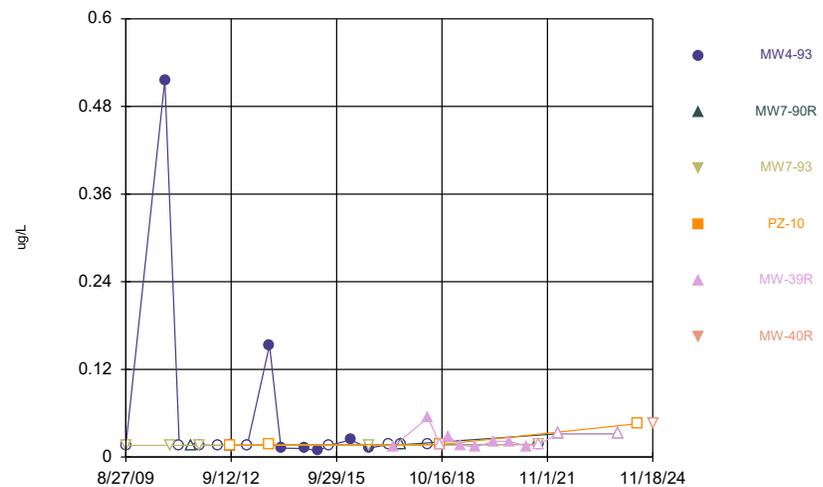
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Time Series



Constituent: Heptachlor Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



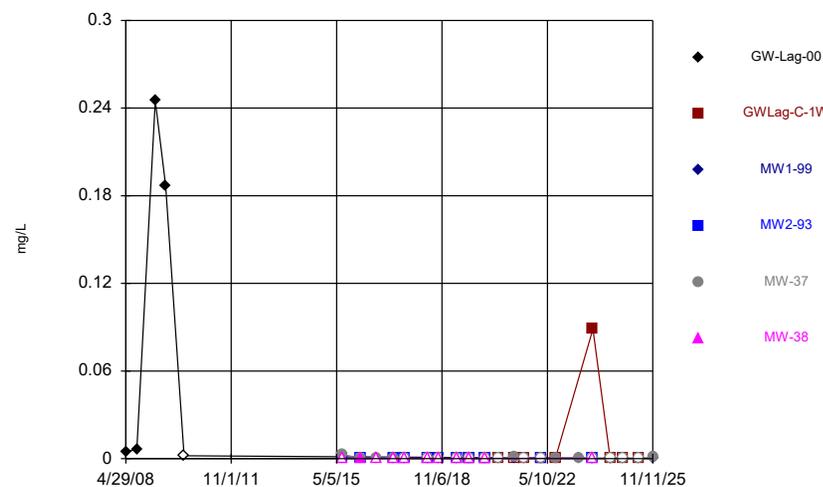
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Time Series



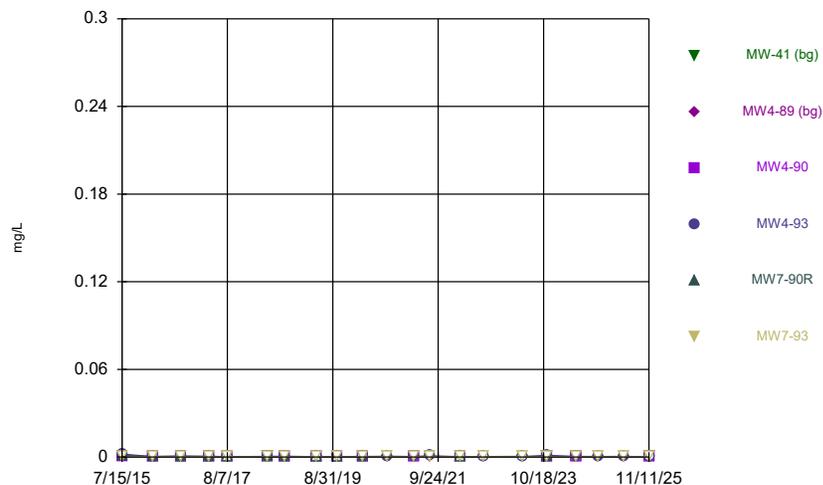
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Time Series



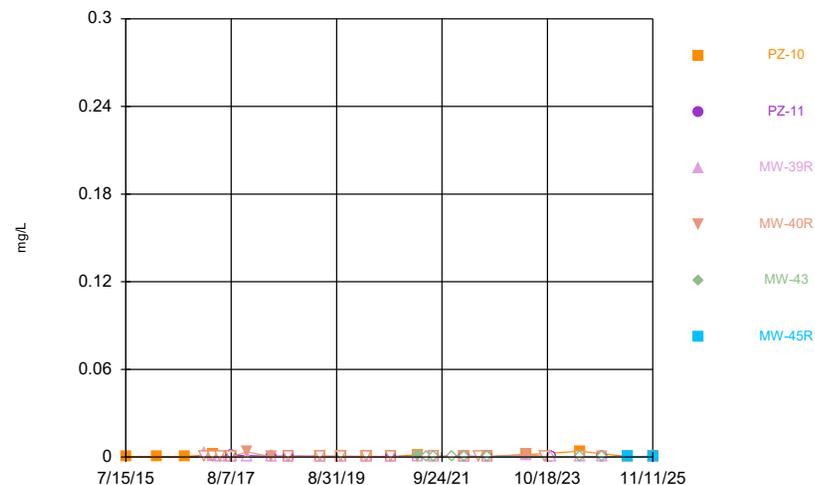
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Time Series



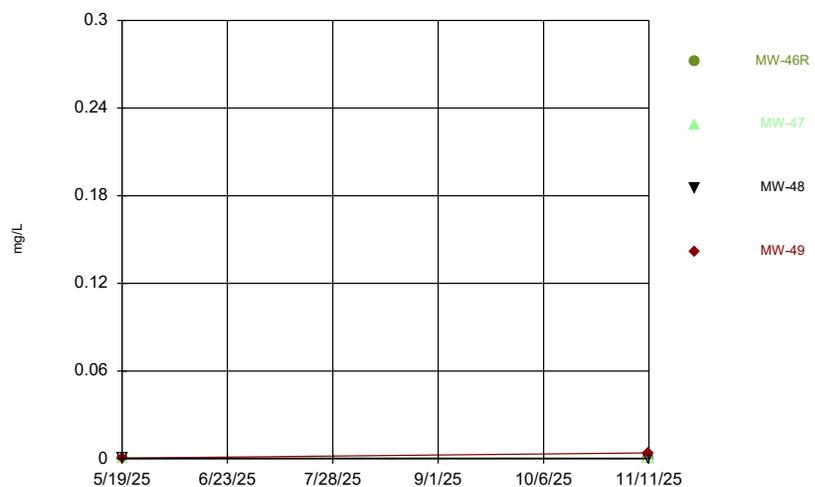
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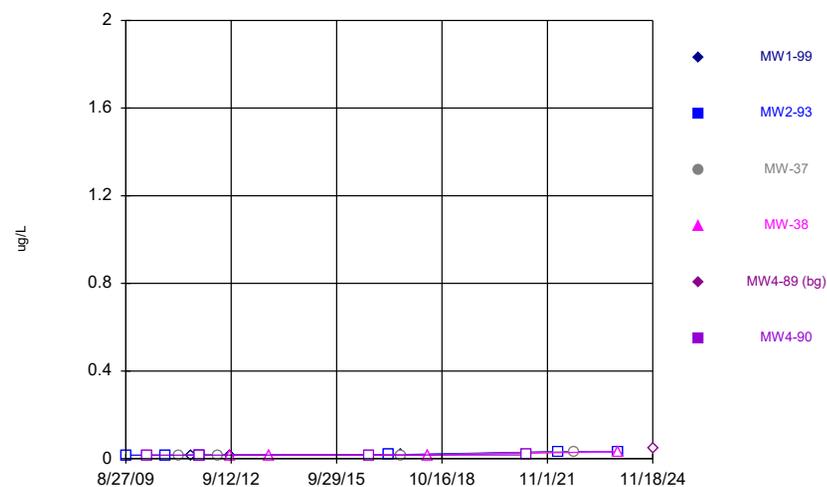
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Time Series



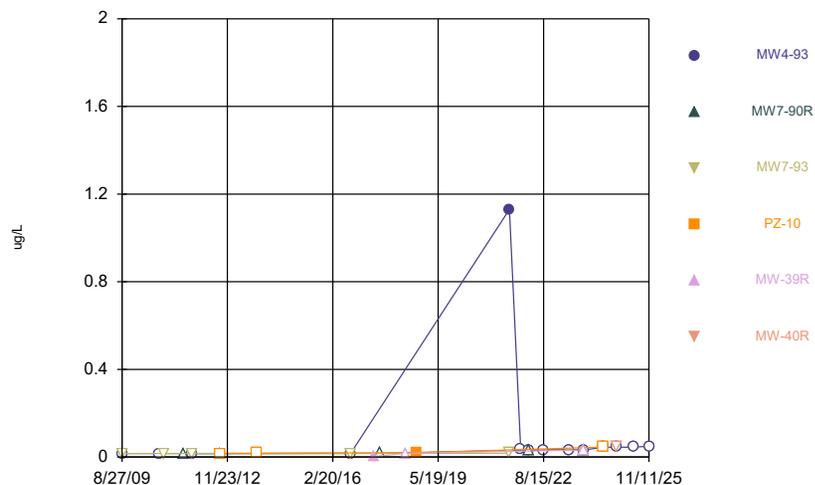
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Time Series



Constituent: Methoxychlor Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



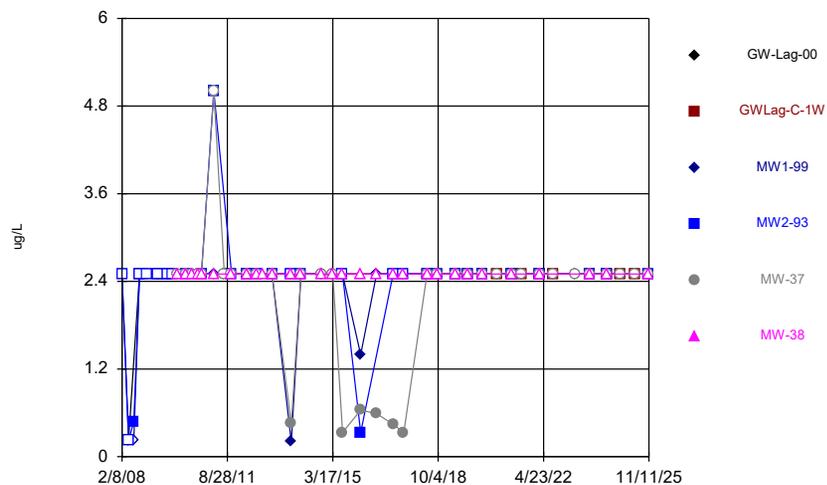
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Time Series



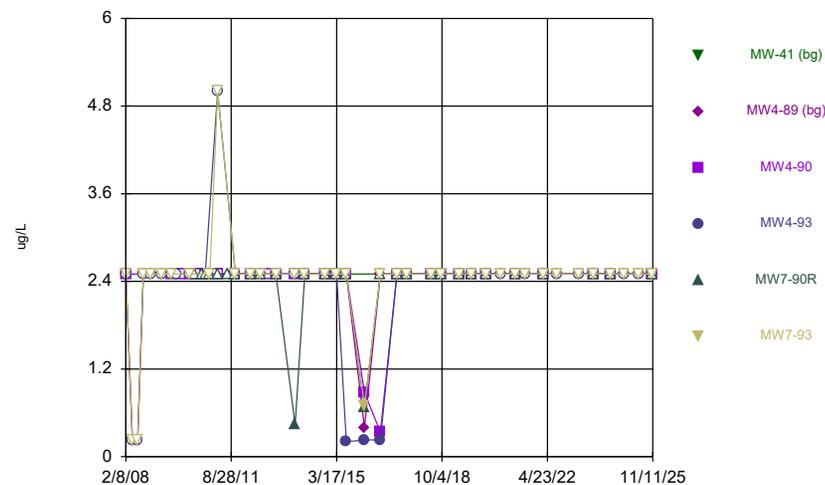
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Time Series



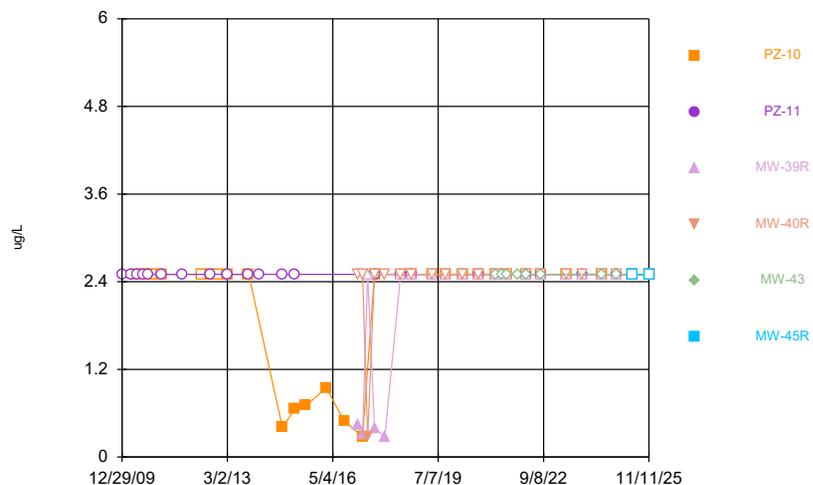
Constituent: Methylene Chloride Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
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Time Series



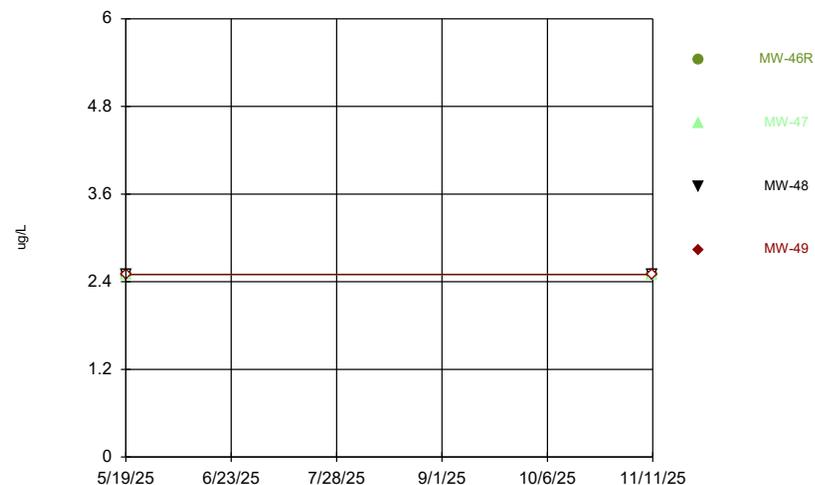
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Time Series



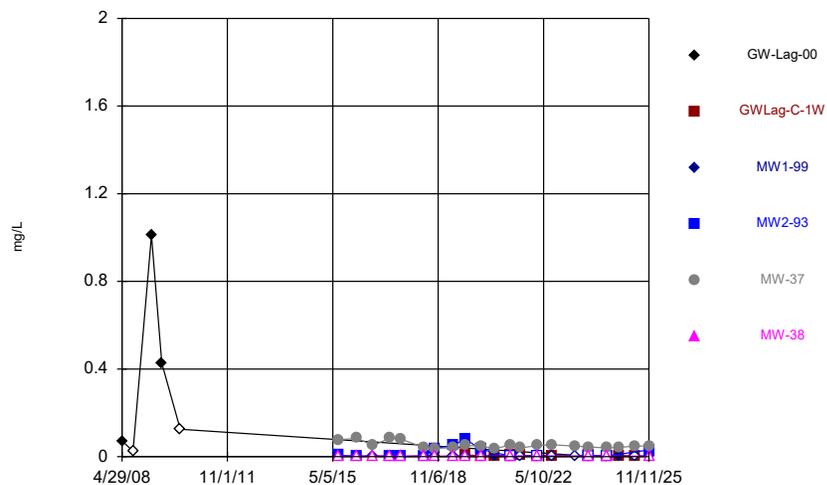
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Time Series



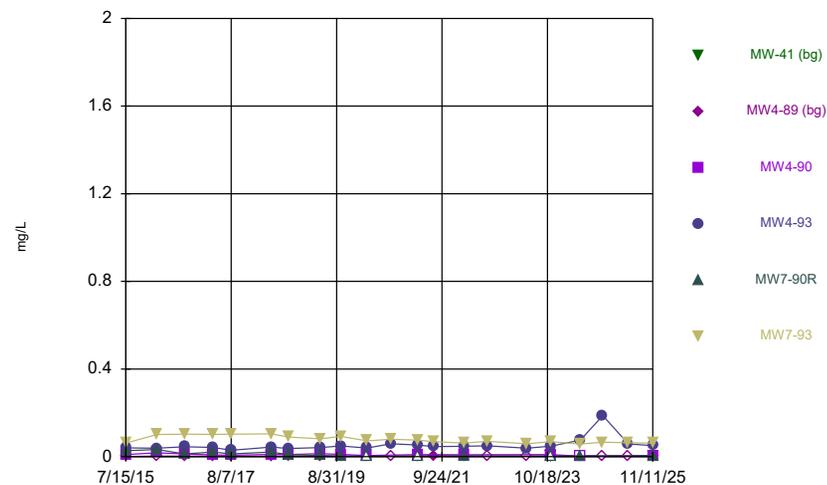
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Time Series



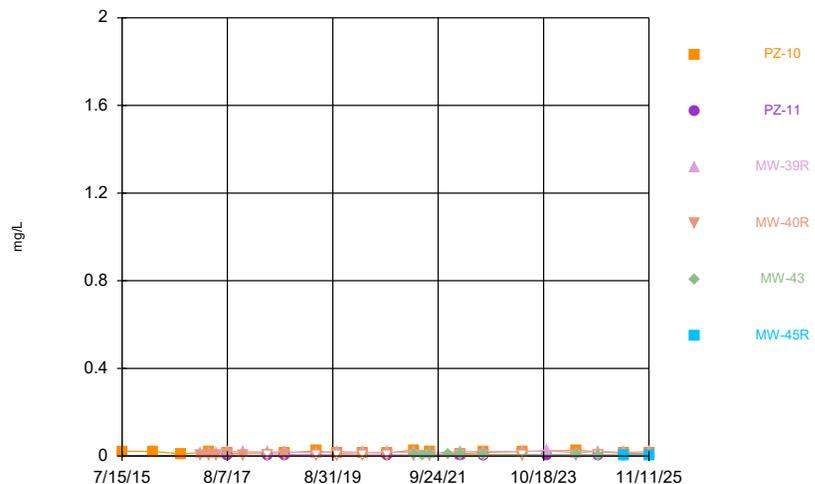
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



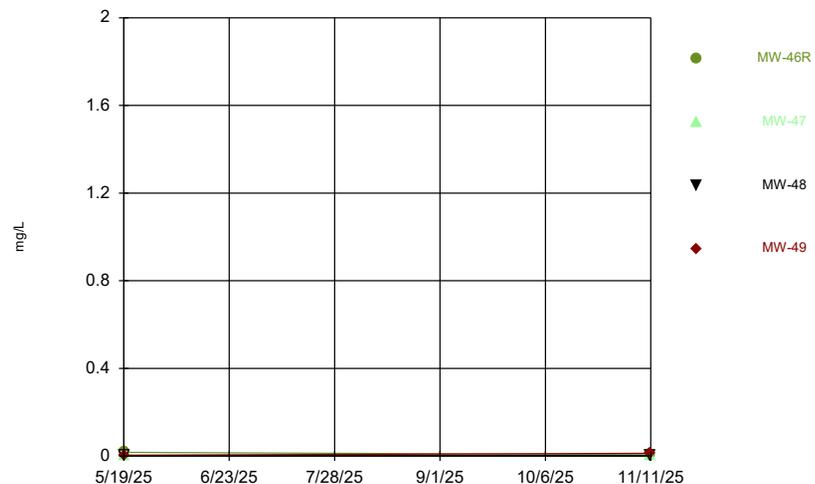
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



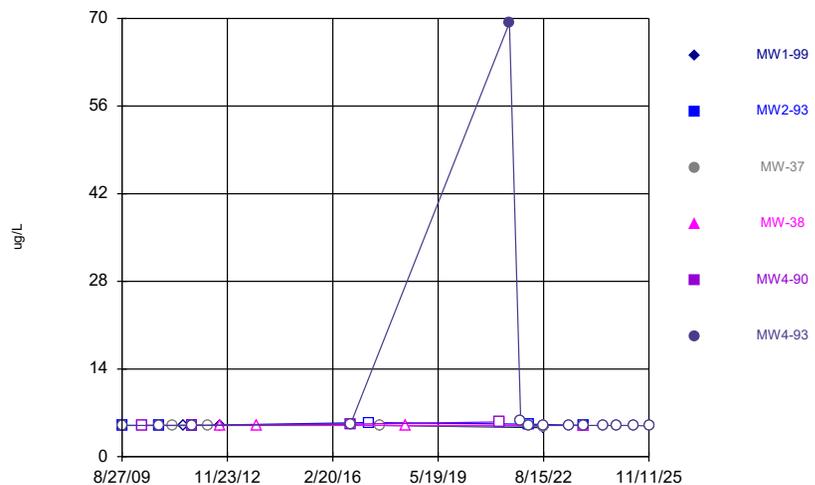
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Time Series



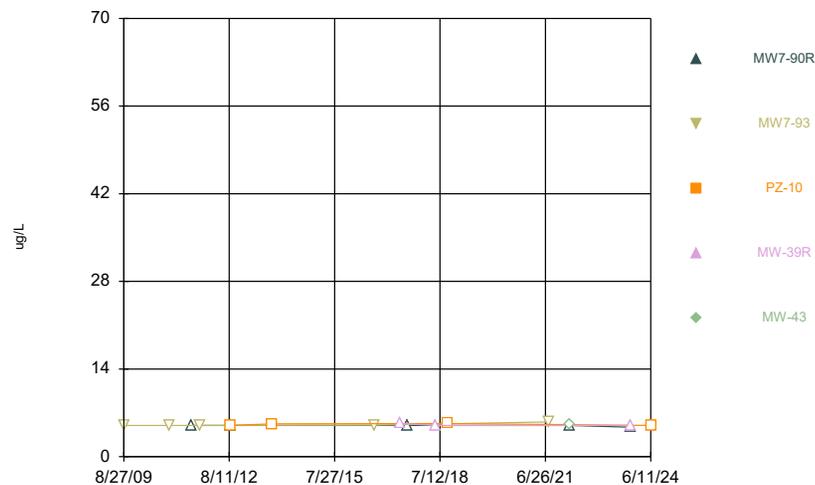
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Time Series



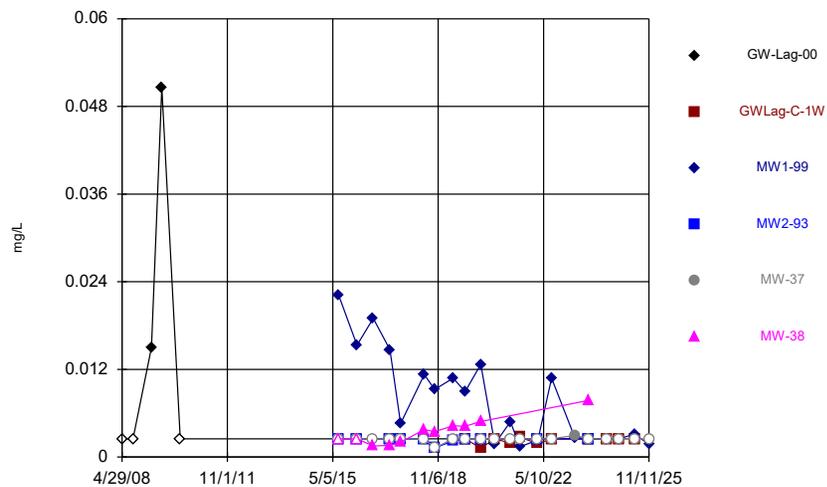
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



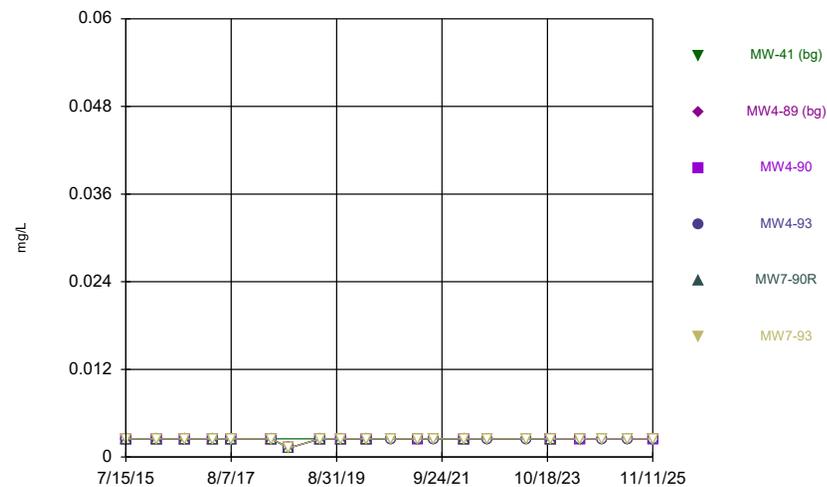
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Time Series



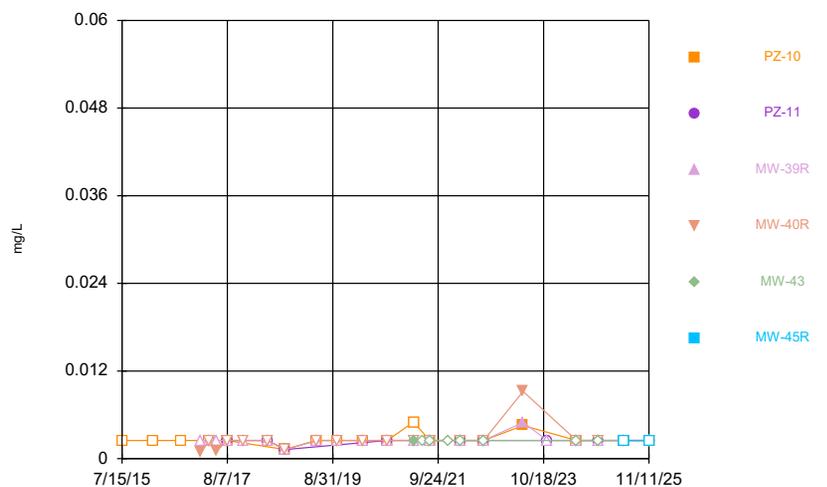
Constituent: Seleniun Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



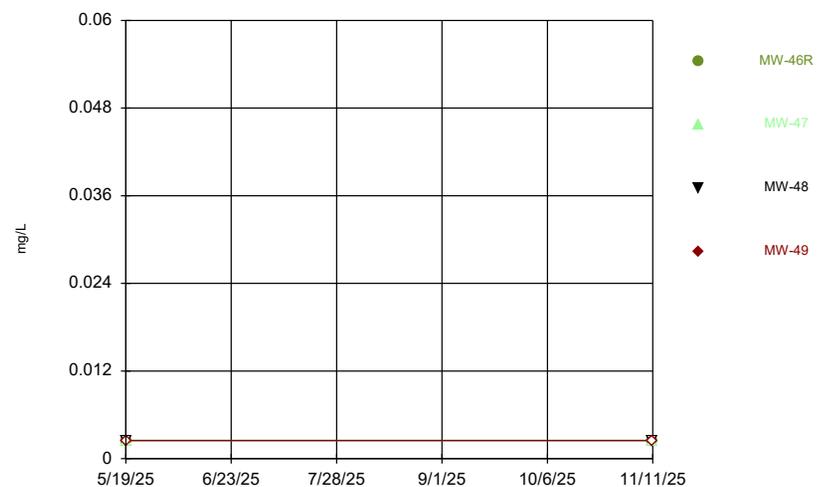
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



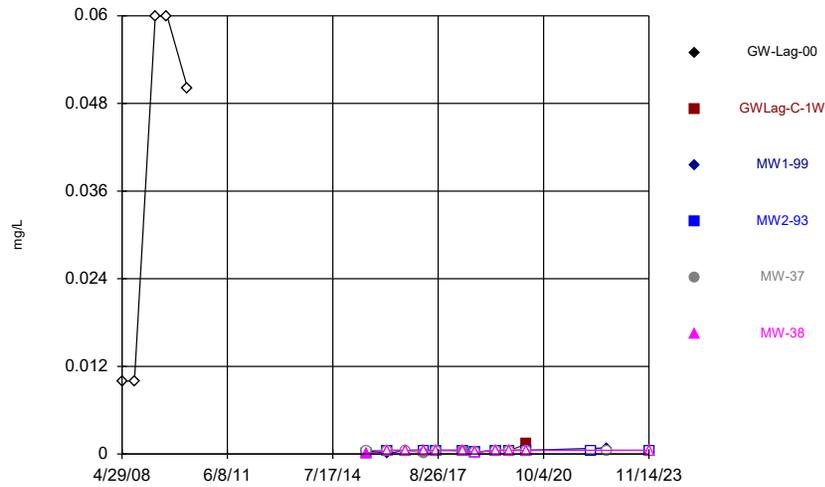
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Time Series



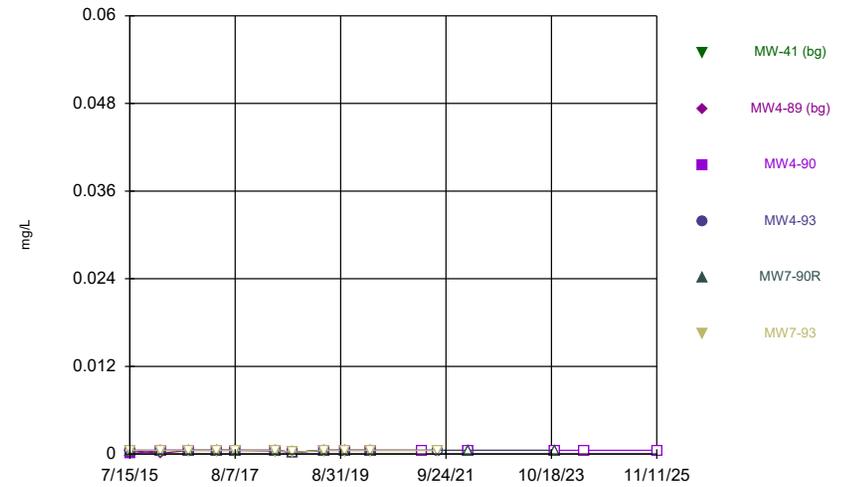
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



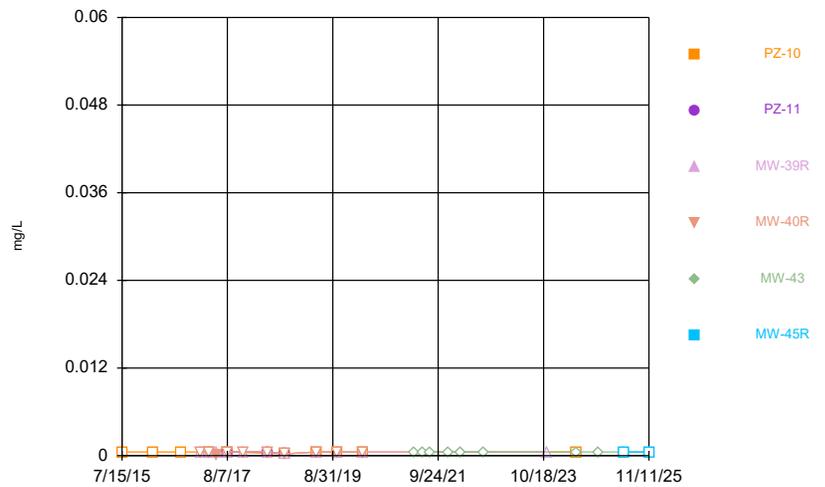
Constituent: Silver Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



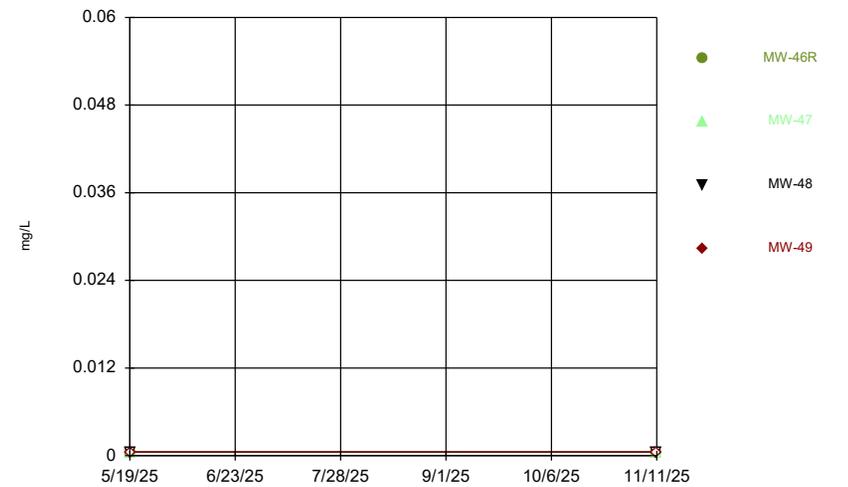
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



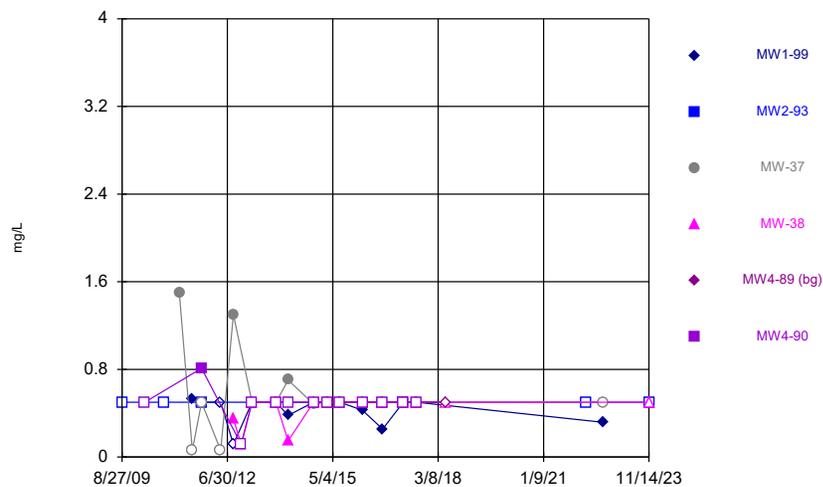
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series

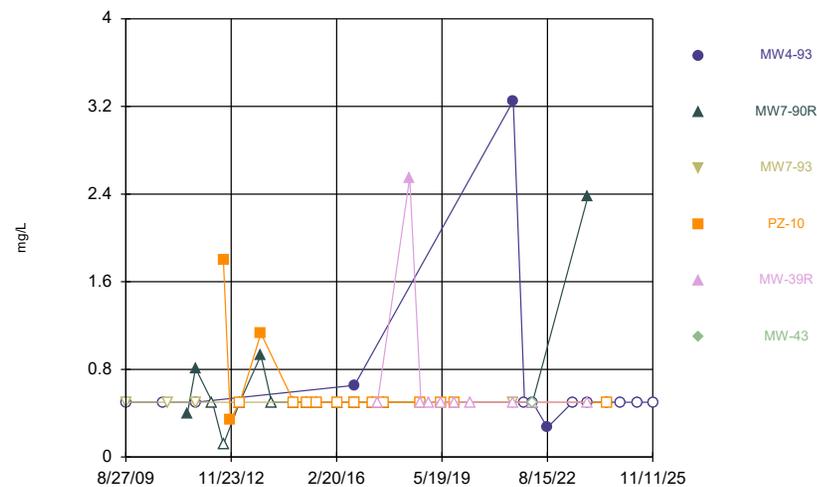


Constituent: Silver Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

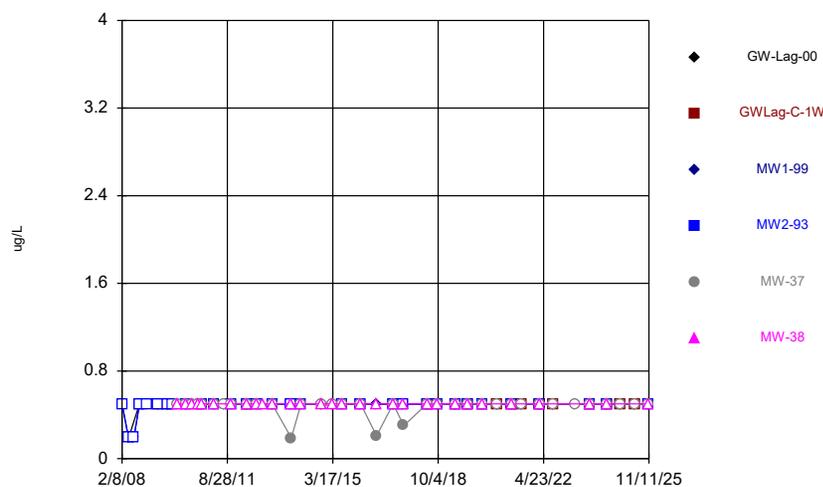
Time Series



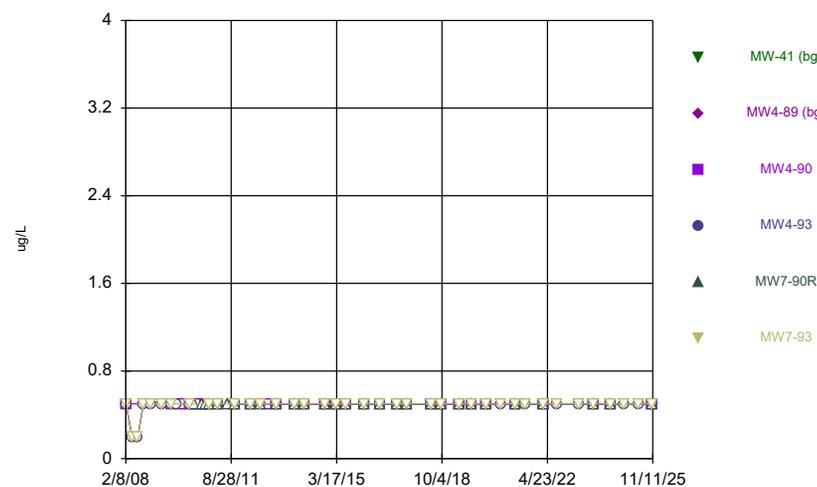
Time Series



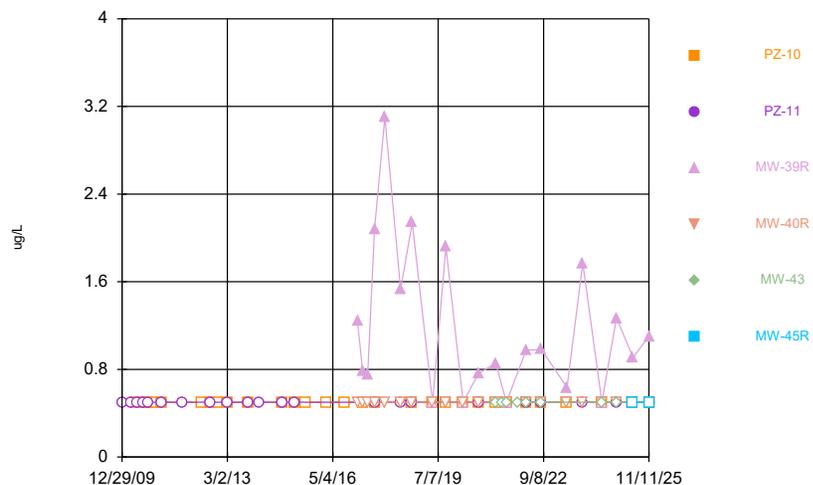
Time Series



Time Series

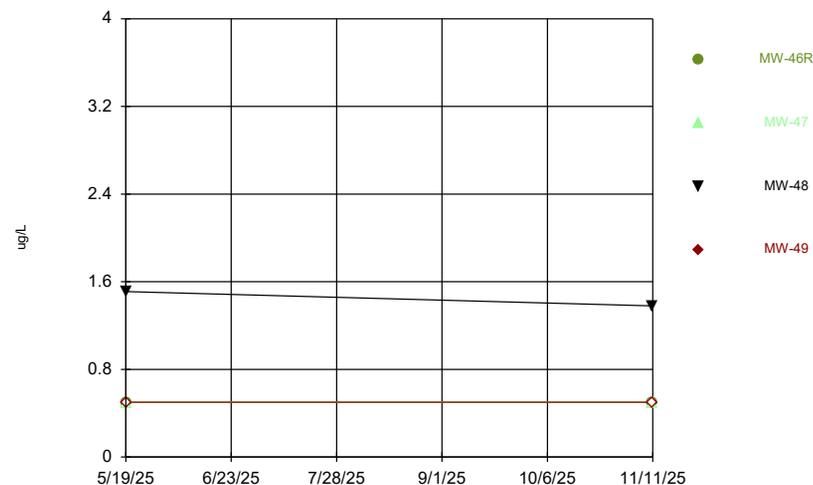


Time Series



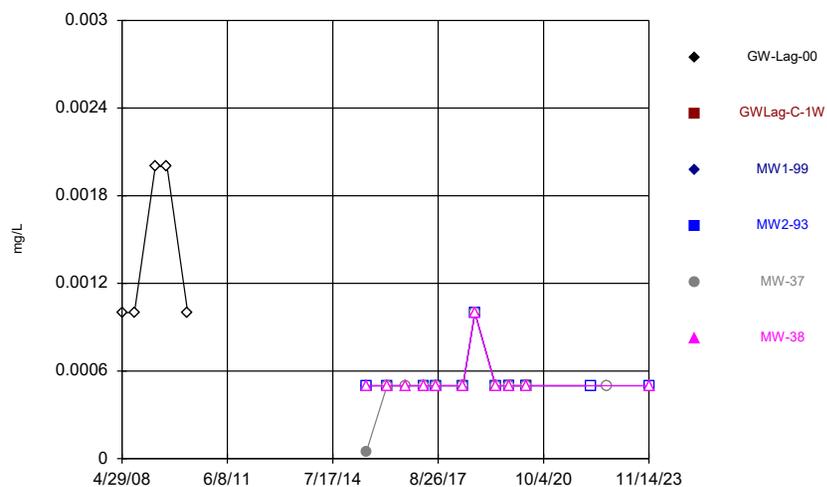
Constituent: Tetrachloroethene Analysis Run 12/5/2025 2:02 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



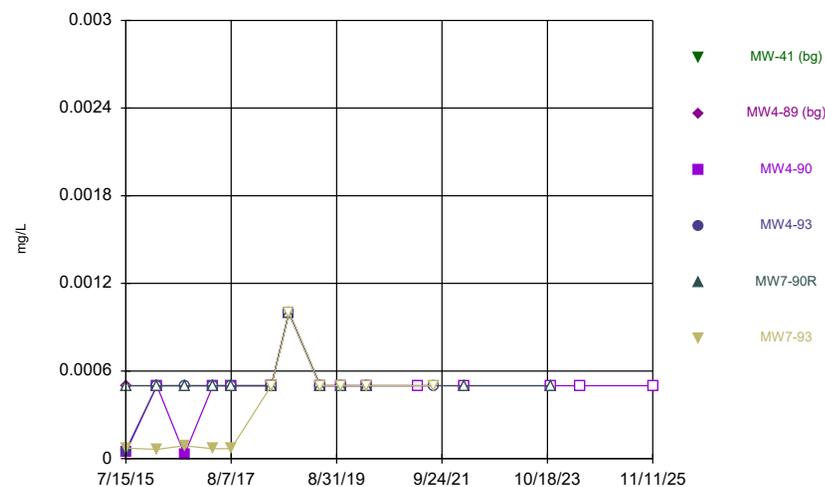
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



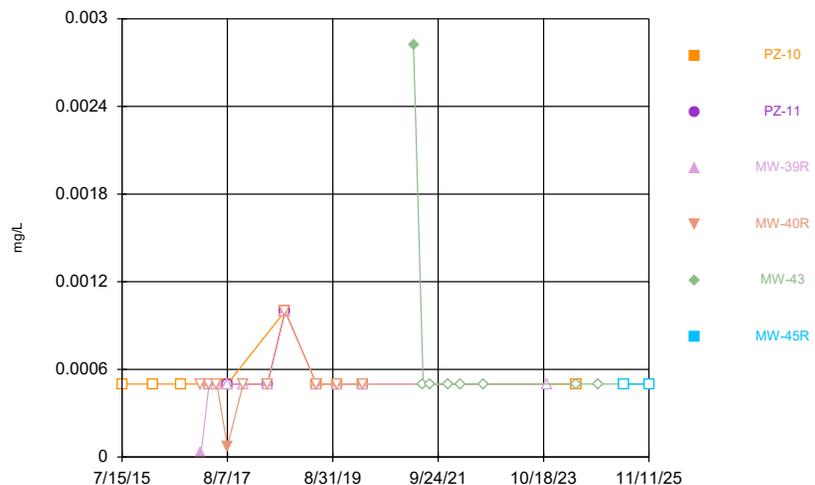
Constituent: Thallium Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



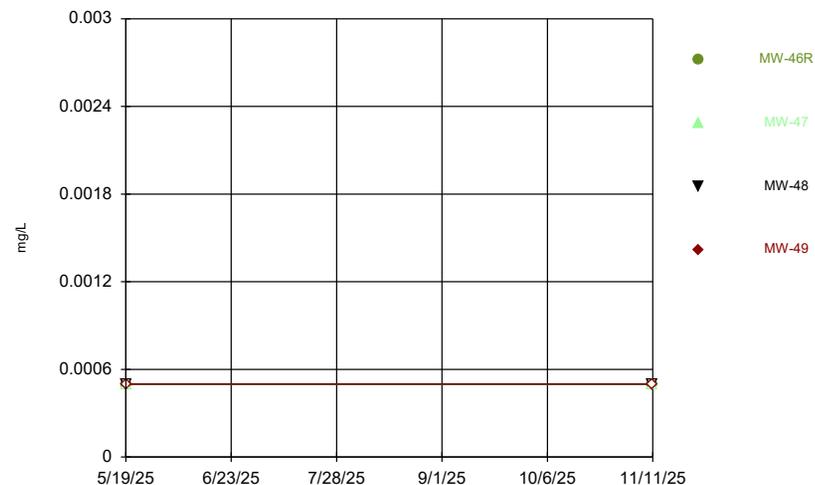
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



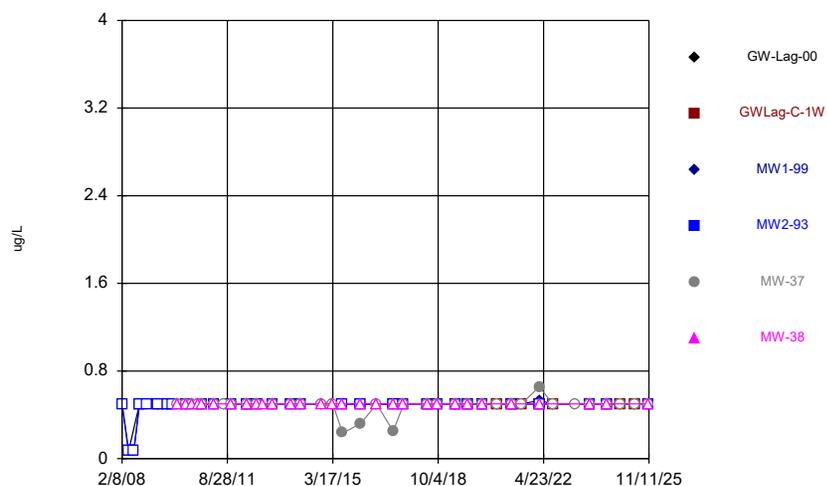
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



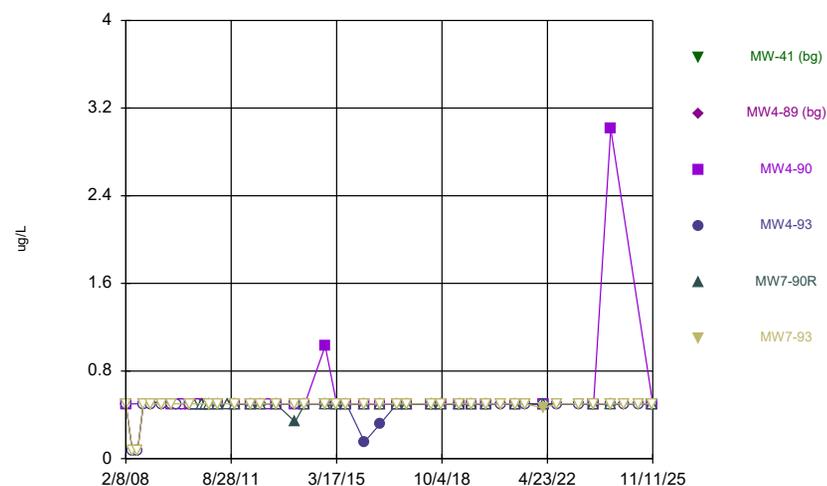
Constituent: Thallium Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



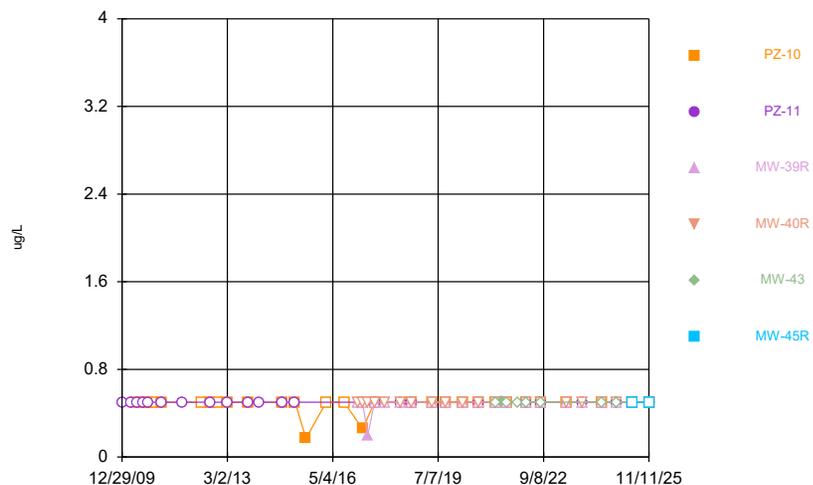
Constituent: Toluene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



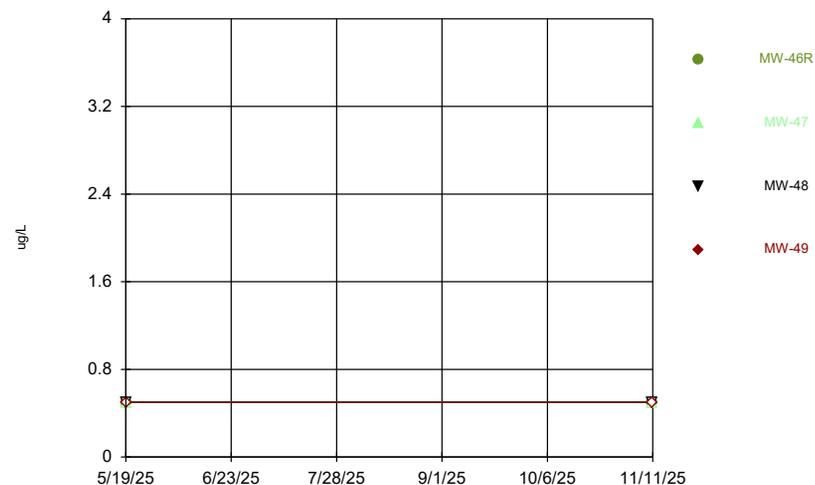
Constituent: Toluene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



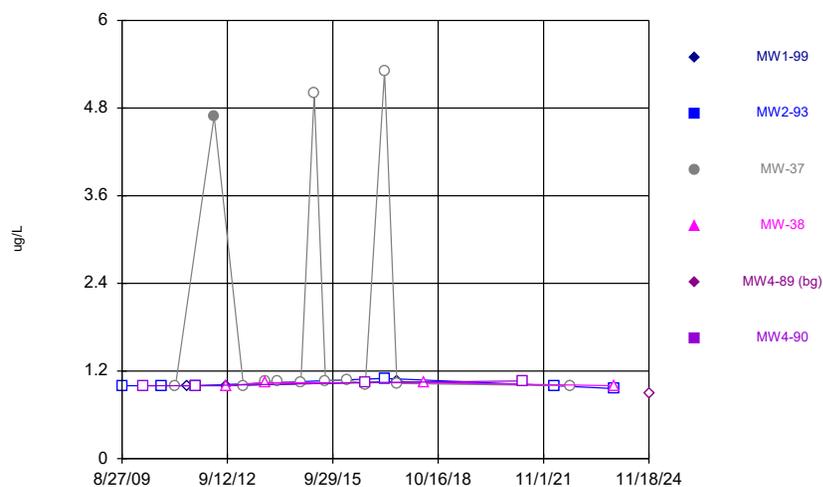
Constituent: Toluene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



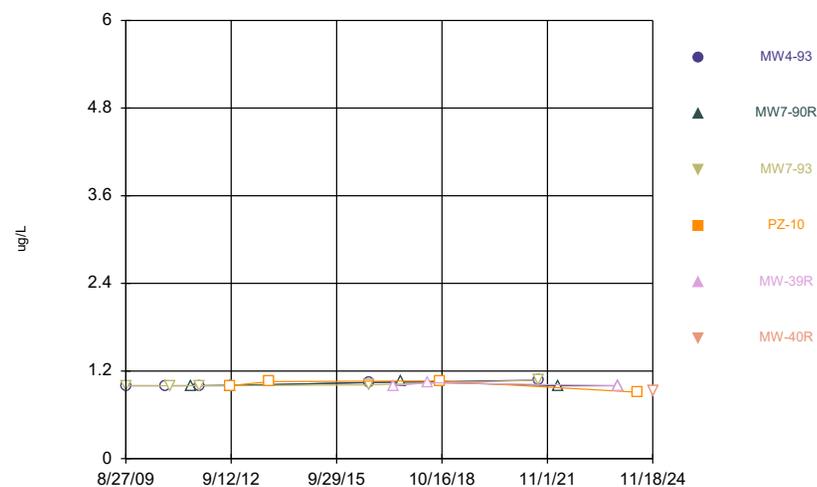
Constituent: Toluene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: Toxaphene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



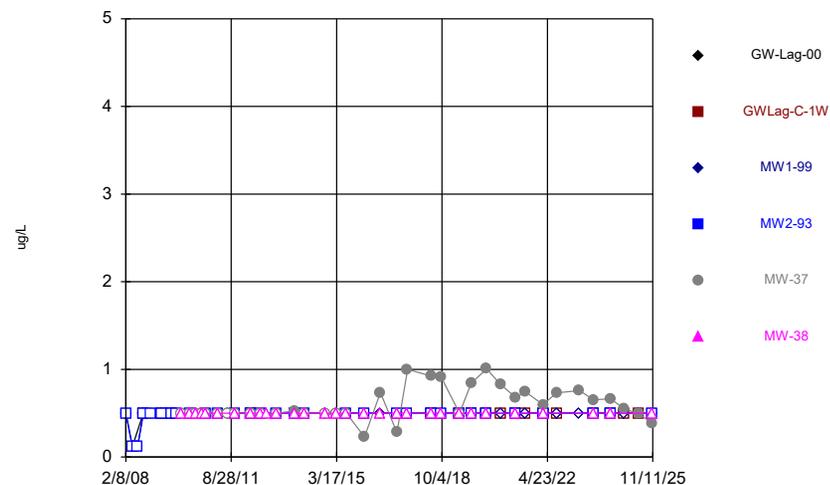
Constituent: Toxaphene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



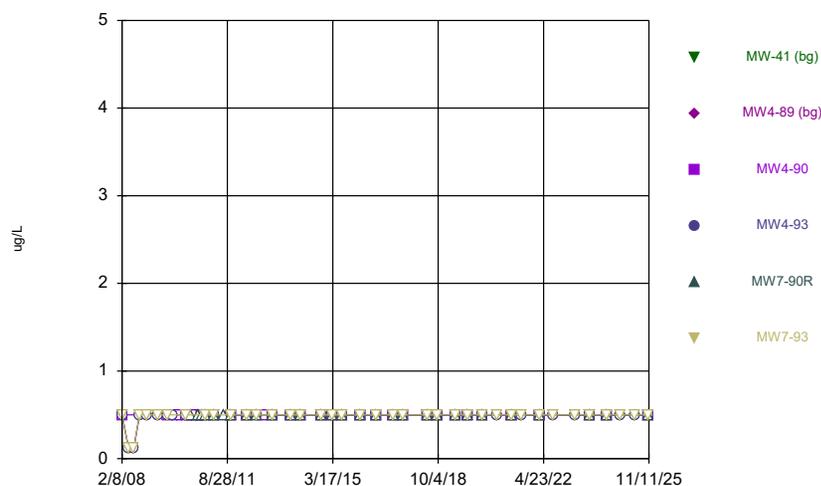
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



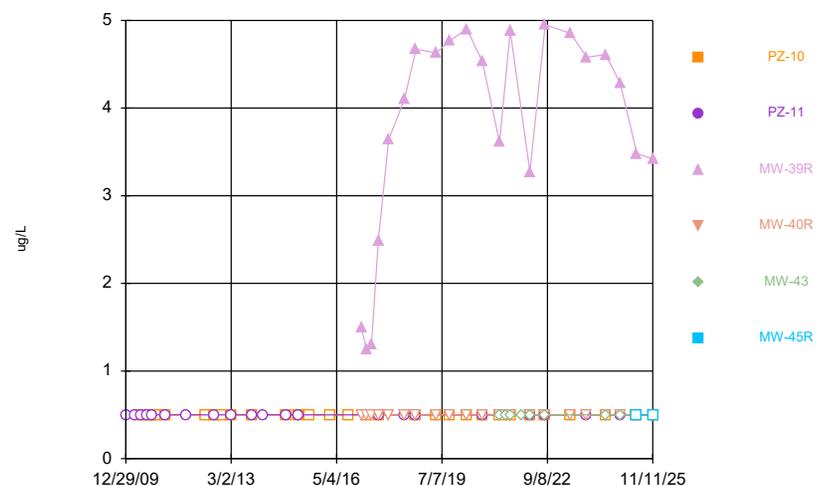
Constituent: Trichloroethene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



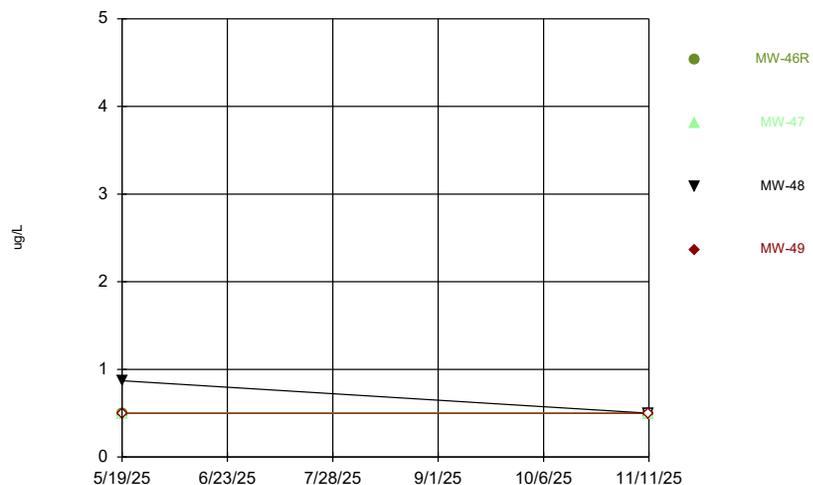
Constituent: Trichloroethene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



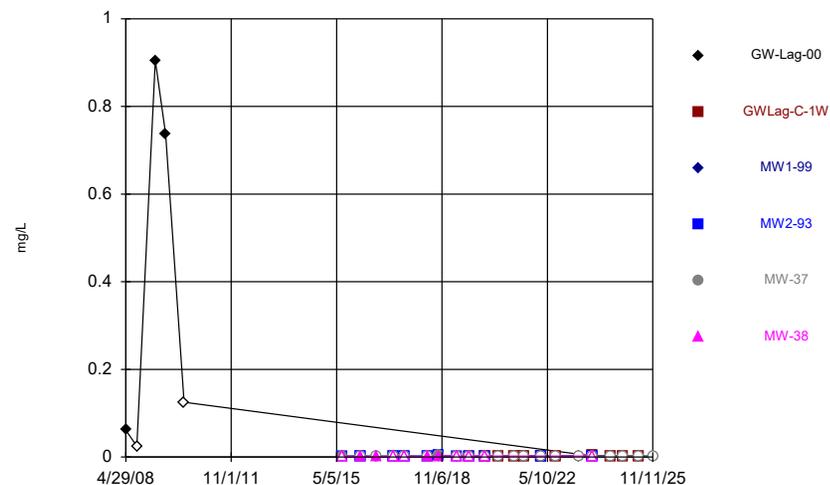
Constituent: Trichloroethene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



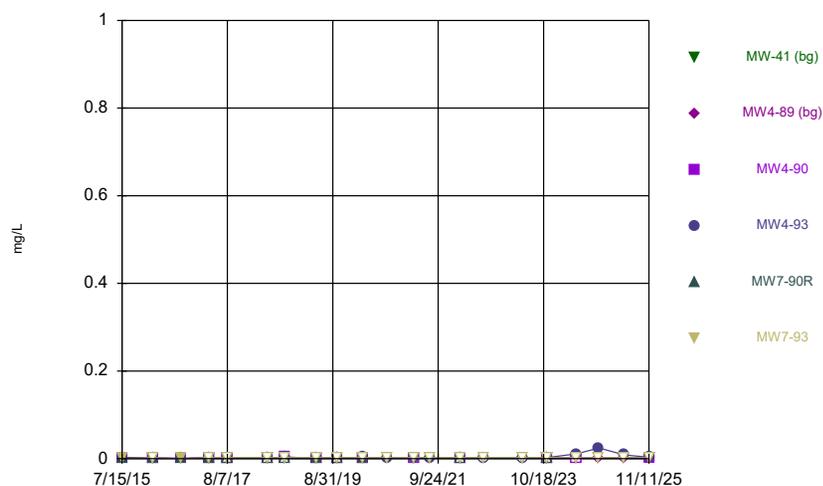
Constituent: Trichloroethene Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



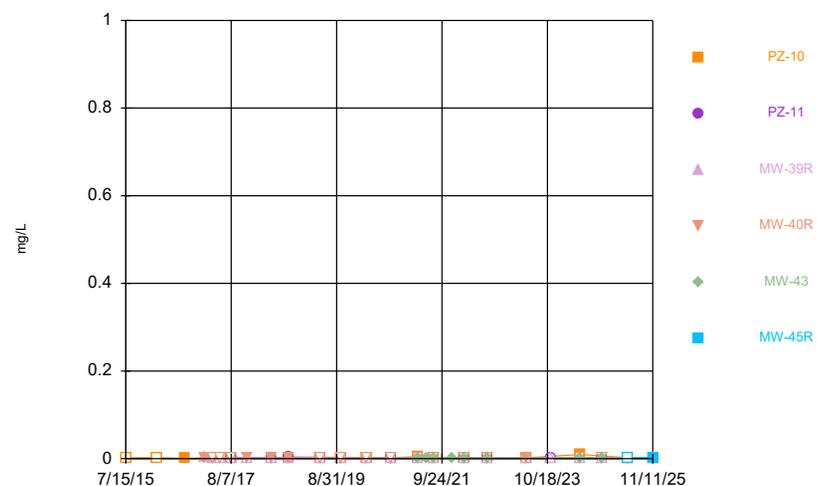
Constituent: Vanadium Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



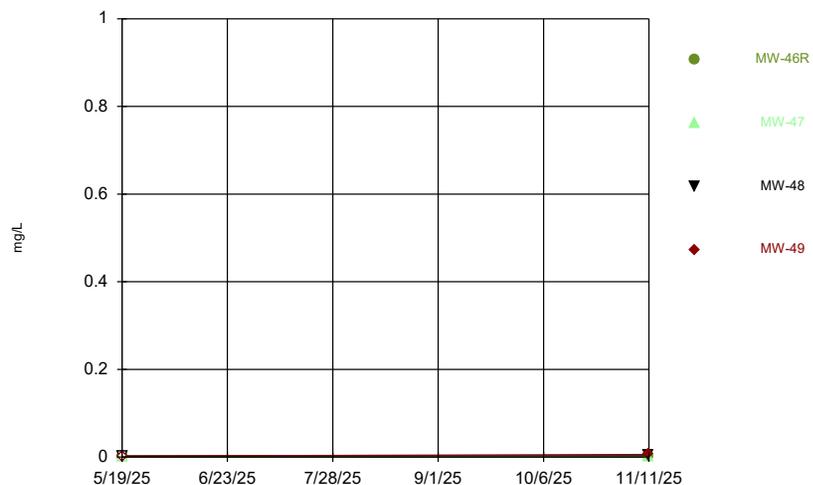
Constituent: Vanadium Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



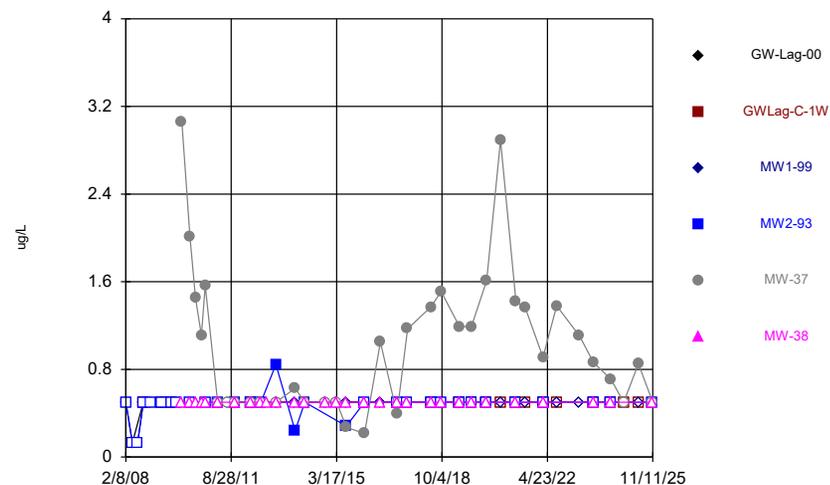
Constituent: Vanadium Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



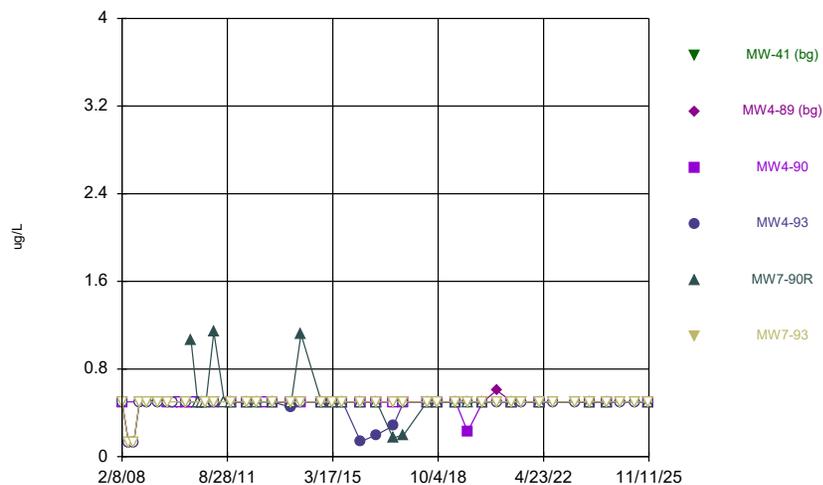
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Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



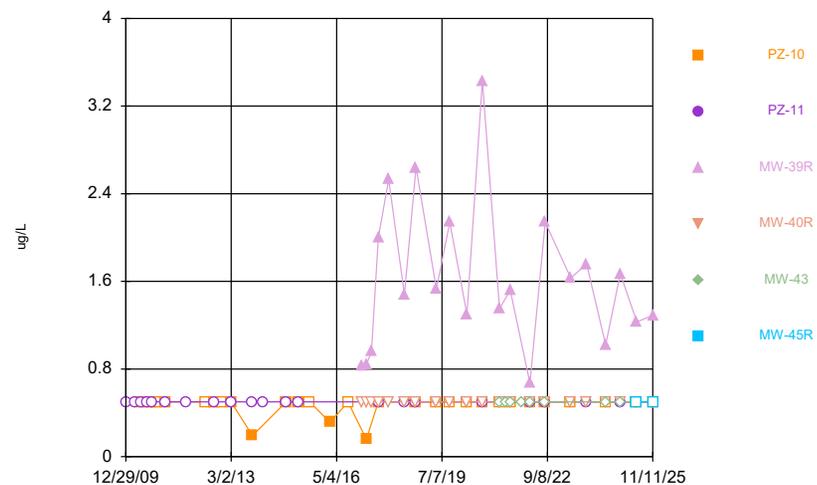
Constituent: Vinyl Chloride Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



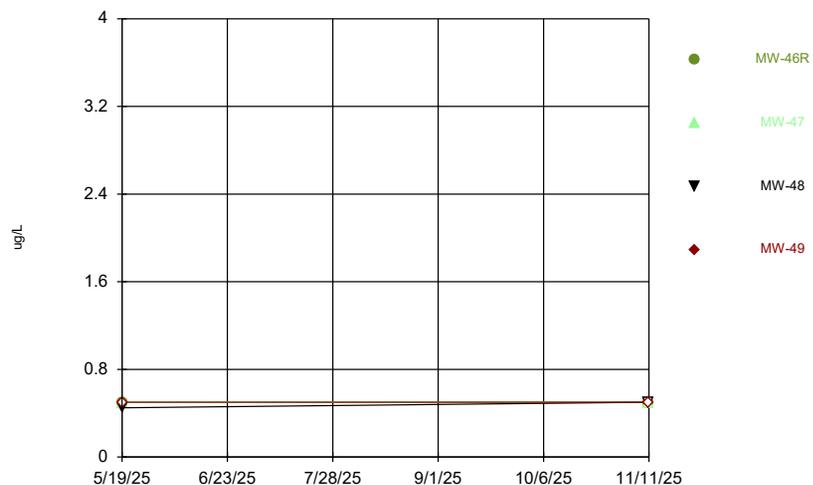
Constituent: Vinyl Chloride Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



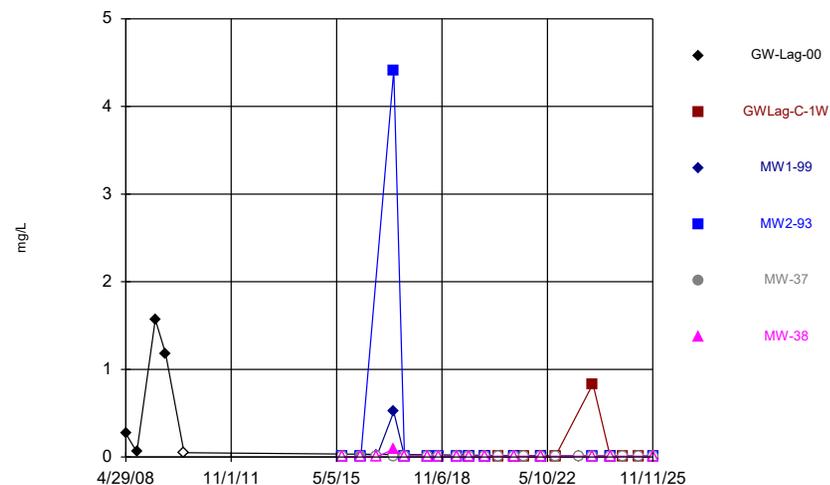
Constituent: Vinyl Chloride Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



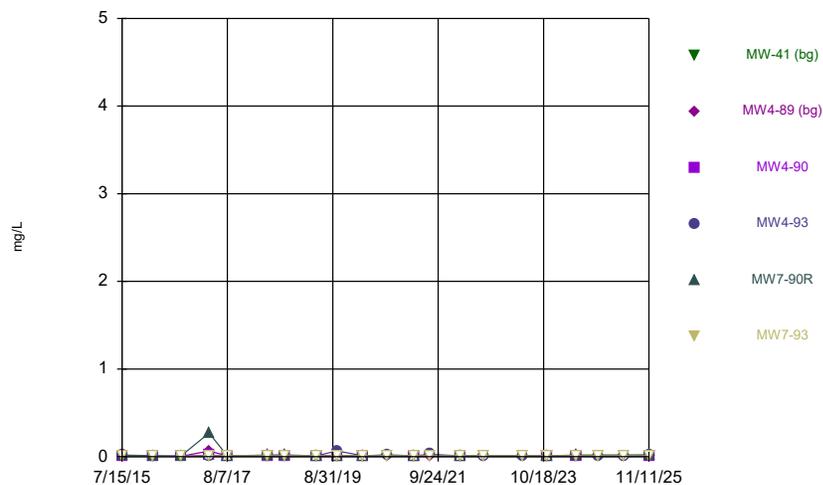
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Time Series



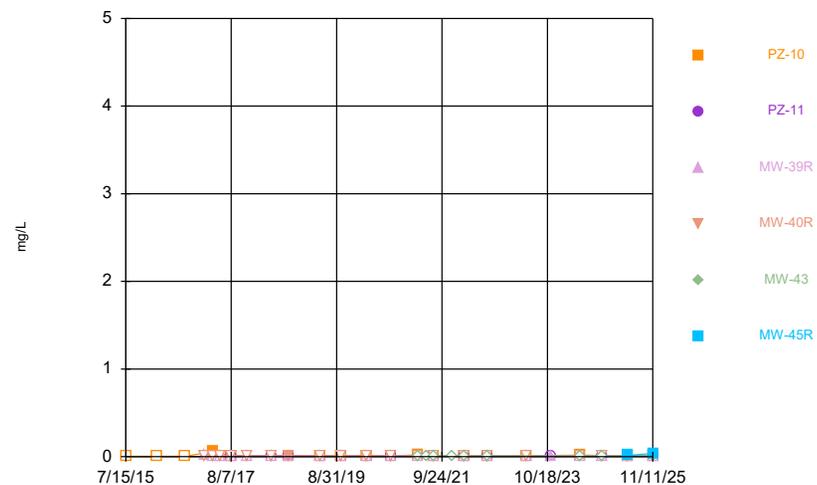
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 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



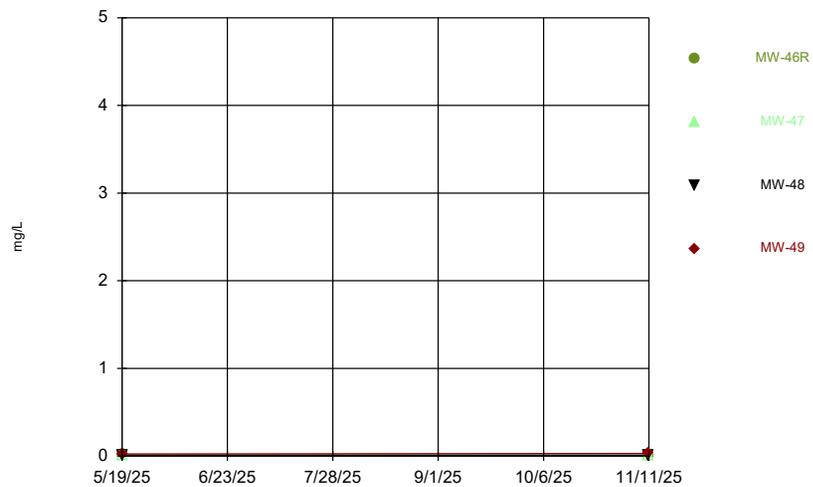
Constituent: Zinc Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: Zinc Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Time Series



Constituent: Zinc Analysis Run 12/5/2025 2:03 PM View: 2025_AWQR-Time_Series

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master[IN USE BY 27DES-BHAZEN]

Outliers Table and Graphs

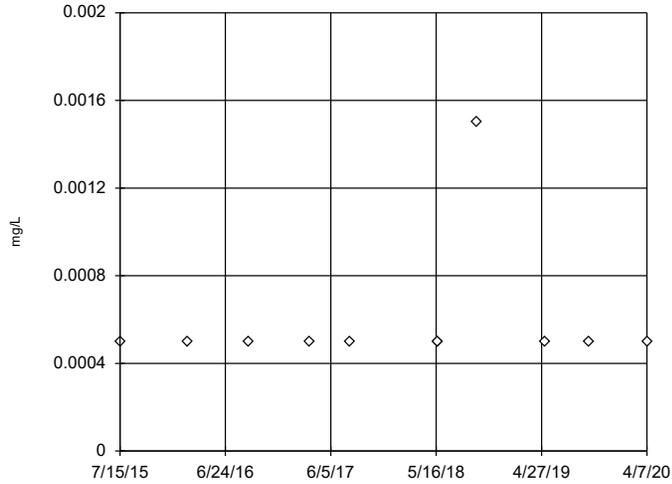
BG Outlier Analysis

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 12/5/2025, 2:46 PM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	11	0.0005909	0.0003015	n/a	n/a
Arsenic (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	24	0.001032	0.0002527	n/a	n/a
Barium (mg/L)	MW-41,MW4-89	Yes	0.197,0.0134,0.0151,0.018	n/a w/combined bg	Rosner/OH	0.01	24	0.08037	0.03513	normal	ShapiroWilk
Beryllium (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	11	0.0005	0	n/a	n/a
Cadmium (mg/L)	MW4-89,MW-41	No	n/a	n/a w/combined bg	EPA/OH	0.05	11	0.0002052	0.0001126	normal	ShapiroWilk
Chromium (mg/L)	MW-41,MW4-89	Yes	0.0145	n/a w/combined bg	OH	NaN	24	0.003006	0.002482	n/a	n/a
Cobalt (mg/L)	MW-41,MW4-89	Yes	0.000512,0.000106,0.0005,0.000761	n/a w/combined bg	NP (nrm)/OH	NaN	22	0.0002962	0.0001334	unknown	ShapiroWilk
Copper (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	24	0.00232	0.0004508	n/a	n/a
Lead (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	24	0.0002504	0.00004989	n/a	n/a
Nickel (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	24	0.002462	0.0006216	n/a	n/a
Selenium (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	24	0.002448	0.0002552	n/a	n/a
Silver (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	11	0.0004338	0.000137	n/a	n/a
Thallium (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	11	0.0005455	0.0001508	n/a	n/a
Vanadium (mg/L)	MW-41,MW4-89	No	n/a	n/a w/combined bg	OH	NaN	24	0.002409	0.0004444	n/a	n/a
Zinc (mg/L)	MW-41,MW4-89	Yes	0.0635	n/a w/combined bg	OH	NaN	24	0.01158	0.01119	n/a	n/a

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

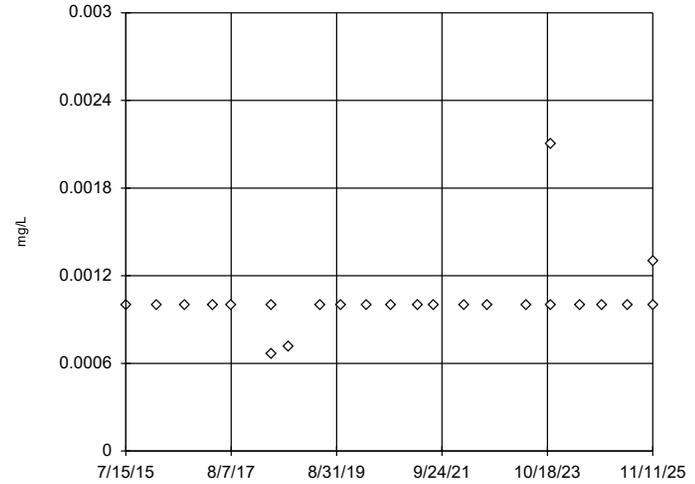


n = 11
No statistical outliers.

Constituent: Antimony Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

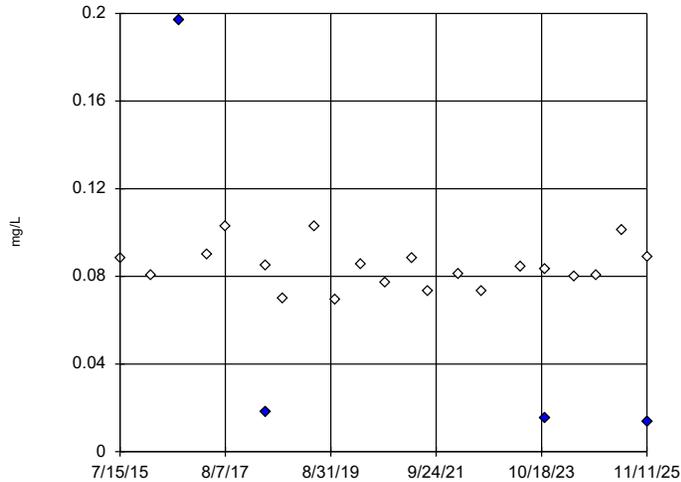


n = 24
No statistical outliers.

Constituent: Arsenic Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Rosner's Outlier Test / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

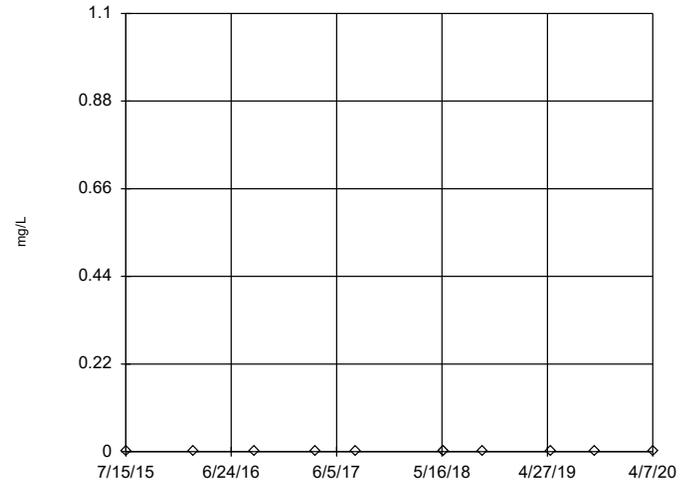


n = 24
Statistical outliers are drawn as solid.
k = 4
r = 3.638
Tabulated value = 3.312
Alpha = 0.01
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9326
Critical = 0.868
The distribution, after removal of suspect values, was found to be normally distributed.

Constituent: Barium Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89

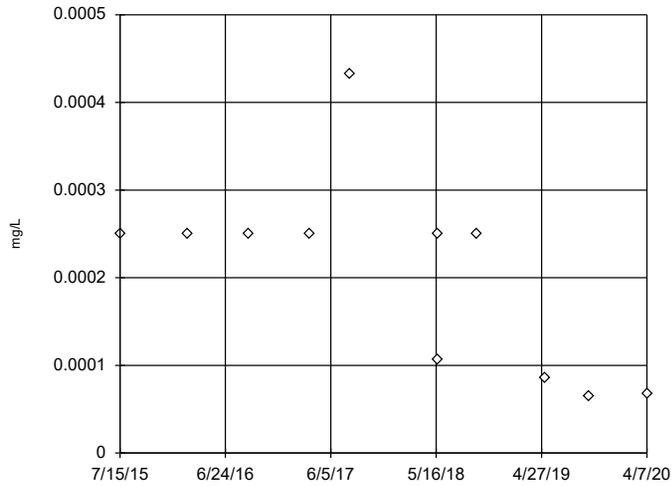


n = 11
No statistical outliers.

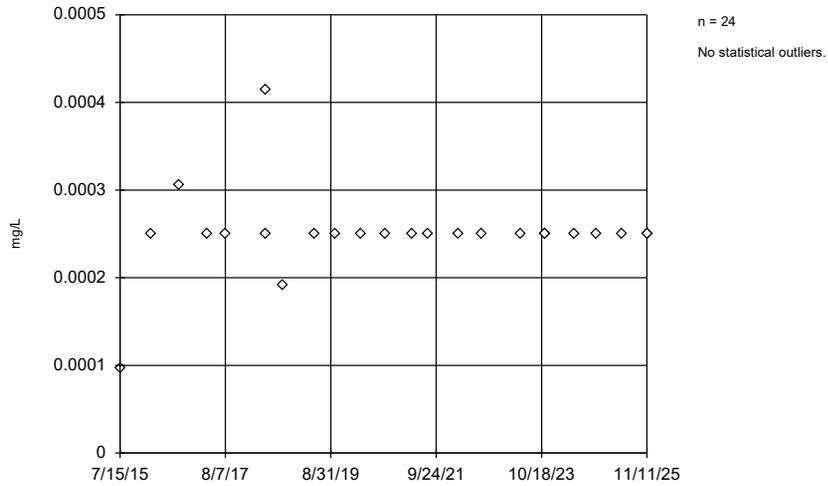
Constituent: Beryllium Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)

MW4-89,MW-41

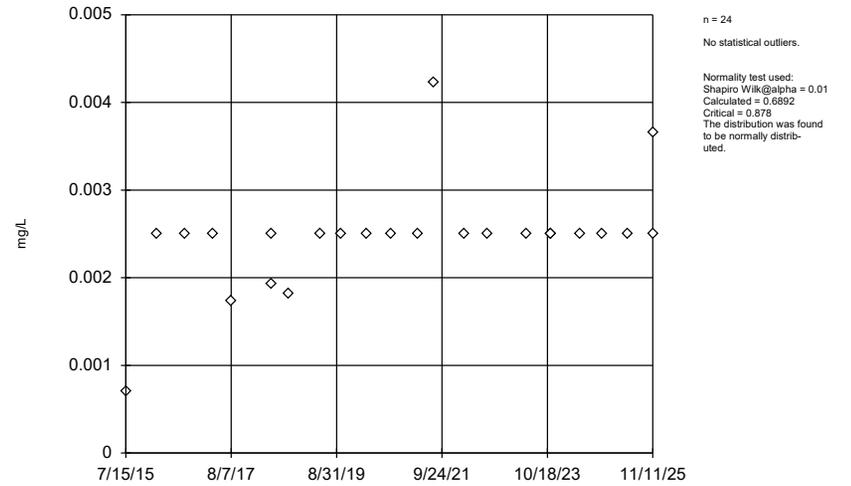


Ohio EPA 0715 Outlier Algorithm, Pooled Background MW-41,MW4-89



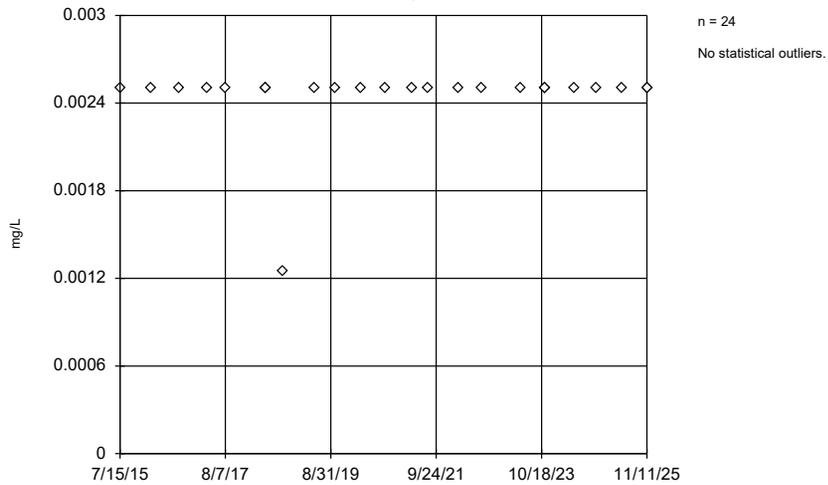
Constituent: Lead Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background MW-41,MW4-89



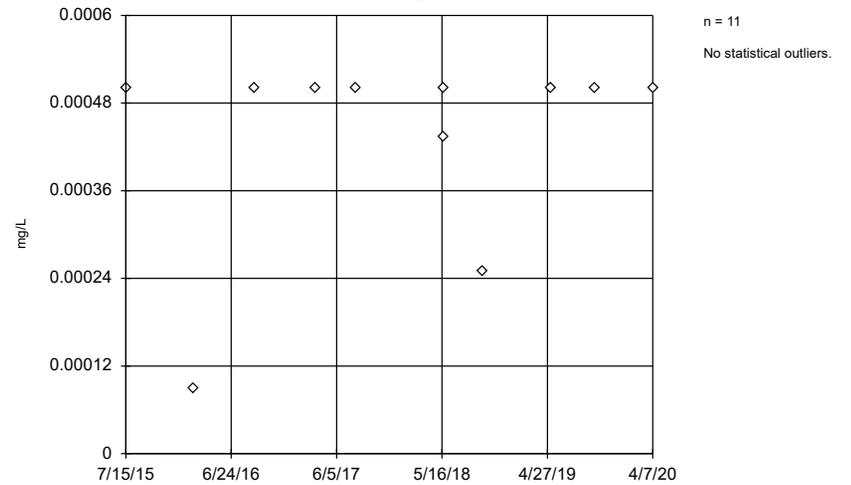
Constituent: Nickel Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background MW-41,MW4-89



Constituent: Selenium Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

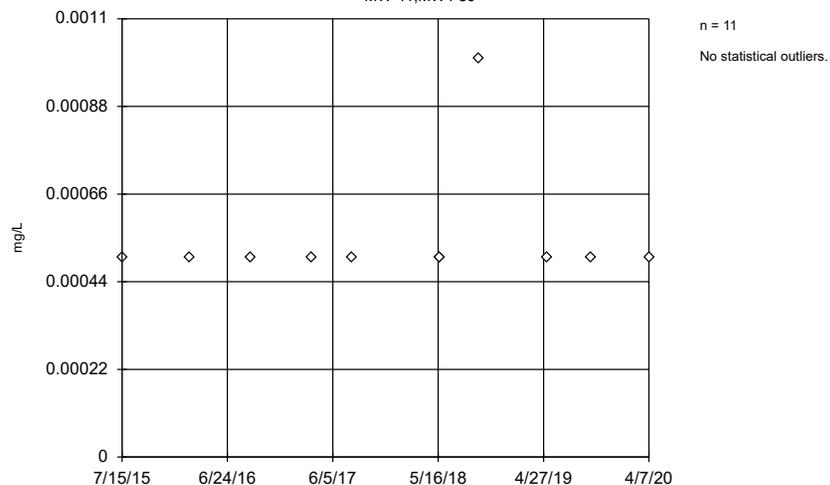
Ohio EPA 0715 Outlier Algorithm, Pooled Background MW-41,MW4-89



Constituent: Silver Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

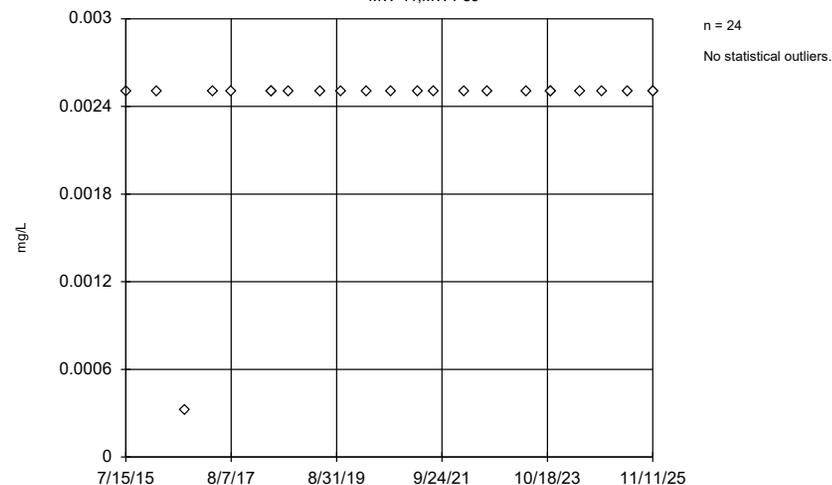
MW-41,MW4-89



Constituent: Thallium Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

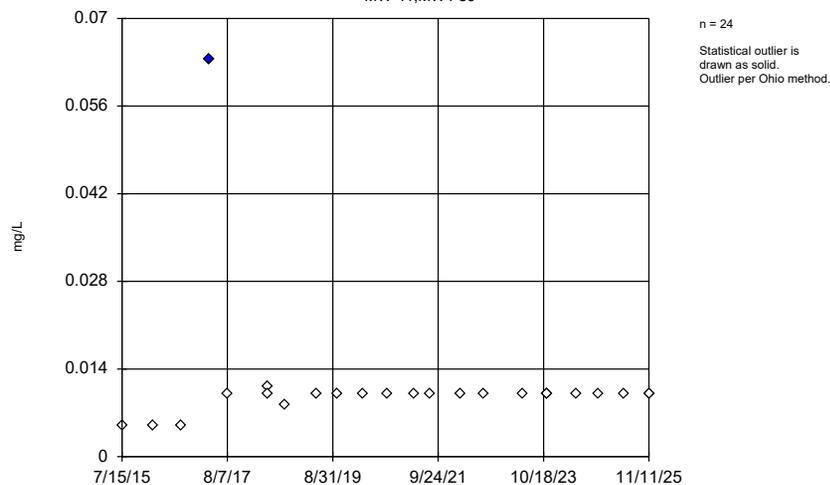
MW-41,MW4-89



Constituent: Vanadium Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-41,MW4-89



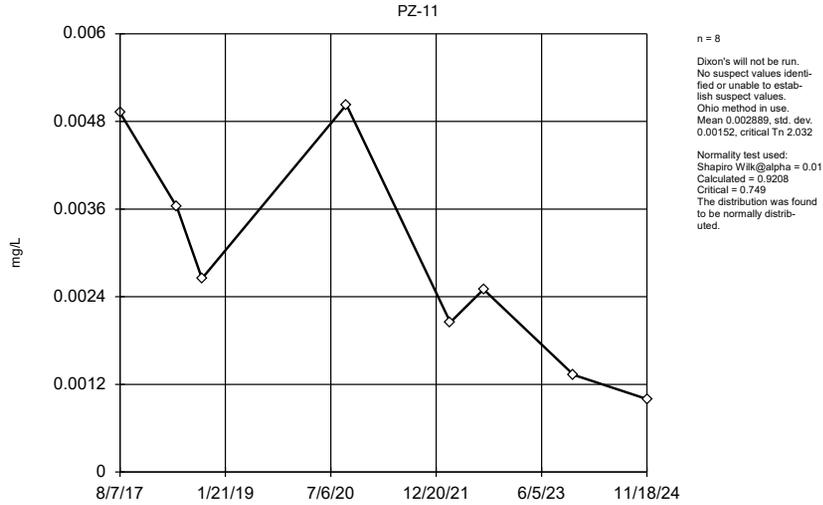
Constituent: Zinc Analysis Run 12/5/2025 2:45 PM View: 2025_AWQR-BG_Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

BG Outlier Analysis

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 12/8/2025, 2:04 PM

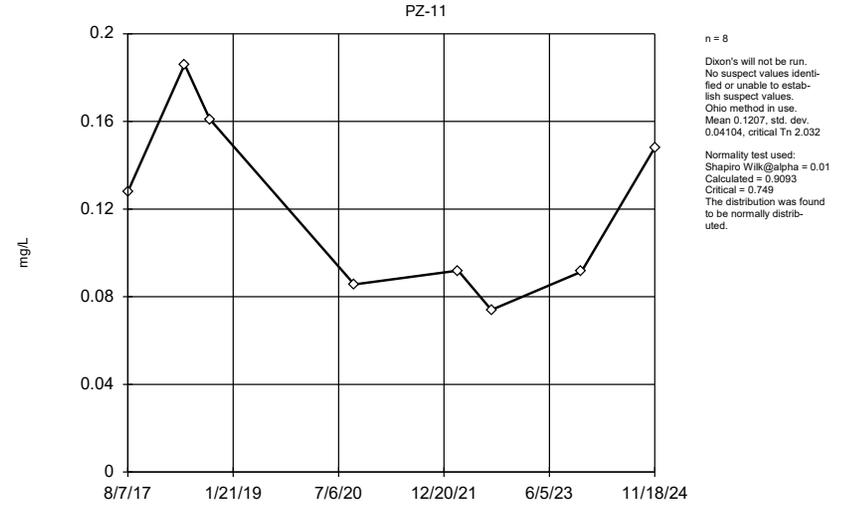
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic (mg/L)	PZ-11	No	n/a	n/a	EPA/OH	0.05	8	0.002889	0.00152	normal	ShapiroWilk
Barium (mg/L)	PZ-11	No	n/a	n/a	EPA/OH	0.05	8	0.1207	0.04104	normal	ShapiroWilk
Chromium (mg/L)	PZ-11	No	n/a	n/a	OH	NaN	8	0.002657	0.0004455	n/a	n/a
Cobalt (mg/L)	PZ-11	No	n/a	n/a	EPA/OH	0.05	7	0.002369	0.001228	normal	ShapiroWilk
Copper (mg/L)	PZ-11	No	n/a	n/a	OH	NaN	8	0.002409	0.0002581	n/a	n/a
Lead (mg/L)	PZ-11	No	n/a	n/a	EPA/OH	0.05	8	0.0005606	0.000341	normal	ShapiroWilk
Nickel (mg/L)	PZ-11	No	n/a	n/a	EPA/OH	0.05	8	0.00355	0.0007735	normal	ShapiroWilk
Vanadium (mg/L)	PZ-11	No	n/a	n/a	OH	NaN	8	0.002471	0.0006676	n/a	n/a

EPA Screening (suspected outliers for Dixon's Test)



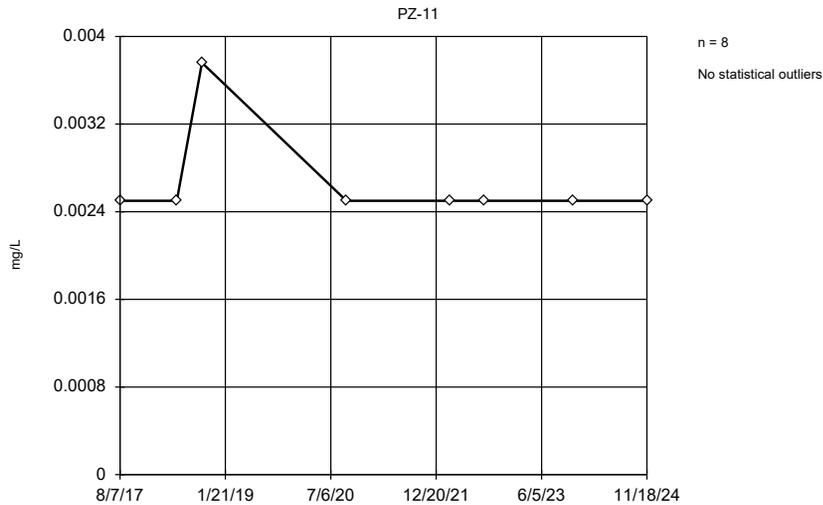
Constituent: Arsenic Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)



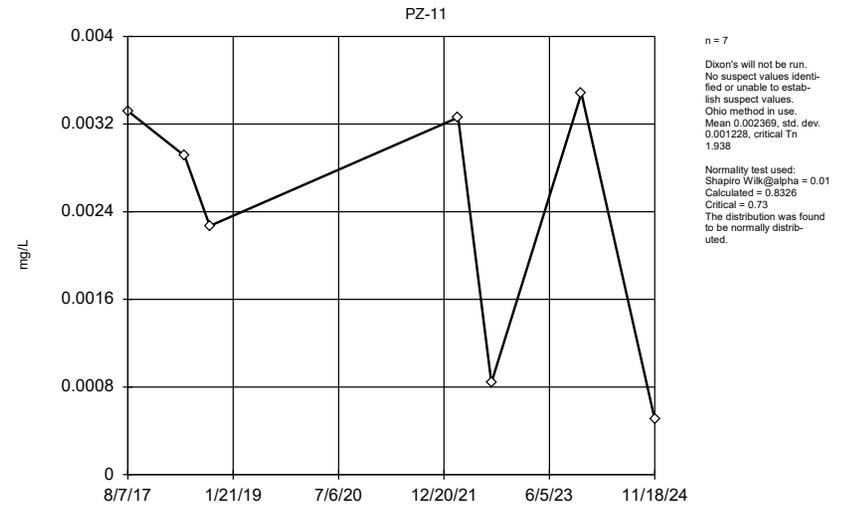
Constituent: Barium Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm



Constituent: Chromium Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

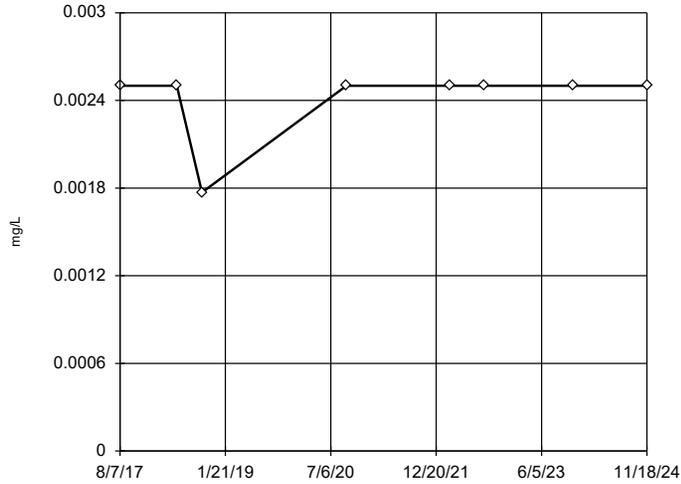
EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cobalt Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm

PZ-11

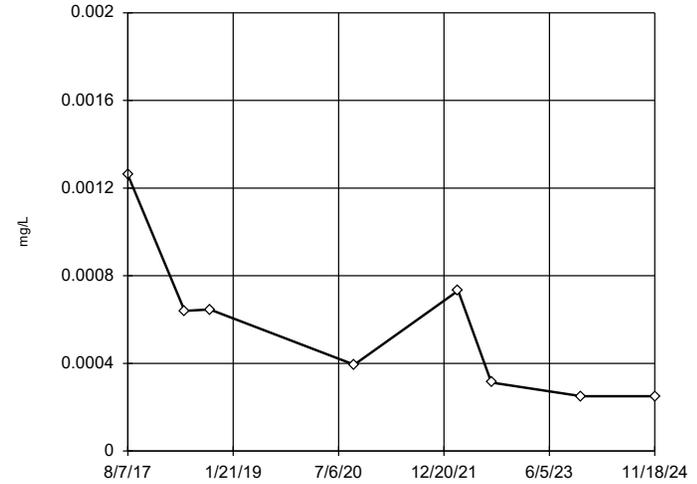


n = 8
No statistical outliers.

Constituent: Copper Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)

PZ-11

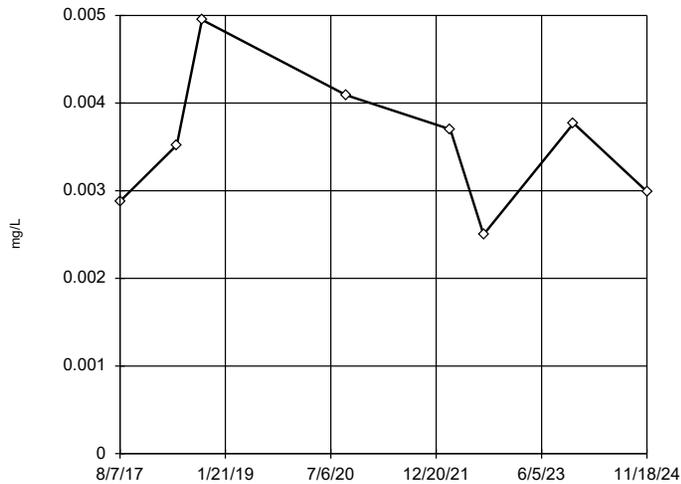


n = 8
Dixon's will not be run. No suspect values identified or unable to establish suspect values.
Ohio method in use. Mean 0.0005606, std. dev. 0.000341, critical Tn 2.032
Normality test used: Shapiro Wilk@alpha = 0.01
Calculated = 0.8576
Critical = 0.749
The distribution was found to be normally distributed.

Constituent: Lead Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

EPA Screening (suspected outliers for Dixon's Test)

PZ-11

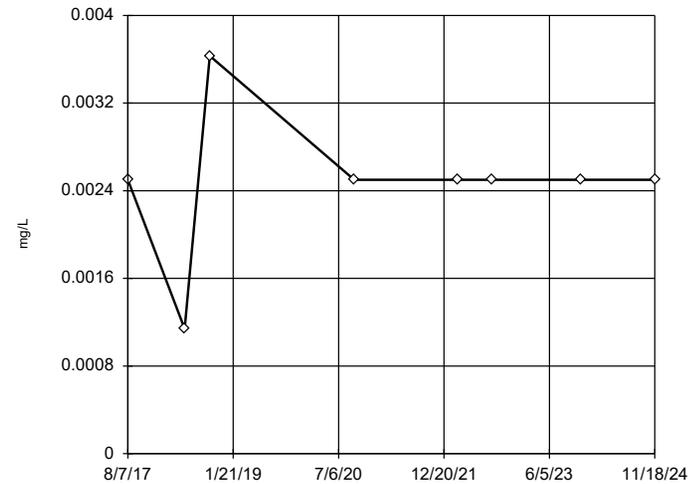


n = 8
Dixon's will not be run. No suspect values identified or unable to establish suspect values.
Ohio method in use. Mean 0.00355, std. dev. 0.0007735, critical Tn 2.032
Normality test used: Shapiro Wilk@alpha = 0.01
Calculated = 0.9662
Critical = 0.749
The distribution was found to be normally distributed.

Constituent: Nickel Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Ohio EPA 0715 Outlier Algorithm

PZ-11



n = 8
No statistical outliers.
Normality test used: Shapiro Wilk@alpha = 0.01
Calculated = 0.9662
Critical = 0.749
The distribution was found to be normally distributed.

Constituent: Vanadium Analysis Run 12/8/2025 1:46 PM View: 2025 AWQR PZ-11 BG Outliers
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Prediction Limits Table and Graphs

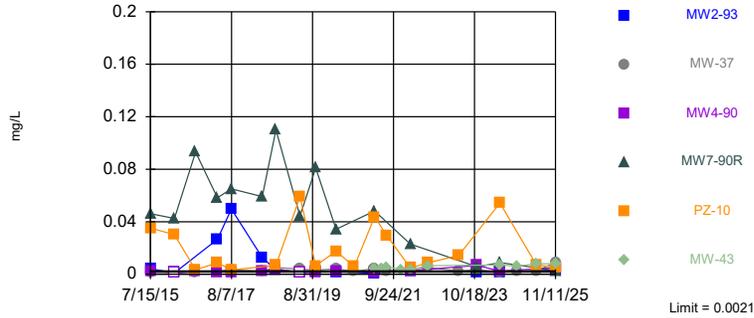
Prediction Limit

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 12/8/2025, 8:46 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	MW2-93	0.0021	n/a	11/11/2025	0.00324	Yes	24	MW-41,MW4-89 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-37	0.0021	n/a	11/11/2025	0.00887	Yes	24	MW-41,MW4-89 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW4-90	0.0021	n/a	11/11/2025	0.00497	Yes	24	MW-41,MW4-89 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW7-90R	0.0021	n/a	11/11/2025	0.00269	Yes	24	MW-41,MW4-89 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	PZ-10	0.0021	n/a	11/11/2025	0.00539	Yes	24	MW-41,MW4-89 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-43	0.0021	n/a	11/11/2025	0.008005	Yes	24	MW-41,MW4-89 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Barium (mg/L)	MW1-99	0.197	n/a	11/11/2025	0.047	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW2-93	0.197	n/a	11/11/2025	0.112	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-37	0.197	n/a	11/11/2025	0.0196	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-38	0.197	n/a	11/11/2025	0.371	Yes	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW4-90	0.197	n/a	11/11/2025	0.224	Yes	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW4-93	0.197	n/a	11/11/2025	0.0322	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW7-90R	0.197	n/a	11/11/2025	0.739	Yes	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW7-93	0.197	n/a	11/11/2025	0.0975	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	PZ-10	0.197	n/a	11/11/2025	0.293	Yes	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-39R	0.197	n/a	11/11/2025	0.189	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-40R	0.197	n/a	11/11/2025	0.105	No	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Barium (mg/L)	MW-43	0.197	n/a	11/11/2025	0.6135	Yes	24	MW-41,MW4-89 0	n/a	n/a	0.002673	NP Inter (normality) 1 of 2
Cobalt (mg/L)	MW1-99	0.000761	n/a	11/11/2025	0.00141	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-37	0.000761	n/a	11/11/2025	0.012	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW4-90	0.000761	n/a	11/11/2025	0.00236	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW4-93	0.000761	n/a	11/11/2025	0.0113	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW7-93	0.000761	n/a	11/11/2025	0.0133	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	PZ-10	0.000761	n/a	11/11/2025	0.0109	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-39R	0.000761	n/a	11/11/2025	0.00128	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-43	0.000761	n/a	11/11/2025	0.001635	Yes	22	MW4-89,MW-41 72.73	n/a	n/a	0.003102	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-37	0.000415	n/a	11/11/2025	0.00097	Yes	24	MW4-89,MW-41 83.33	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW2-93	0.00423	n/a	11/11/2025	0.0309	Yes	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-37	0.00423	n/a	11/11/2025	0.0488	Yes	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW4-93	0.00423	n/a	11/11/2025	0.0502	Yes	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW7-93	0.00423	n/a	11/11/2025	0.0617	Yes	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	PZ-10	0.00423	n/a	11/11/2025	0.0124	Yes	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-39R	0.00423	n/a	11/11/2025	0.0208	Yes	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-43	0.00423	n/a	11/11/2025	0.00502J	No	24	MW4-89,MW-41 75	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2
Zinc (mg/L)	MW7-90R	0.0635	n/a	11/11/2025	0.0207	No	24	MW4-89,MW-41 87.5	n/a	n/a	0.002673	NP Inter (NDs) 1 of 2

Exceeds Limit: MW2-93, MW-37, MW4-90,
MW7-90R, PZ-10, MW-43

Prediction Limit
Interwell Non-parametric

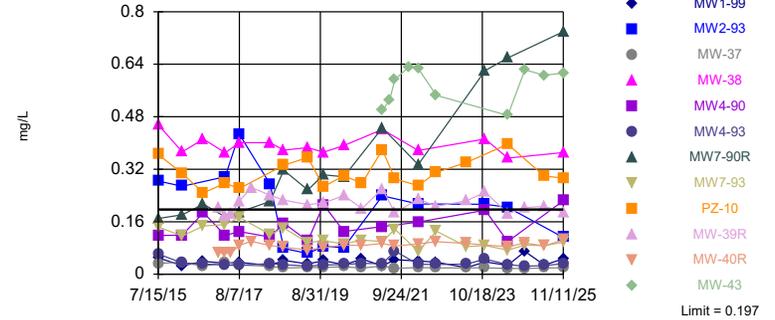


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. Annual per-constituent alpha = 0.07716. Individual comparison alpha = 0.002673 (1 of 2). Comparing 6 points to limit. Assumes 9 future values.

Constituent: Arsenic Analysis Run 12/8/2025 8:44 AM View: 2025_AWQR-DMAM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW-38, MW4-90, MW7-90R, PZ-10, MW-43

Prediction Limit
Interwell Non-parametric

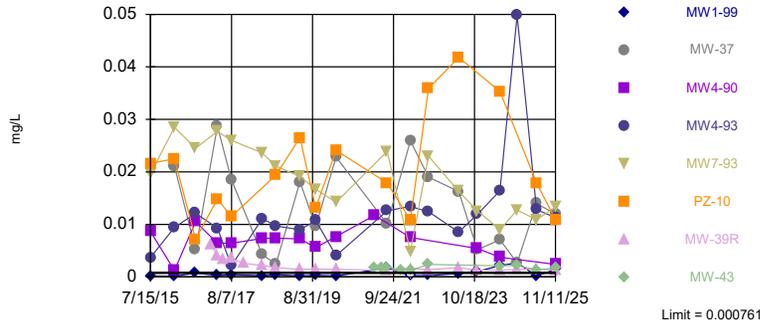


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. Annual per-constituent alpha = 0.07716. Individual comparison alpha = 0.002673 (1 of 2). Comparing 12 points to limit. Assumes 3 future values.

Constituent: Barium Analysis Run 12/8/2025 8:44 AM View: 2025_AWQR-DMAM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW1-99, MW-37, MW4-90,
MW4-93, MW7-93, PZ-10, MW-39R, MW-43

Prediction Limit
Interwell Non-parametric

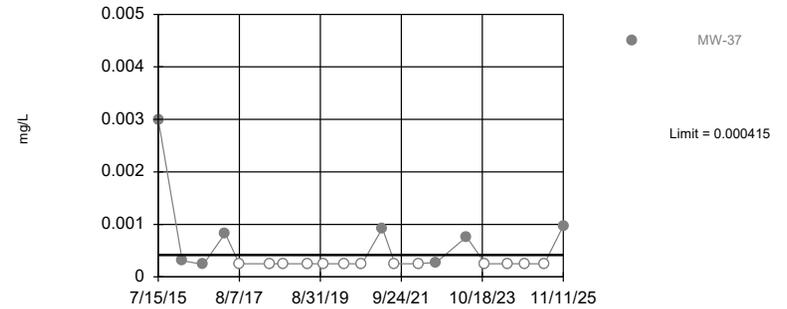


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 72.73% NDs. Annual per-constituent alpha = 0.08898. Individual comparison alpha = 0.003102 (1 of 2). Comparing 8 points to limit. Assumes 7 future values.

Constituent: Cobalt Analysis Run 12/8/2025 8:44 AM View: 2025_AWQR-DMAM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW-37

Prediction Limit
Interwell Non-parametric



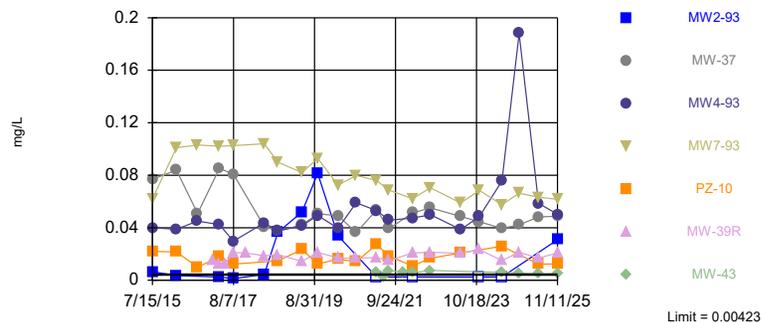
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. Annual per-constituent alpha = 0.07716. Individual comparison alpha = 0.002673 (1 of 2). Assumes 14 future values.

Constituent: Lead Analysis Run 12/8/2025 8:44 AM View: 2025_AWQR-DMAM_Interwell_PL
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Exceeds Limit: MW2-93, MW-37, MW4-93,
 MW7-93, PZ-10, MW-39R

Prediction Limit

Interwell Non-parametric



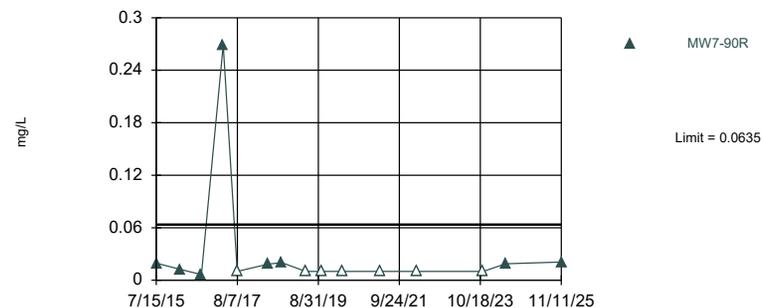
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 75% NDs. Annual per-constituent alpha = 0.07716. Individual comparison alpha = 0.002673 (1 of 2). Comparing 7 points to limit. Assumes 8 future values.

Constituent: Nickel Analysis Run 12/8/2025 8:44 AM View: 2025_AWQR-DMAM_Interwell_PL
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 87.5% NDs. Annual per-constituent alpha = 0.07716. Individual comparison alpha = 0.002673 (1 of 2). Assumes 14 future values.

Constituent: Zinc Analysis Run 12/8/2025 8:44 AM View: 2025_AWQR-DMAM_Interwell_PL
 Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

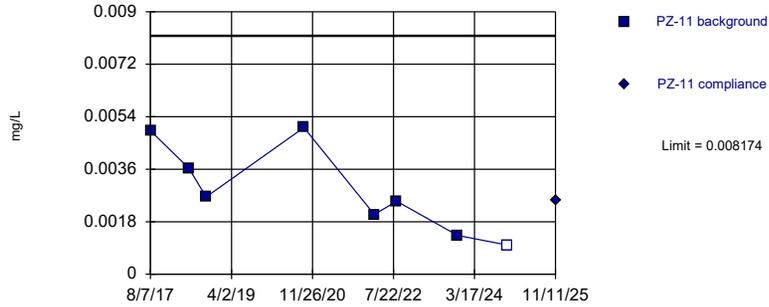
Prediction Limit

Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master Printed 12/8/2025, 2:17 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	PZ-11	0.008174	n/a	11/11/2025	0.00252	No	8	n/a	12.5	No	0.0004389	Param Intra 1 of 2
Barium (mg/L)	PZ-11	0.2634	n/a	11/11/2025	0.101	No	8	n/a	0	No	0.0004389	Param Intra 1 of 2
Chromium (mg/L)	PZ-11	0.00376	n/a	11/11/2025	0.0025ND	No	8	n/a	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	PZ-11	0.007221	n/a	11/11/2025	0.00173	No	7	n/a	0	No	0.0004389	Param Intra 1 of 2
Copper (mg/L)	PZ-11	0.0025	n/a	11/11/2025	0.0025ND	No	8	n/a	87.5	n/a	0.02144	NP Intra (NDs) 1 of 2
Lead (mg/L)	PZ-11	0.001619	n/a	11/11/2025	0.00025ND	No	8	n/a	25	No	0.0004389	Param Intra 1 of 2
Nickel (mg/L)	PZ-11	0.00624	n/a	11/11/2025	0.00314J	No	8	n/a	12.5	No	0.0004389	Param Intra 1 of 2
Vanadium (mg/L)	PZ-11	0.00363	n/a	11/11/2025	0.0025ND	No	8	n/a	75	n/a	0.02144	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit
Intrawell Parametric

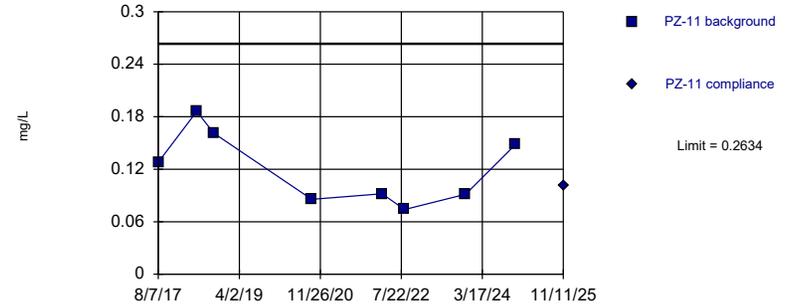


Background Data Summary: Mean=0.002889, Std. Dev.=0.00152, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9208, critical = 0.749. Kappa = 3.478 (c=8, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004389.

Constituent: Arsenic Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Parametric

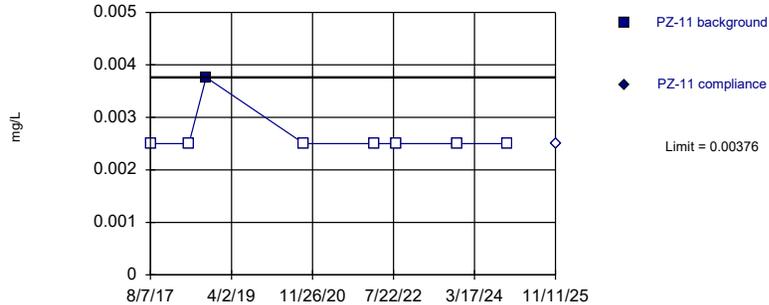


Background Data Summary: Mean=0.1207, Std. Dev.=0.04104, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9093, critical = 0.749. Kappa = 3.478 (c=8, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004389.

Constituent: Barium Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Non-parametric

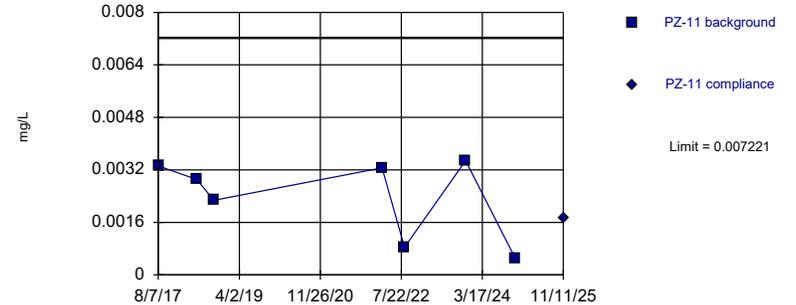


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Chromium Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit
Intrawell Parametric



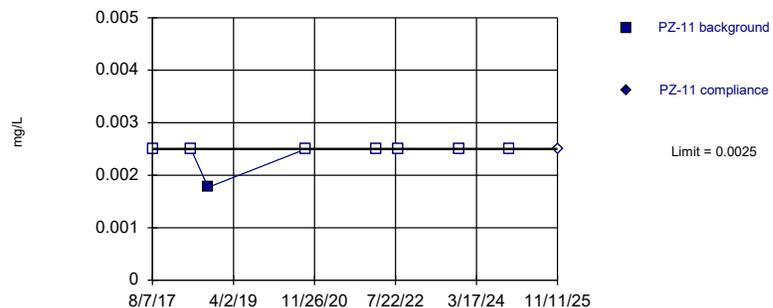
Background Data Summary: Mean=0.002369, Std. Dev.=0.001228, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8326, critical = 0.73. Kappa = 3.95 (c=8, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004389.

Constituent: Cobalt Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit

Intrawell Non-parametric



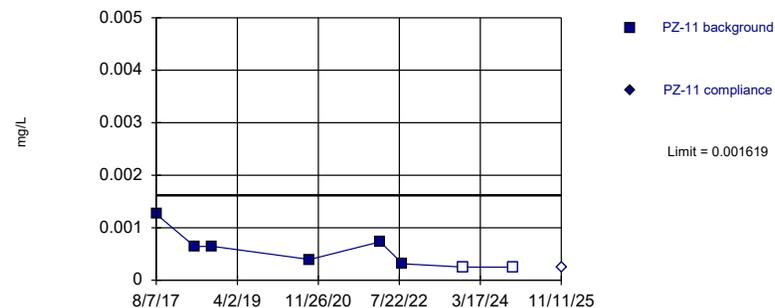
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Copper Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit

Intrawell Parametric



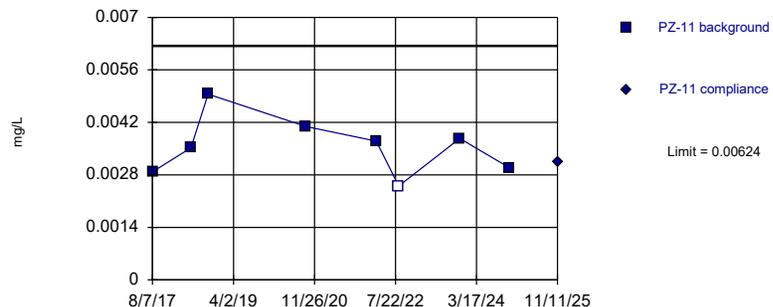
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0005865, Std. Dev.=0.0002968, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8576, critical = 0.749. Kappa = 3.478 (c=8, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004389.

Constituent: Lead Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit

Intrawell Parametric



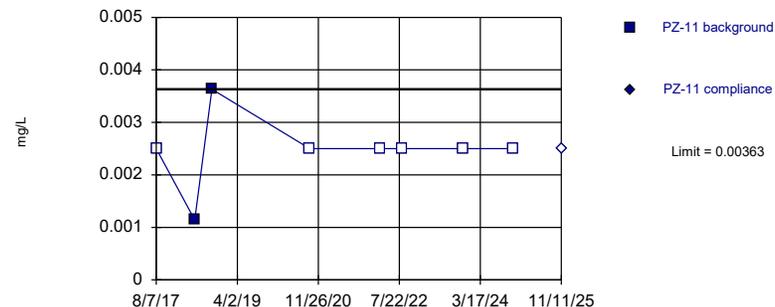
Background Data Summary: Mean=0.00355, Std. Dev.=0.0007735, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9662, critical = 0.749. Kappa = 3.478 (c=8, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004389.

Constituent: Nickel Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Vanadium Analysis Run 12/8/2025 2:10 PM View: 2025AWQR_IntraPredLim_PZ-11
Des Moines County Regional SLF Client: SCS Engineers Data: Des Moines County LF Master

Mann-Kendall Trend Table and Graphs

Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/16/2025, 8:39 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
1,1,1-Trichloroethane (ug/L)	MW1-99	0	-3	-21	No	8	87.5	0.01	NP
1,1-Dichloroethane (ug/L)	MW2-93	0.7972	12	21	No	8	50	0.01	NP
1,1-Dichloroethane (ug/L)	MW4-93	-0.04257	-5	-21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	MW-37	-0.6966	-2	-21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	MW-39R	0.9078	3	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	PZ-10	-0.1161	-12	-21	No	8	12.5	0.01	NP
1,1-Dichloroethene (ug/L)	MW1-99	0	-3	-21	No	8	87.5	0.01	NP
1,1-Dichloroethene (ug/L)	MW2-93	0	5	21	No	8	75	0.01	NP
1,1-Dichloroethene (ug/L)	MW-37	-0.6753	-14	-21	No	8	0	0.01	NP
1,2-Dichloroethane (ug/L)	MW1-99	0	-3	-21	No	8	87.5	0.01	NP
1,2-Dichloropropane (ug/L)	MW1-99	0	-3	-21	No	8	87.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW2-93	0	5	21	No	8	75	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW4-90	0	0	21	No	8	62.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW4-93	0.01855	4	21	No	8	0	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW7-90R	-0.1216	-9	-21	No	8	37.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	PZ-10	-0.5033	-18	-21	No	8	0	0.01	NP
2,4,5-TP [Silvex] [2C] (ug/L)	MW-39R	-0.01064	-9	-14	No	6	83.33	0.01	NP
Acetone (ug/L)	MW-43	0	1	21	No	8	37.5	0.01	NP
alpha-BHC (ug/L)	MW-39R	-0.00935	-10	-21	No	8	50	0.01	NP
Antimony (mg/L)	MW4-93	0.0005332	21	21	No	8	50	0.01	NP
Arsenic (mg/L)	MW2-93	0.0001102	2	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW4-90	0.0005731	16	21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW4-93	0.0004625	10	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW7-90R	-0.007754	-20	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-37	-0.0001676	-2	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-43	0.0007354	18	21	No	8	0	0.01	NP
Arsenic (mg/L)	PZ-10	-0.003662	-8	-21	No	8	0	0.01	NP
Barium (mg/L)	MW1-99	0.00144	4	21	No	8	0	0.01	NP
Barium (mg/L)	MW2-93	0.01351	6	21	No	8	0	0.01	NP
Barium (mg/L)	MW4-90	0.01529	8	21	No	8	0	0.01	NP
Barium (mg/L)	MW4-93	-0.000403	-4	-21	No	8	0	0.01	NP
Barium (mg/L)	MW7-90R	0.07484	24	21	Yes	8	0	0.01	NP
Barium (mg/L)	MW7-93	0.004216	8	21	No	8	0	0.01	NP
Barium (mg/L)	MW-37	-0.0003113	-9	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-38	-0.002746	-6	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-39R	-0.009058	-11	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-43	-0.003173	-4	-21	No	8	0	0.01	NP
Barium (mg/L)	PZ-10	-0.001761	0	21	No	8	0	0.01	NP
Benzene (ug/L)	MW4-90	0	-5	-21	No	8	87.5	0.01	NP
Benzene (ug/L)	MW4-93	-0.05171	-15	-21	No	8	25	0.01	NP
Benzene (ug/L)	MW7-90R	-0.1996	-21	-21	No	8	37.5	0.01	NP
Benzene (ug/L)	MW-37	-0.09836	-18	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-39R	-0.04406	-4	-21	No	8	12.5	0.01	NP
Benzene (ug/L)	PZ-10	-0.4401	-7	-21	No	8	0	0.01	NP
Beryllium (mg/L)	MW4-93	0	3	21	No	8	87.5	0.01	NP
Cadmium (mg/L)	MW2-93	-9.9e-7	-1	-21	No	8	50	0.01	NP
Cadmium (mg/L)	MW4-93	0.0001086	15	21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW7-93	-0.000013	-4	-21	No	8	12.5	0.01	NP
Cadmium (mg/L)	PZ-10	-0.000002274	-13	-21	No	8	87.5	0.01	NP
Chlorobenzene (ug/L)	MW2-93	0	-4	-21	No	8	50	0.01	NP

Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/16/2025, 8:39 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Chlorobenzene (ug/L)	MW4-90	0	-3	-21	No	8	75	0.01	NP
Chlorobenzene (ug/L)	MW4-93	-2.207	-12	-21	No	8	0	0.01	NP
Chlorobenzene (ug/L)	MW-37	-1.186	-16	-21	No	8	0	0.01	NP
Chlorobenzene (ug/L)	PZ-10	0.09315	3	21	No	8	0	0.01	NP
Chloroethane (ug/L)	MW4-90	0.1983	2	21	No	8	0	0.01	NP
Chloroethane (ug/L)	MW-37	0.4706	2	21	No	8	0	0.01	NP
Chloroethane (ug/L)	PZ-10	-0.5396	-12	-21	No	8	0	0.01	NP
Chromium (mg/L)	MW-38	-0.0003554	-18	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW2-93	0.03511	8	21	No	8	50	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW4-93	0.01034	6	21	No	8	12.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-37	0.1533	8	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-39R	-0.1098	-1	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	PZ-10	-0.1043	-11	-21	No	8	25	0.01	NP
Cobalt (mg/L)	MW1-99	0.0004098	10	21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW2-93	-0.0003611	-6	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW4-90	-0.0007138	-14	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW4-93	-0.0000207	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW7-90R	-0.003426	-18	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW7-93	-0.0004715	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-37	-0.003726	-14	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-39R	-0.00004298	-9	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-43	0.0000142	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	PZ-10	-0.0007704	-3	-21	No	8	0	0.01	NP
Copper (mg/L)	MW2-93	0	-8	-21	No	8	62.5	0.01	NP
Copper (mg/L)	MW4-93	0	2	21	No	8	62.5	0.01	NP
Copper (mg/L)	MW7-90R	0	7	21	No	8	75	0.01	NP
Copper (mg/L)	MW7-93	-0.0006988	-18	-21	No	8	12.5	0.01	NP
Copper (mg/L)	PZ-10	0	-3	-21	No	8	87.5	0.01	NP
Dichlorodifluoromethane (ug/L)	MW-39R	-0.07246	0	21	No	8	0	0.01	NP
Lead (mg/L)	MW4-93	0.00002977	6	21	No	8	50	0.01	NP
Lead (mg/L)	MW7-90R	0	4	21	No	8	50	0.01	NP
Lead (mg/L)	MW-37	0	2	21	No	8	62.5	0.01	NP
Lead (mg/L)	MW-39R	0	-3	-21	No	8	87.5	0.01	NP
Lead (mg/L)	PZ-10	0	-4	-21	No	8	50	0.01	NP
Nickel (mg/L)	MW2-93	-0.00785	-12	-21	No	8	50	0.01	NP
Nickel (mg/L)	MW4-90	-0.001045	-18	-21	No	8	12.5	0.01	NP
Nickel (mg/L)	MW4-93	0.004105	12	21	No	8	0	0.01	NP
Nickel (mg/L)	MW7-90R	0.0002834	7	21	No	8	37.5	0.01	NP
Nickel (mg/L)	MW7-93	-0.001689	-6	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-37	-0.002026	-8	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-39R	-0.0001834	-4	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-43	-0.0004892	-18	-21	No	8	0	0.01	NP
Nickel (mg/L)	PZ-10	-0.001398	-6	-21	No	8	0	0.01	NP
Selenium (mg/L)	MW1-99	-0.00013	-5	-21	No	8	37.5	0.01	NP
Selenium (mg/L)	MW-38	0.0009226	24	21	Yes	8	0	0.01	NP
Sulfide (mg/L)	MW7-90R	0	7	21	No	8	87.5	0.01	NP
Tetrachloroethene (ug/L)	MW-39R	0.02449	2	21	No	8	12.5	0.01	NP
Toluene (ug/L)	MW4-90	0	5	21	No	8	87.5	0.01	NP
Trichloroethene (ug/L)	MW-39R	-0.2966	-12	-21	No	8	0	0.01	NP
Vanadium (mg/L)	MW4-93	0.001642	17	21	No	8	25	0.01	NP

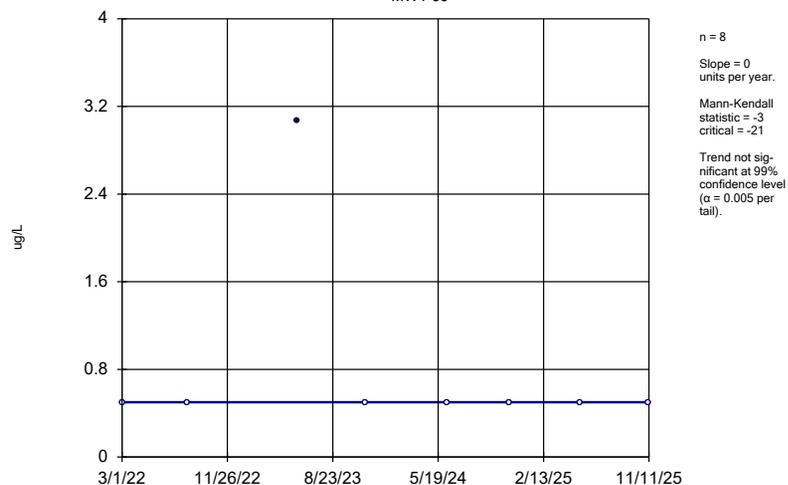
Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/16/2025, 8:39 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Vanadium (mg/L)	PZ-10	0	-3	-21	No	8	87.5	0.01	NP
Vinyl Chloride (ug/L)	MW-37	-0.1866	-19	-21	No	8	25	0.01	NP
Vinyl Chloride (ug/L)	MW-39R	-0.1133	-2	-21	No	8	0	0.01	NP
Zinc (mg/L)	MW7-90R	0	13	21	No	8	75	0.01	NP

Sen's Slope Estimator

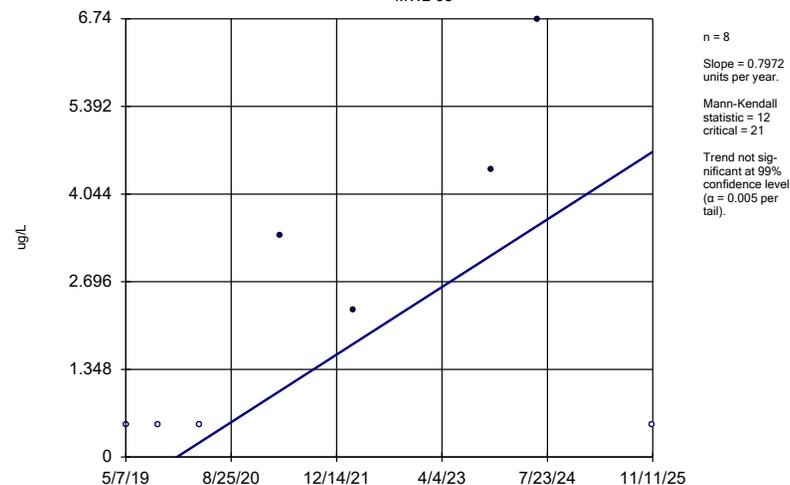
MW1-99



Constituent: 1,1,1-Trichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

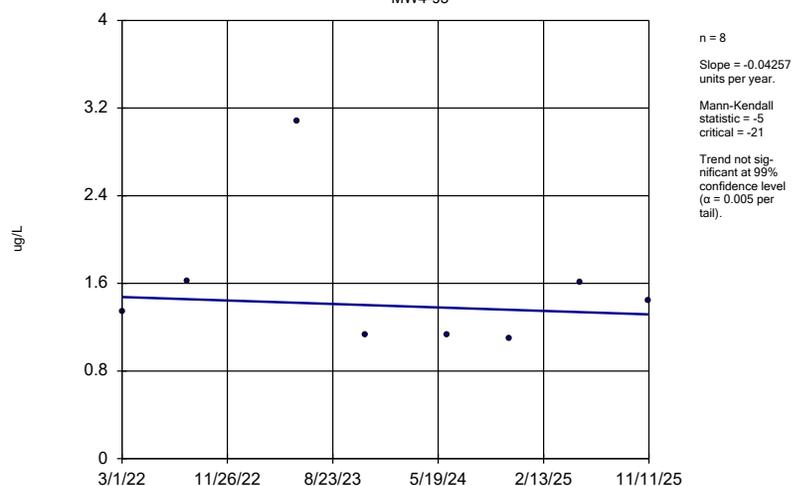
MW2-93



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

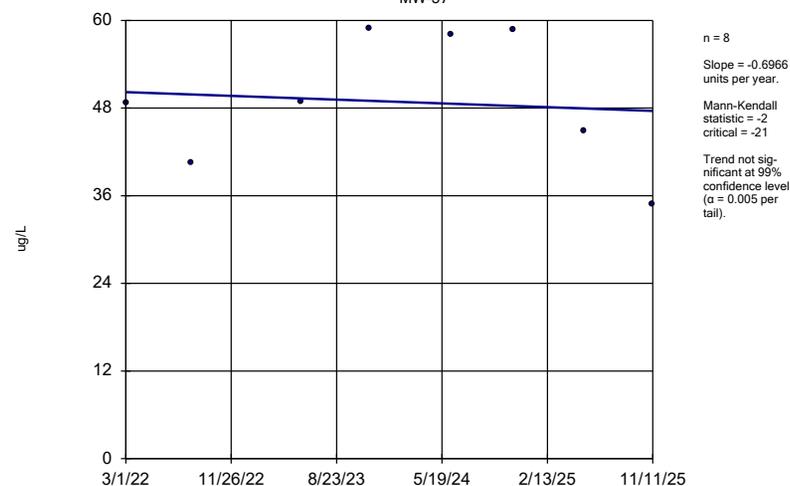
MW4-93



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

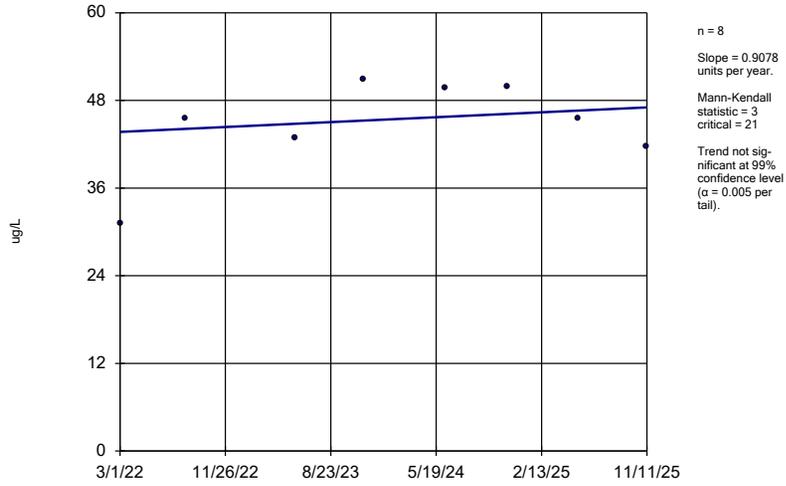
MW-37



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

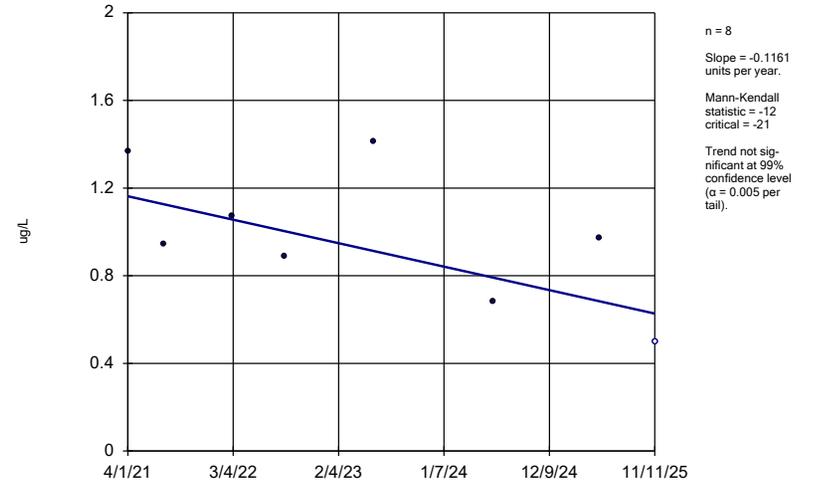
MW-39R



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

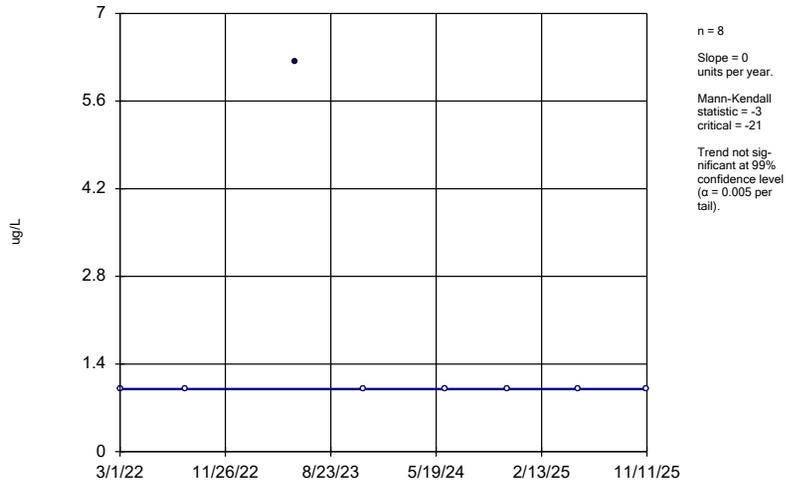
PZ-10



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

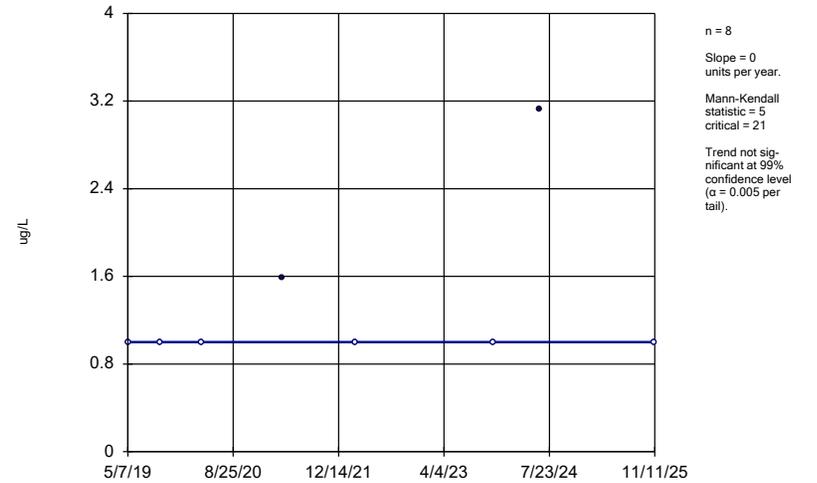
MW1-99



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

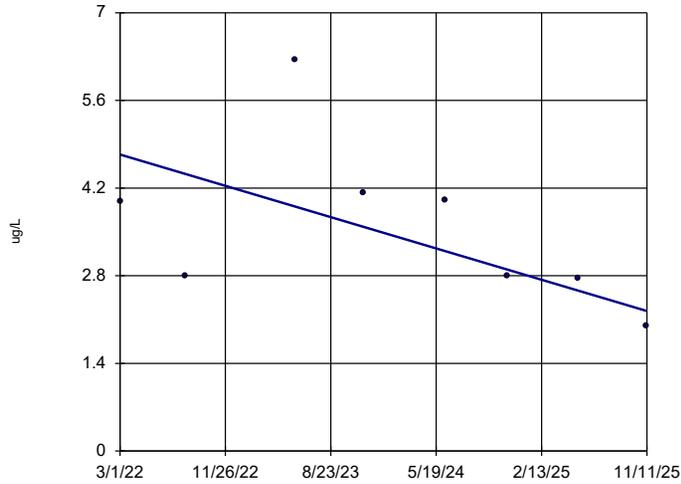
MW2-93



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

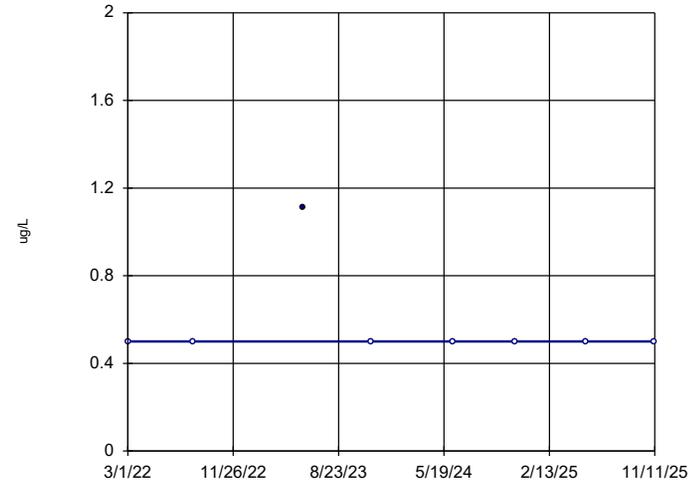
MW-37



n = 8
 Slope = -0.6753 units per year.
 Mann-Kendall statistic = -14
 critical = -21
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Sen's Slope Estimator

MW1-99



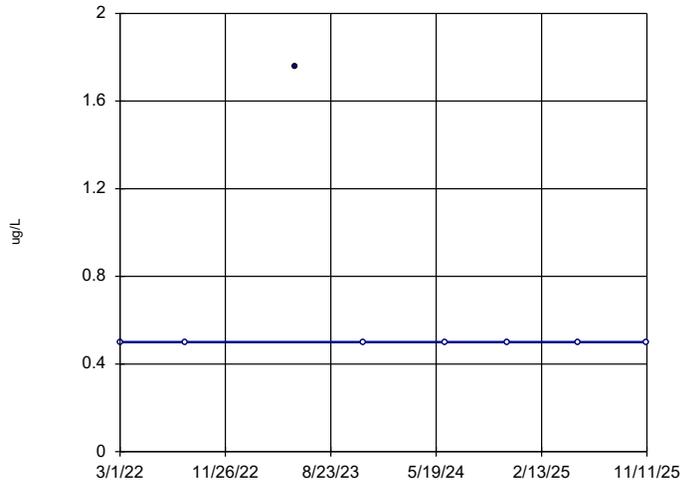
n = 8
 Slope = 0 units per year.
 Mann-Kendall statistic = -3
 critical = -21
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: 1,1-Dichloroethene Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Constituent: 1,2-Dichloroethane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

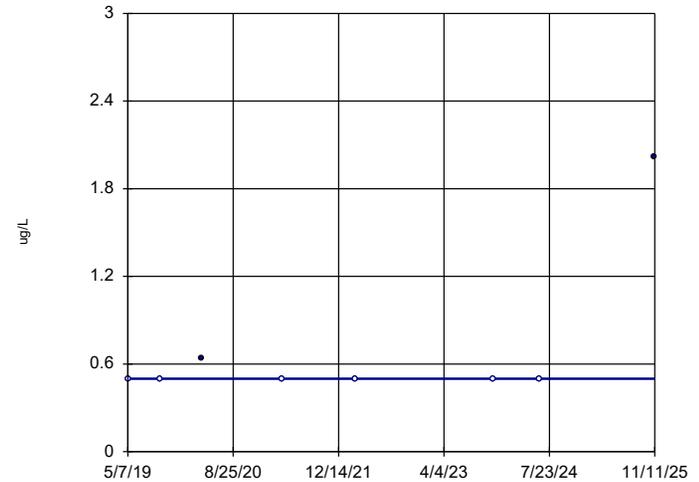
MW1-99



n = 8
 Slope = 0 units per year.
 Mann-Kendall statistic = -3
 critical = -21
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Sen's Slope Estimator

MW2-93



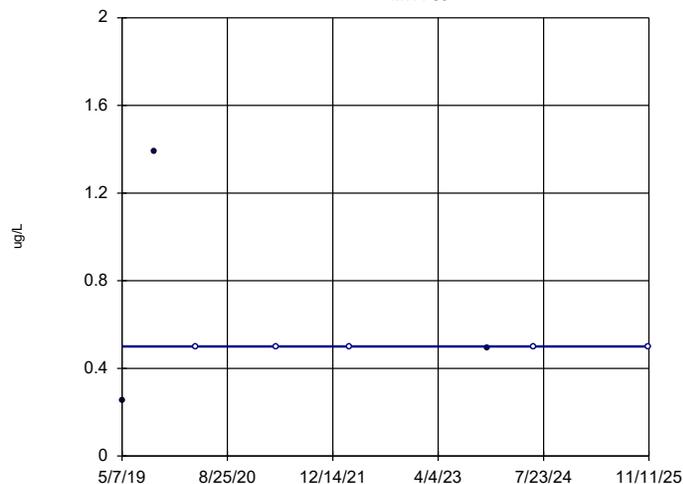
n = 8
 Slope = 0 units per year.
 Mann-Kendall statistic = 5
 critical = 21
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: 1,2-Dichloropropane Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

MW4-90

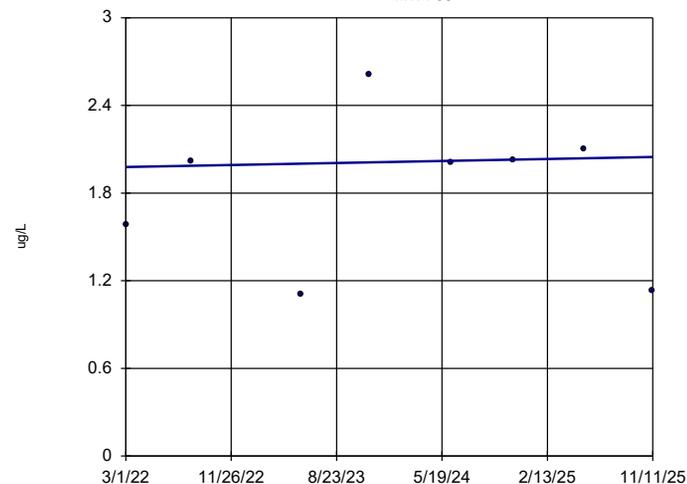


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = 0
critical = 21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

MW4-93

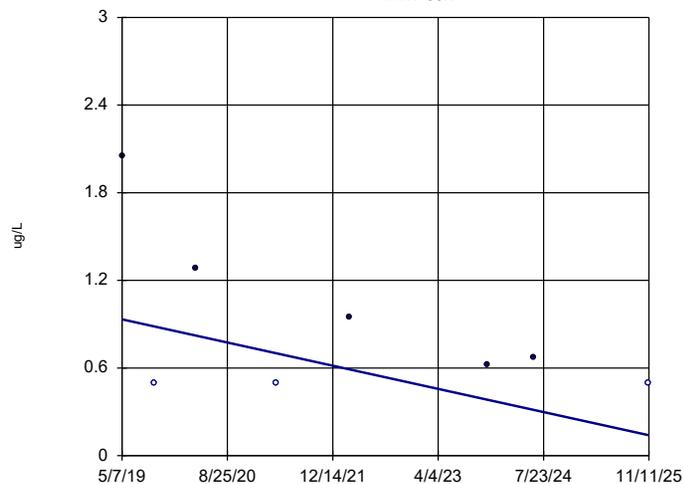


n = 8
Slope = 0.01855
units per year.
Mann-Kendall
statistic = 4
critical = 21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

MW7-90R

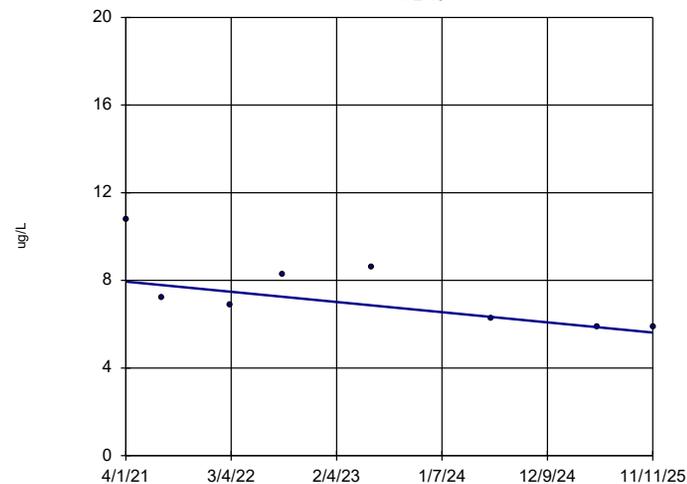


n = 8
Slope = -0.1216
units per year.
Mann-Kendall
statistic = -9
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:33 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

PZ-10

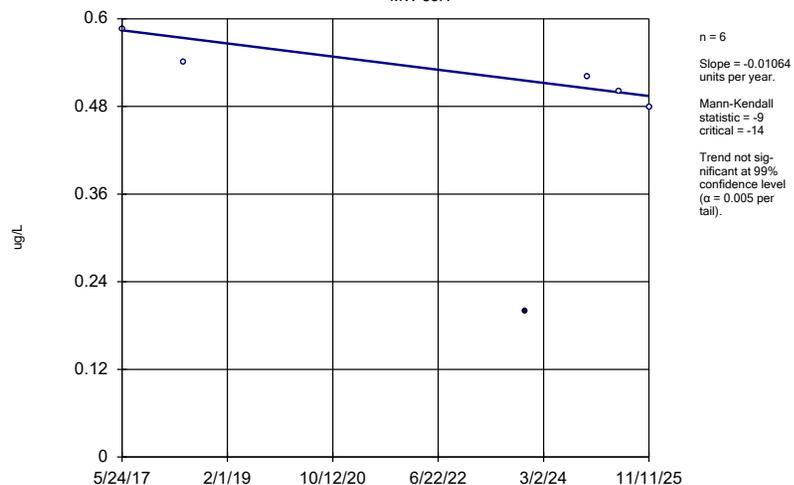


n = 8
Slope = -0.5033
units per year.
Mann-Kendall
statistic = -18
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

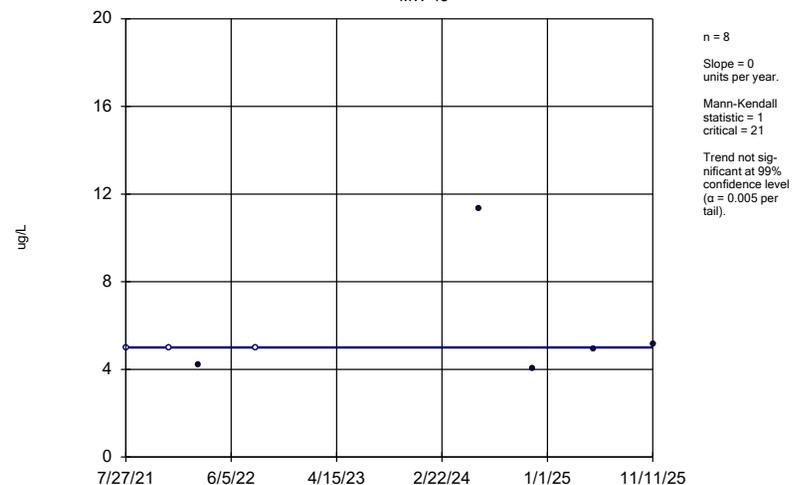
MW-39R



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

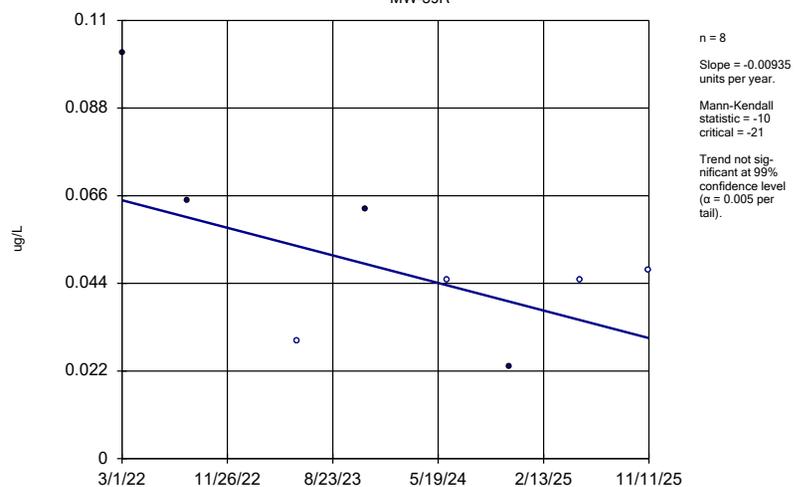
MW-43



Constituent: Acetone Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

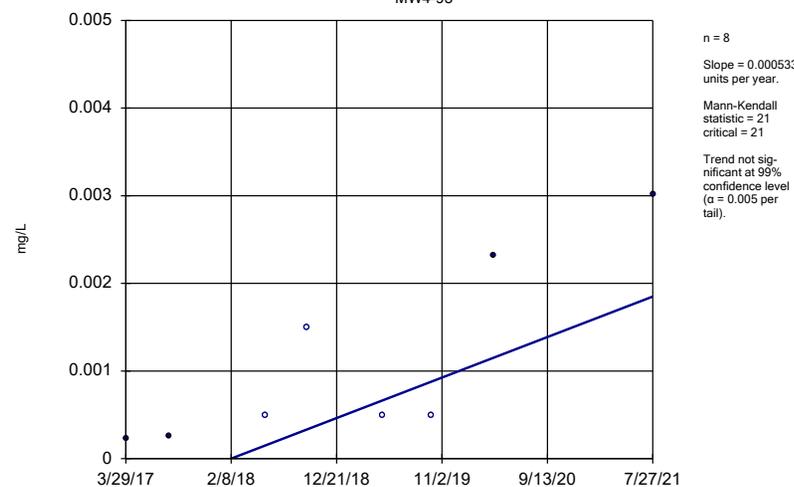
MW-39R



Constituent: alpha-BHC Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

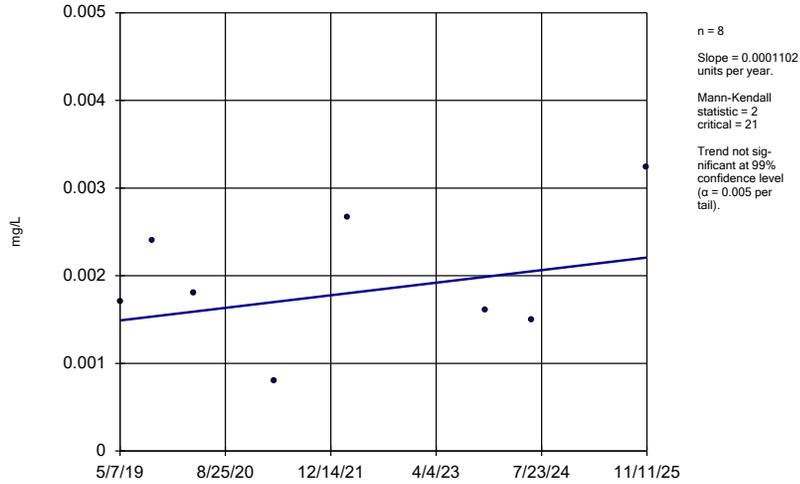
MW4-93



Constituent: Antimony Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

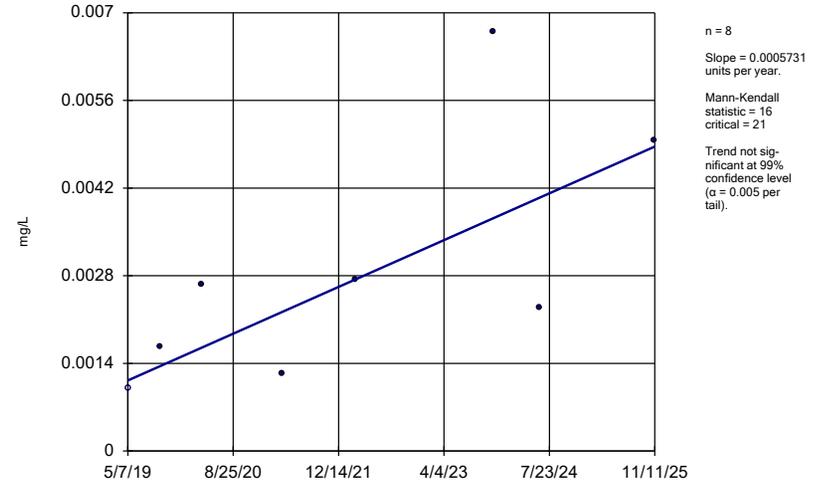
MW2-93



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

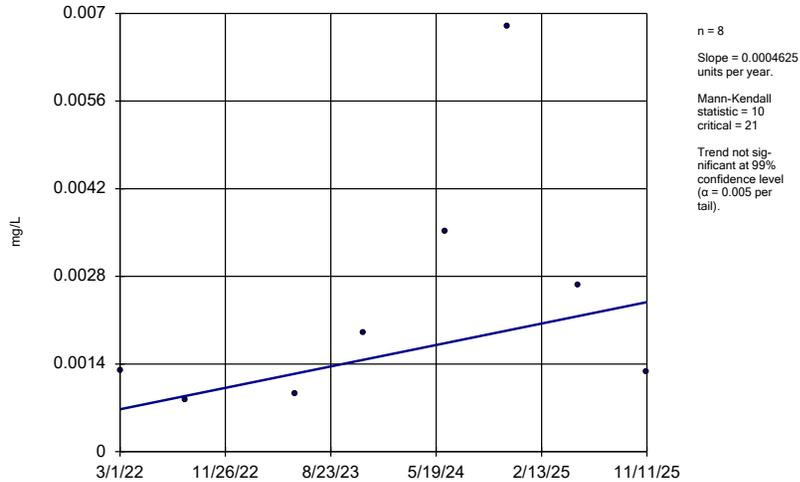
MW4-90



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

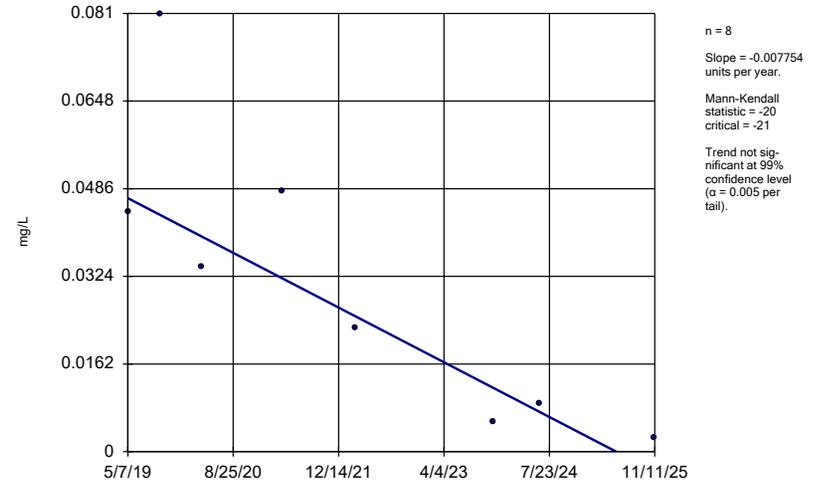
MW4-93



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

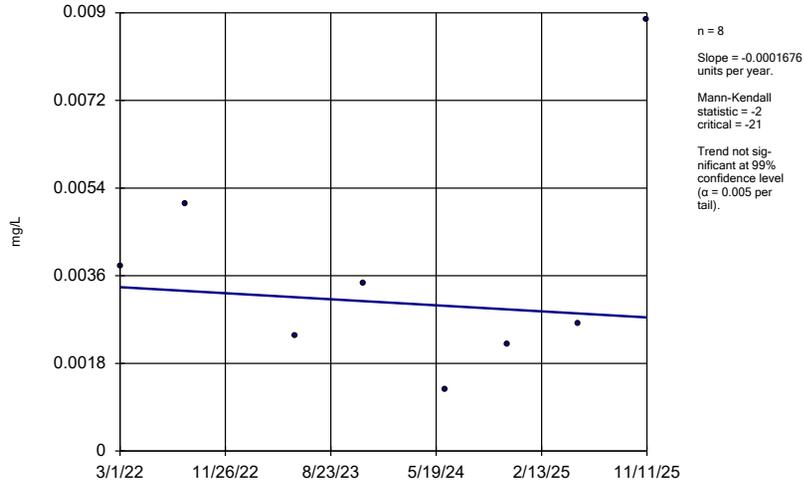
MW7-90R



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

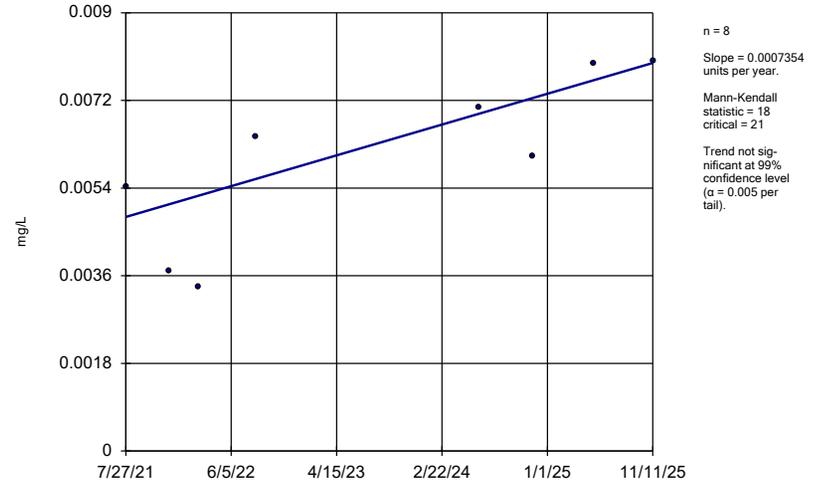
MW-37



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

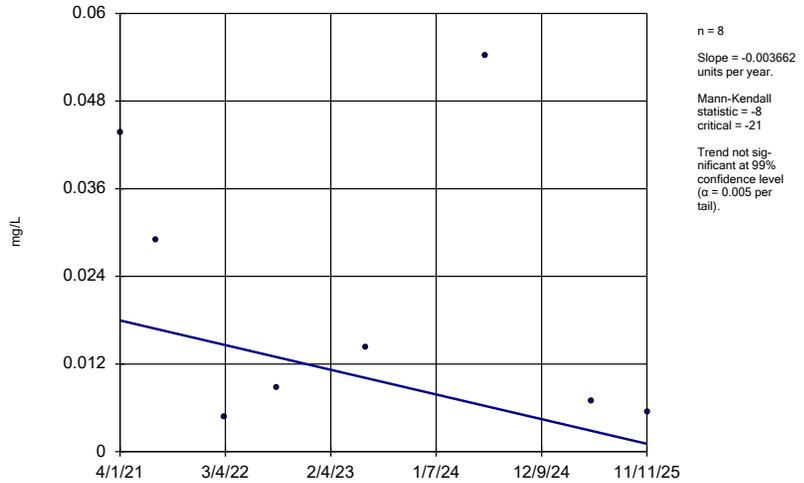
MW-43



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

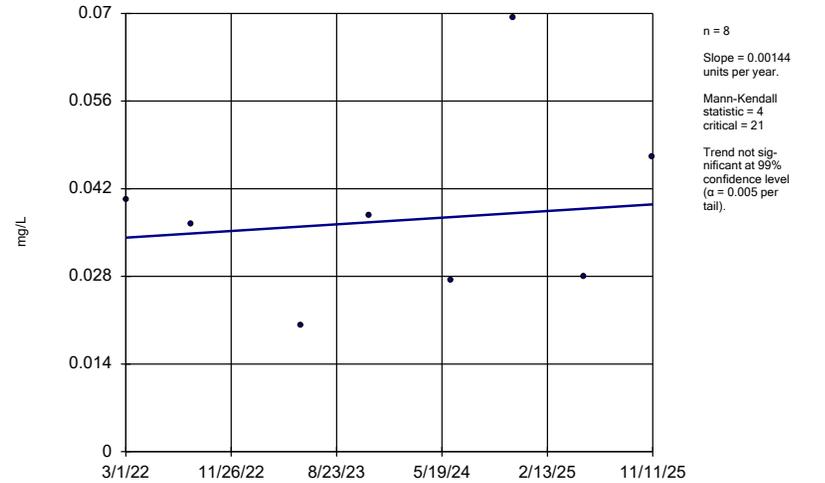
PZ-10



Constituent: Arsenic Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

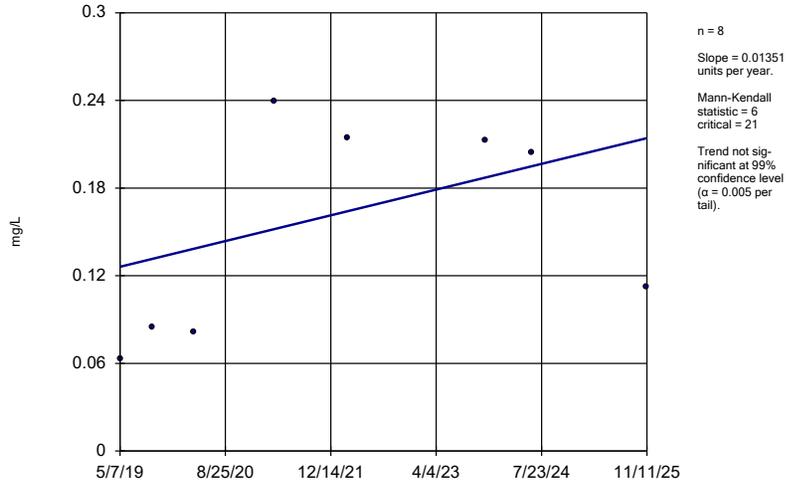
MW1-99



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

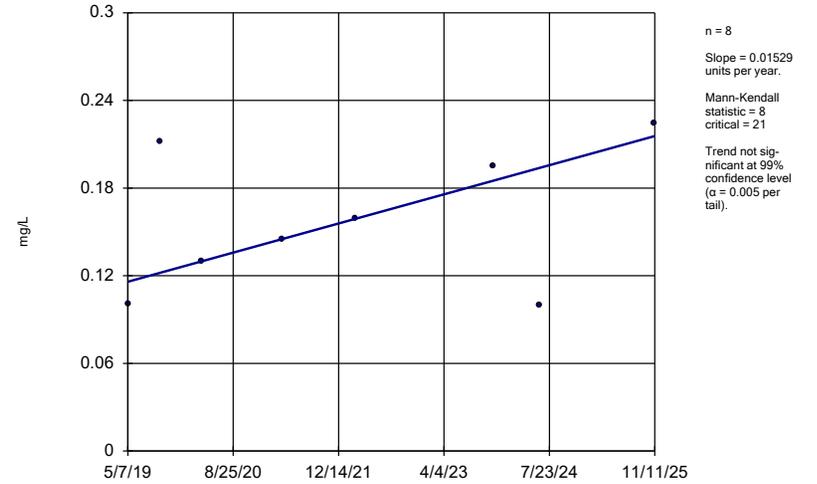
MW2-93



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

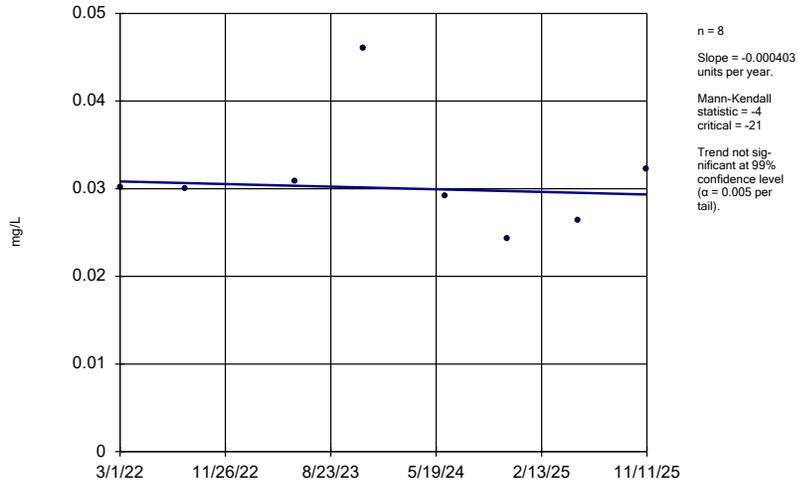
MW4-90



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

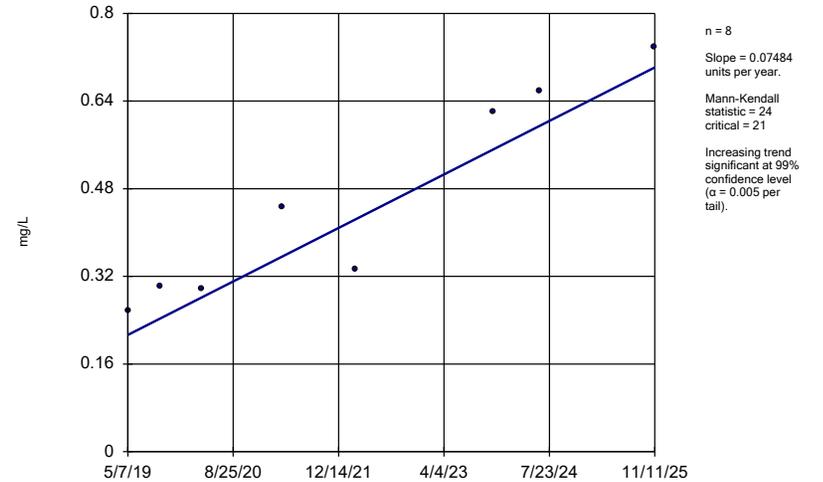
MW4-93



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

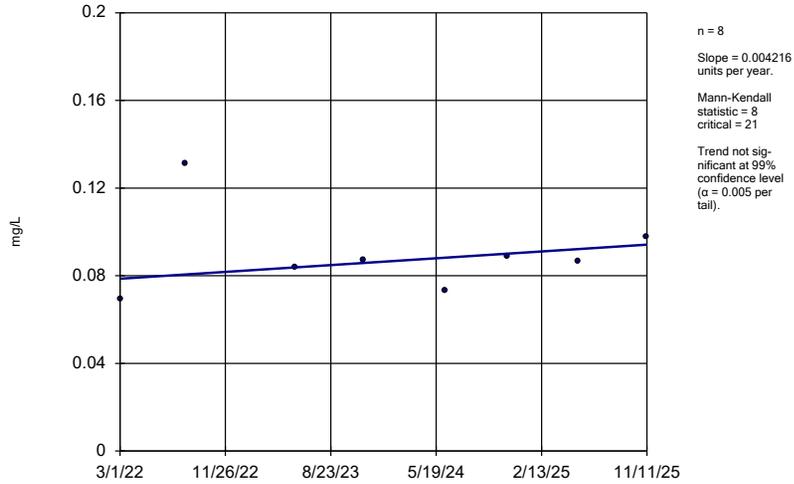
MW7-90R



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

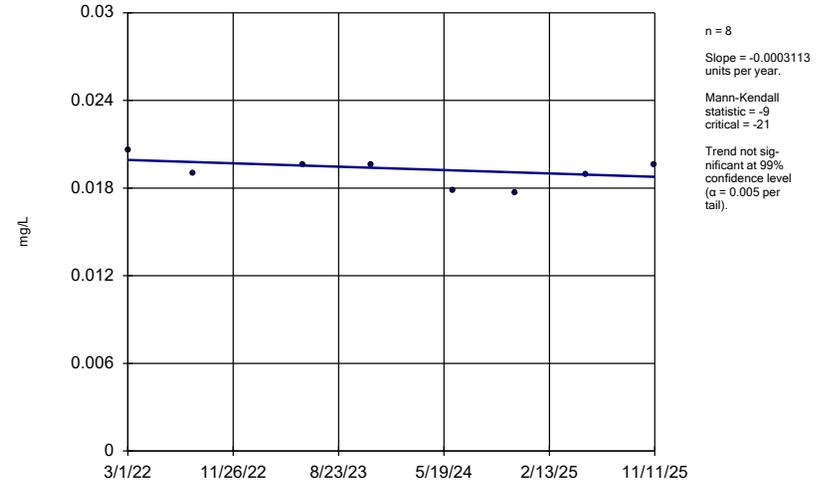
MW7-93



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

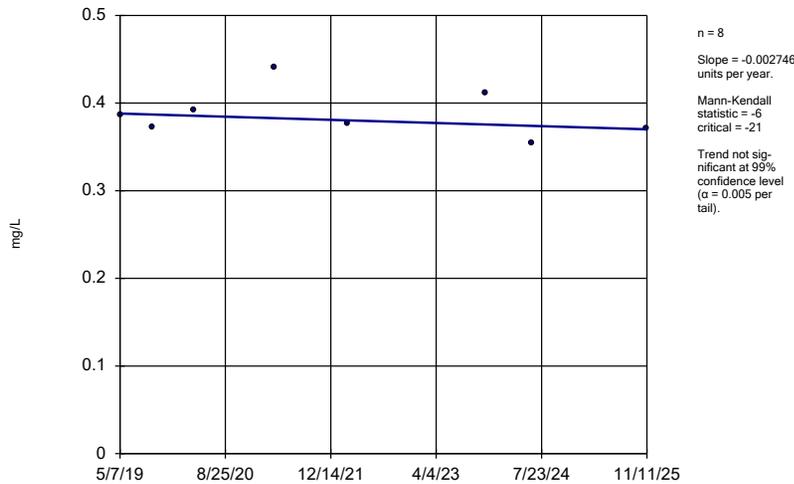
MW-37



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

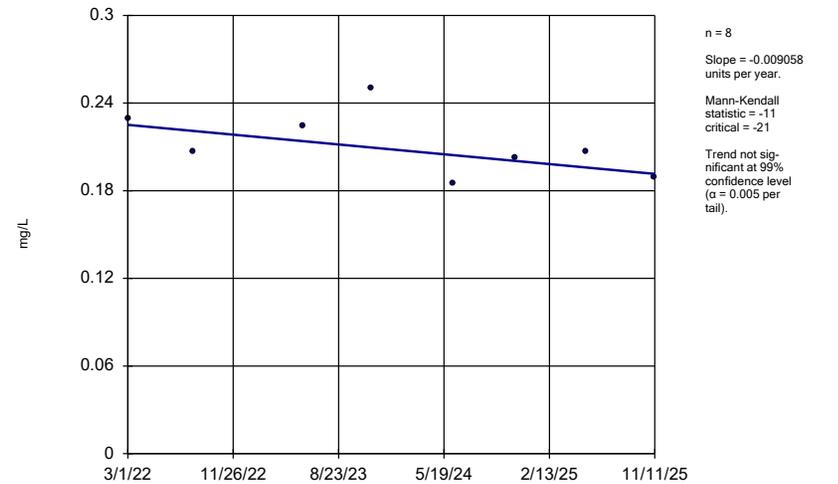
MW-38



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

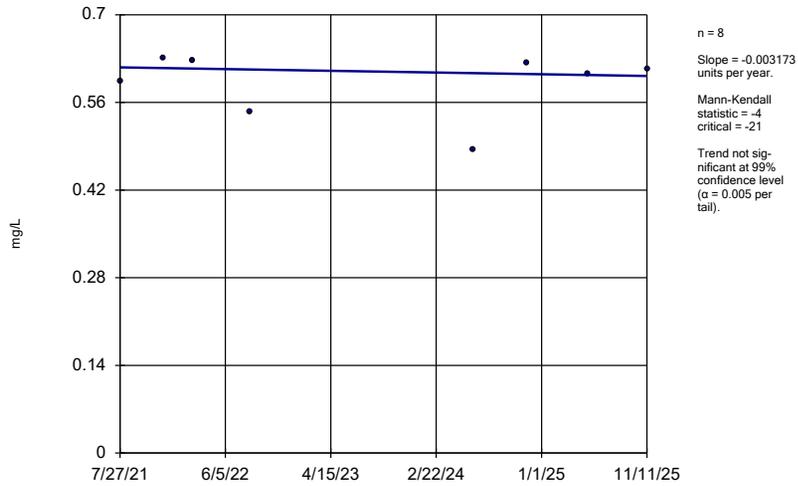
MW-39R



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

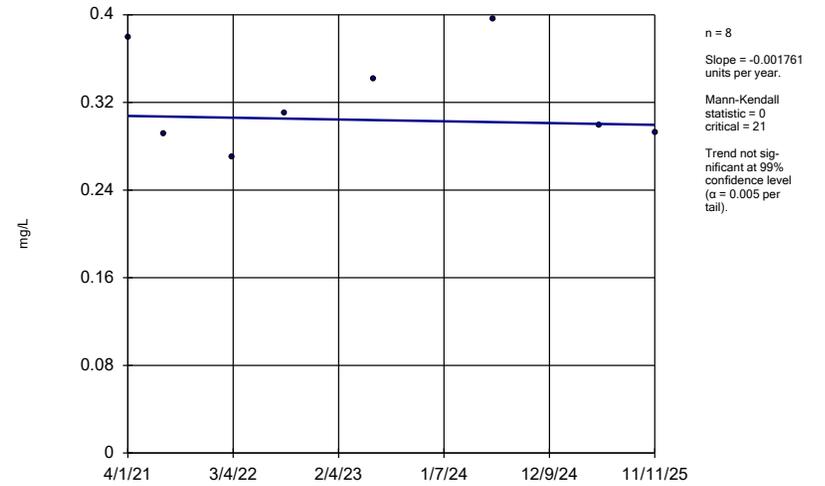
MW-43



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

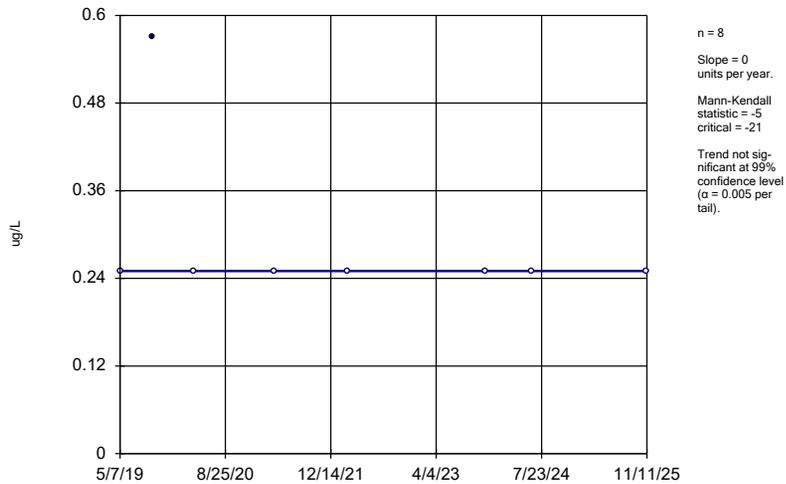
PZ-10



Constituent: Barium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

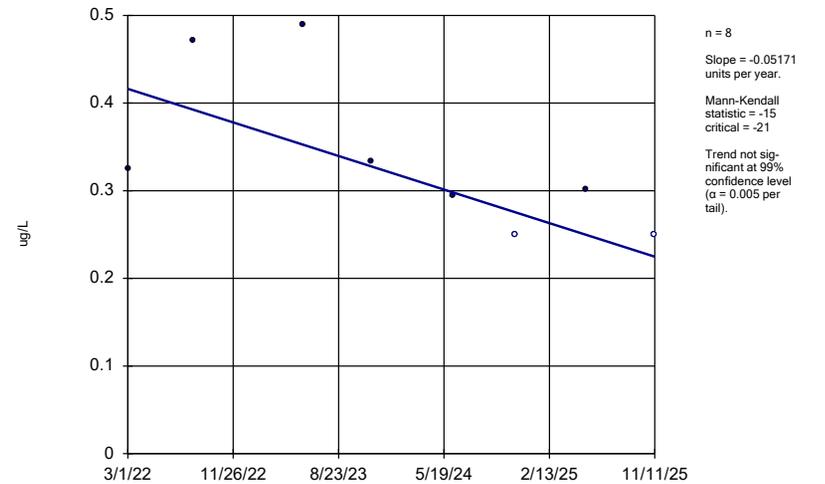
MW4-90



Constituent: Benzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

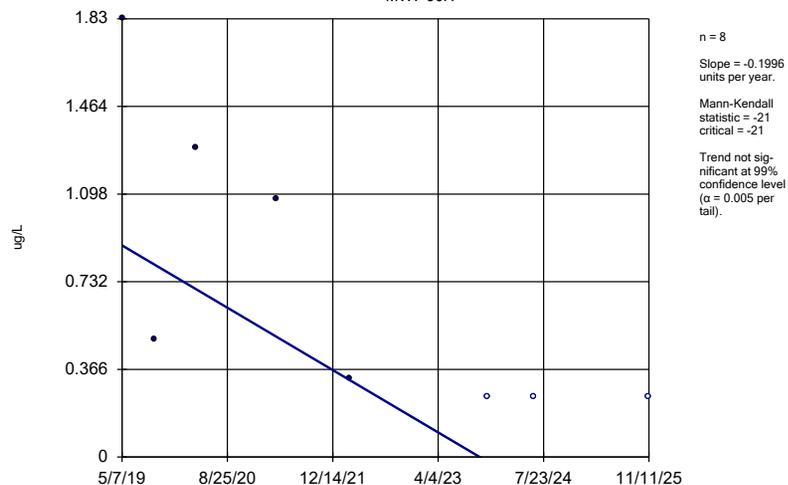
Sen's Slope Estimator

MW4-93



Sen's Slope Estimator

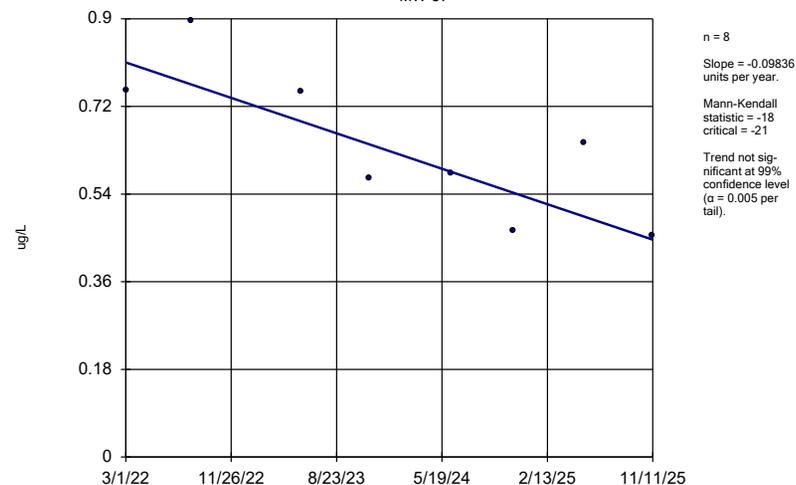
MW7-90R



Constituent: Benzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

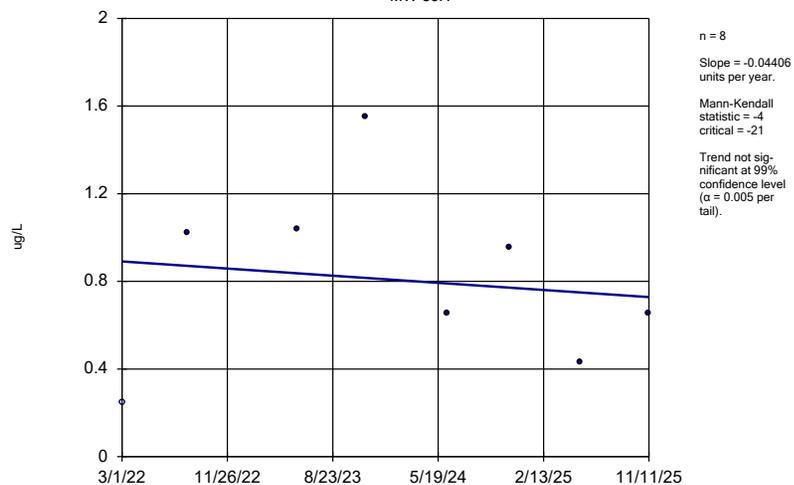
MW-37



Constituent: Benzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

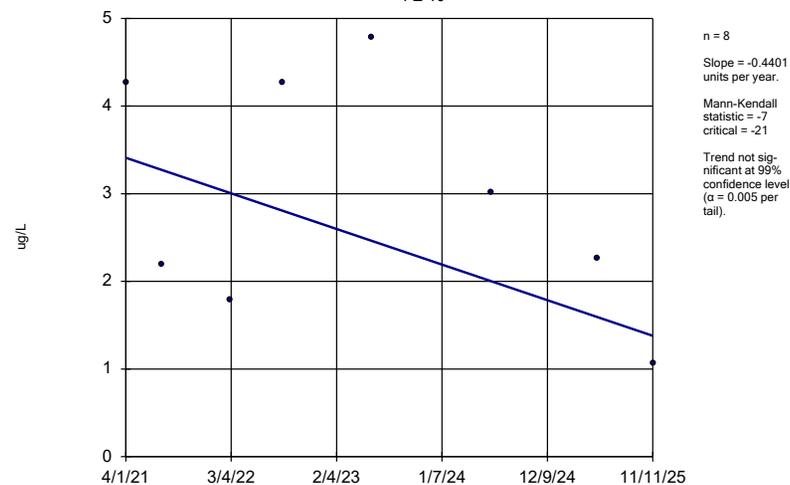
MW-39R



Constituent: Benzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

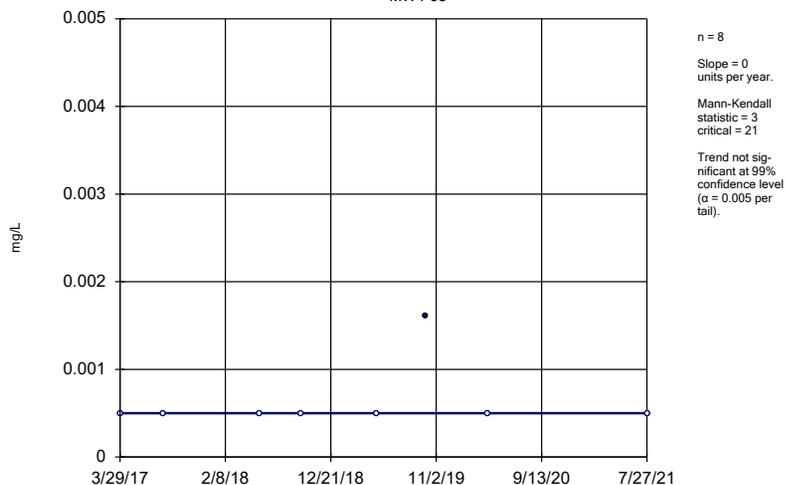
PZ-10



Constituent: Benzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

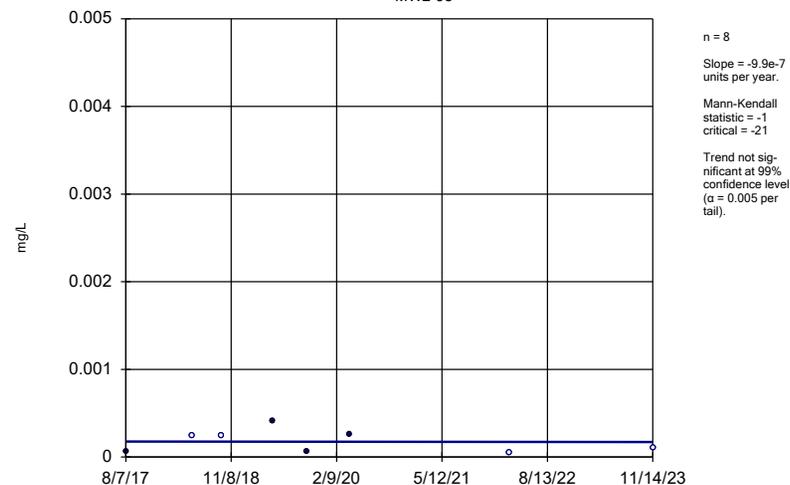
MW4-93



Constituent: Beryllium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

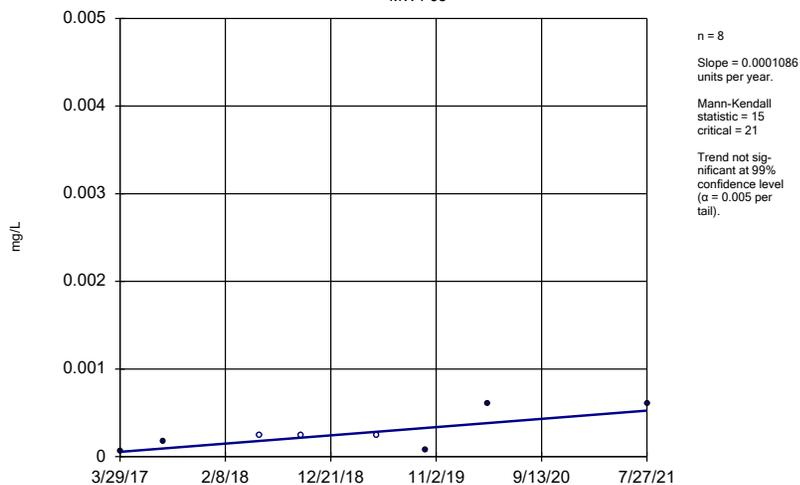
MW2-93



Constituent: Cadmium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

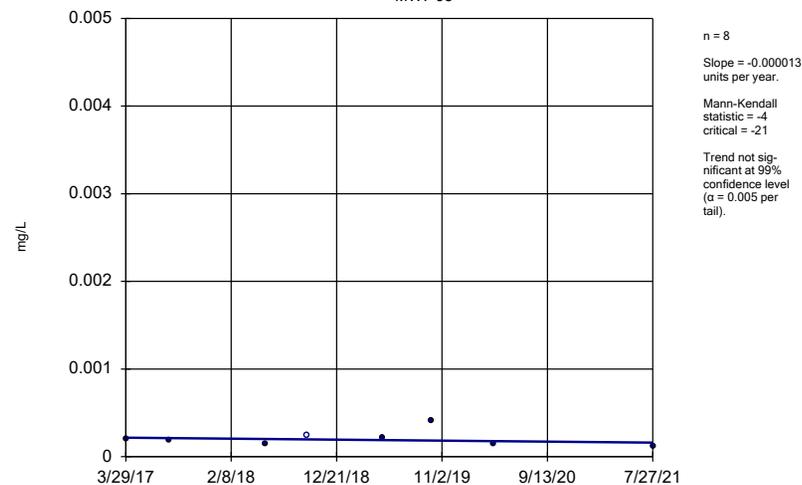
MW4-93



Constituent: Cadmium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

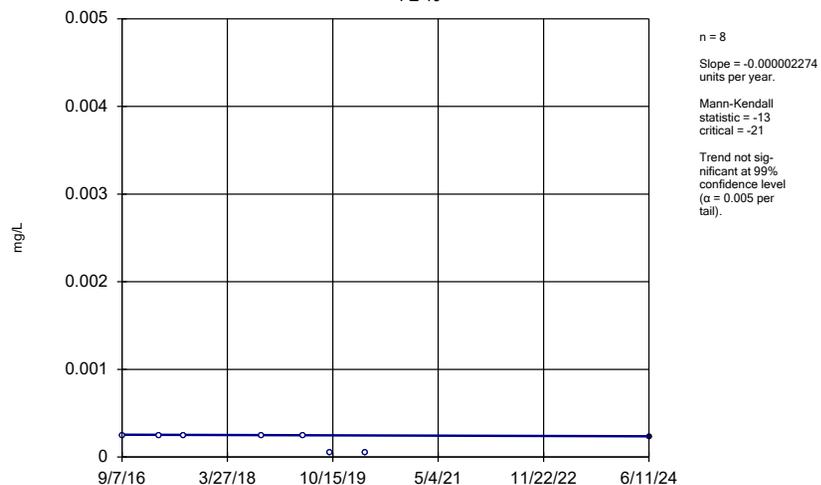
MW7-93



Constituent: Cadmium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

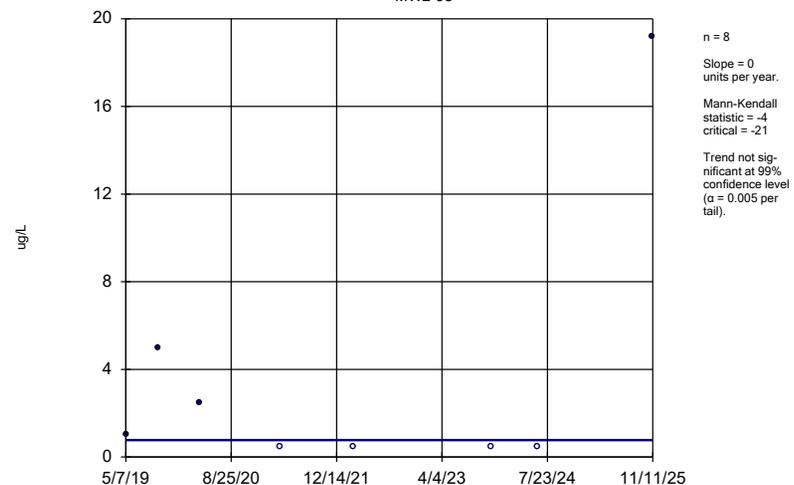
PZ-10



Constituent: Cadmium Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

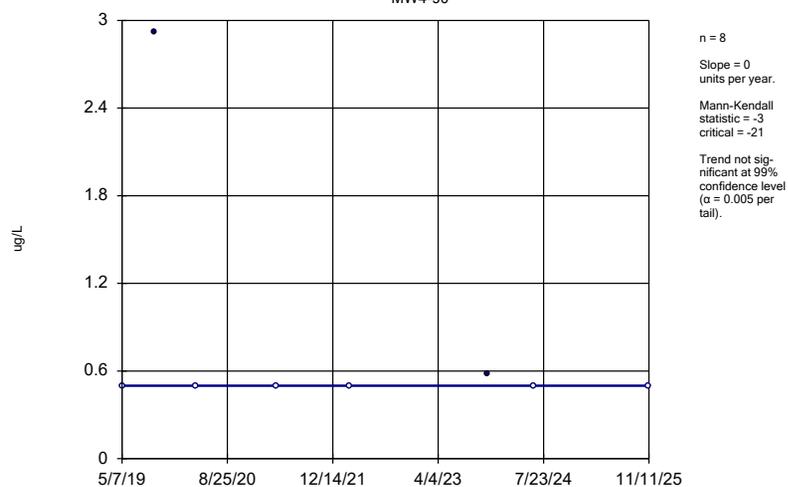
MW2-93



Constituent: Chlorobenzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

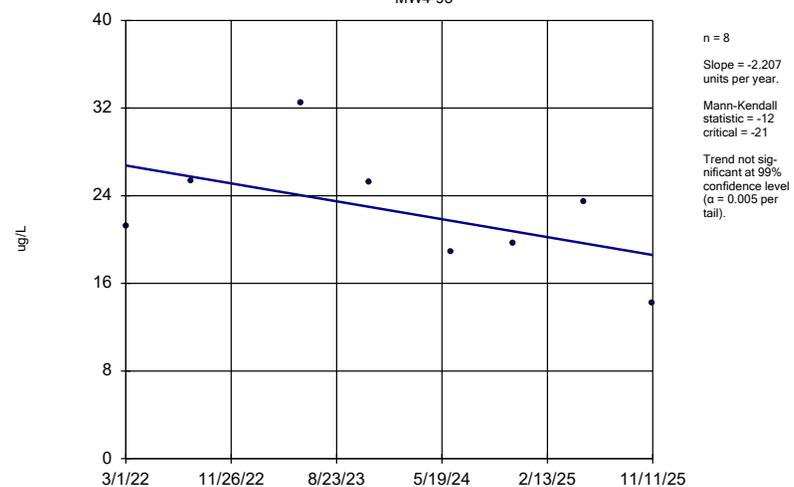
MW4-90



Constituent: Chlorobenzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

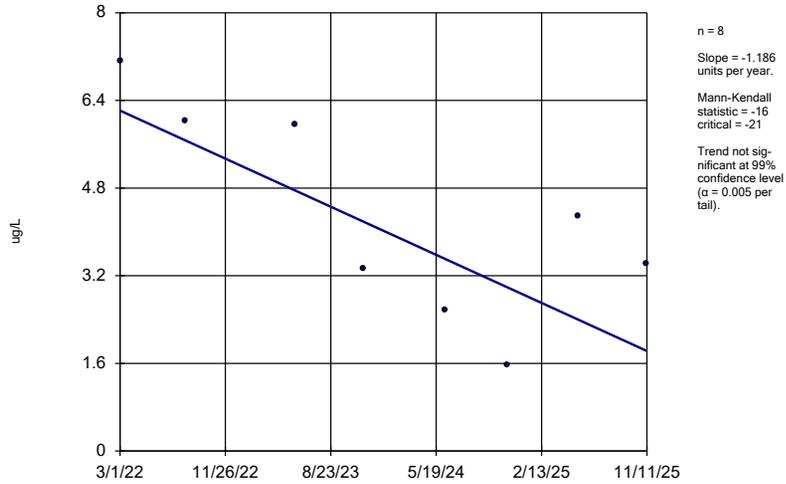
MW4-93



Constituent: Chlorobenzene Analysis Run 12/16/2025 8:34 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

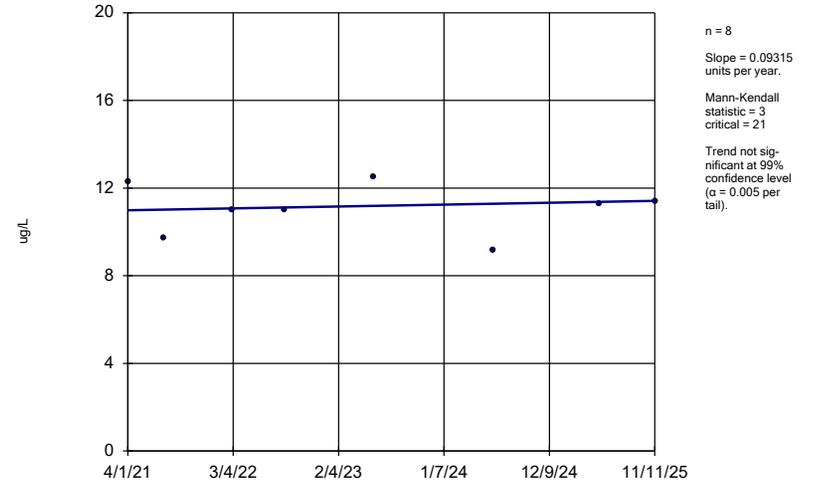
MW-37



Constituent: Chlorobenzene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

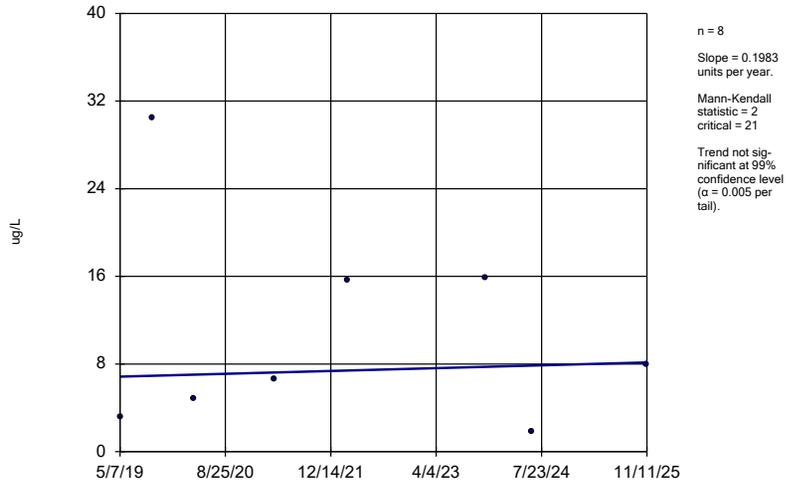
PZ-10



Constituent: Chlorobenzene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

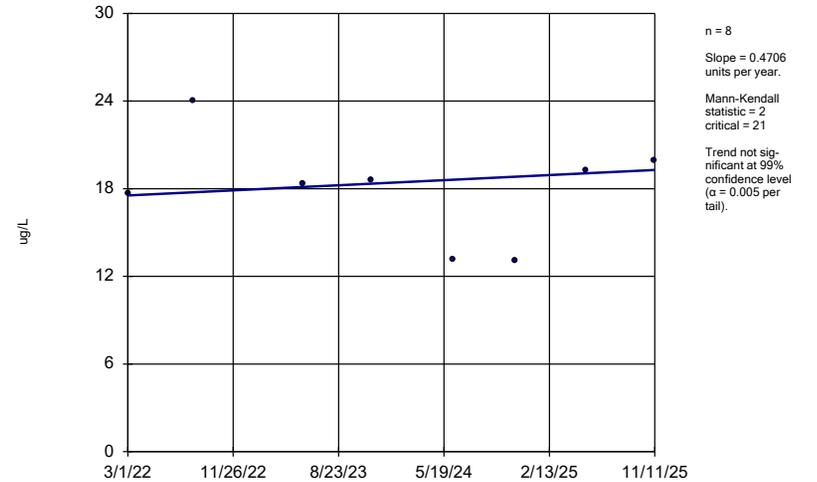
MW4-90



Constituent: Chloroethane Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

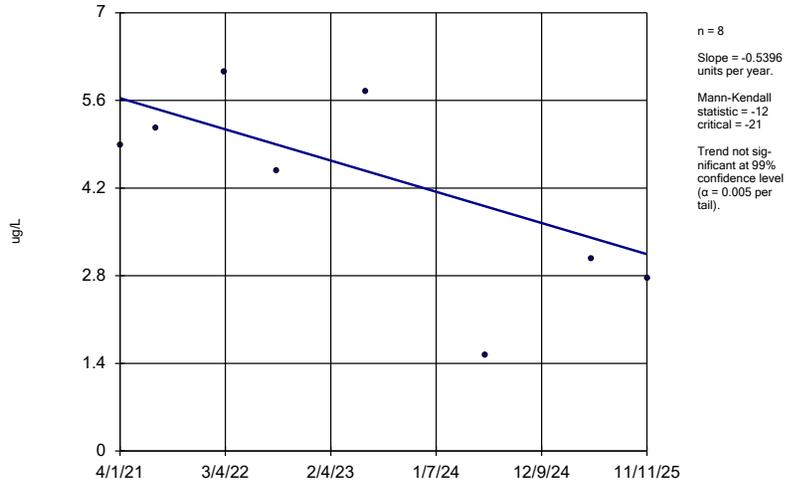
MW-37



Constituent: Chloroethane Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

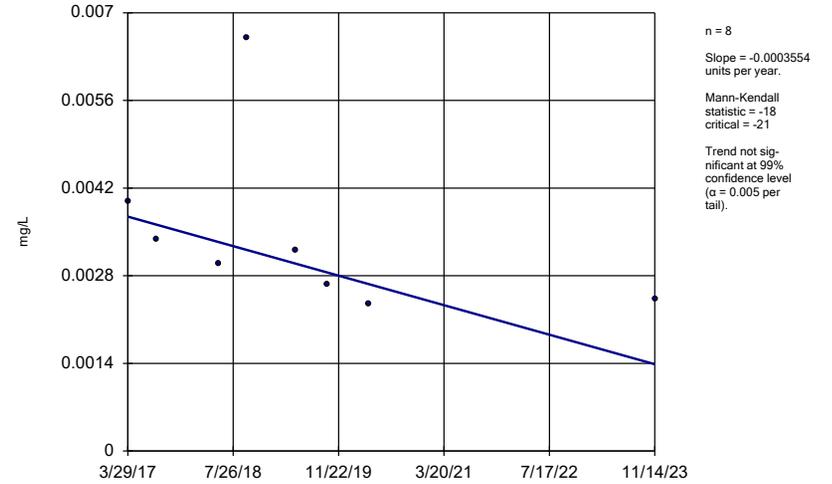
PZ-10



Constituent: Chloroethane Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

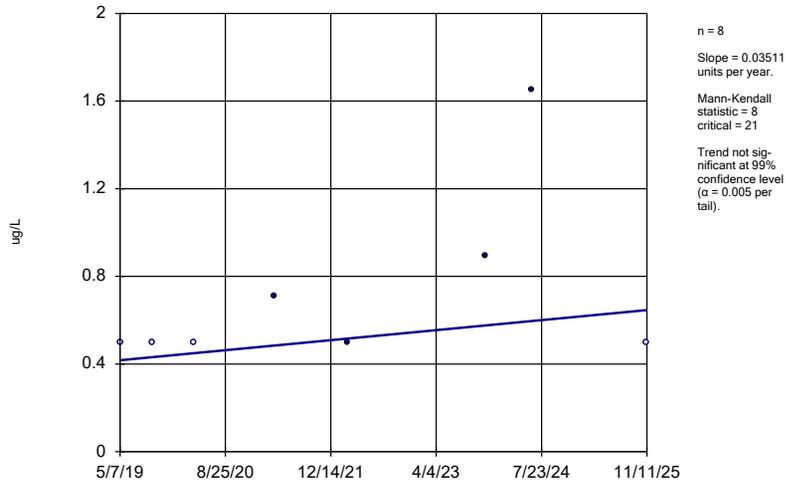
MW-38



Constituent: Chromium Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

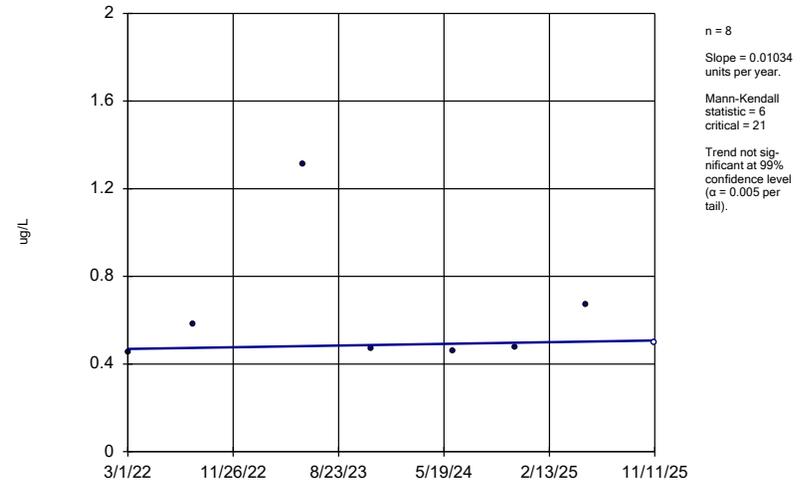
MW2-93



Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

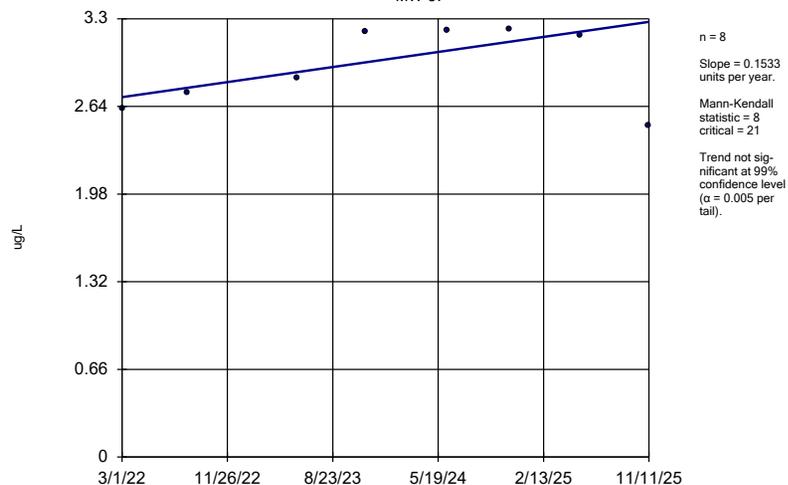
MW4-93



Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

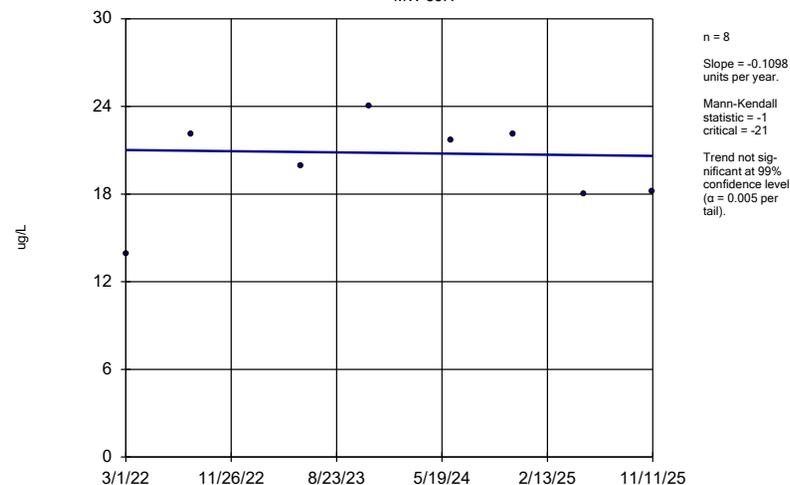
MW-37



Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

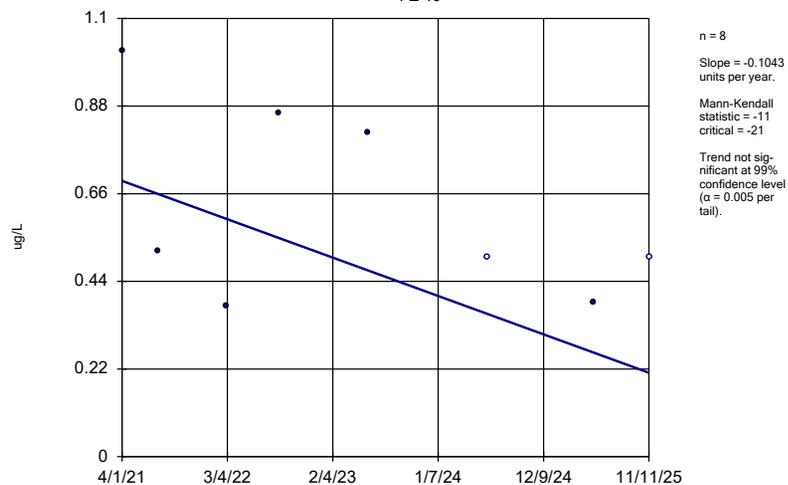
MW-39R



Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

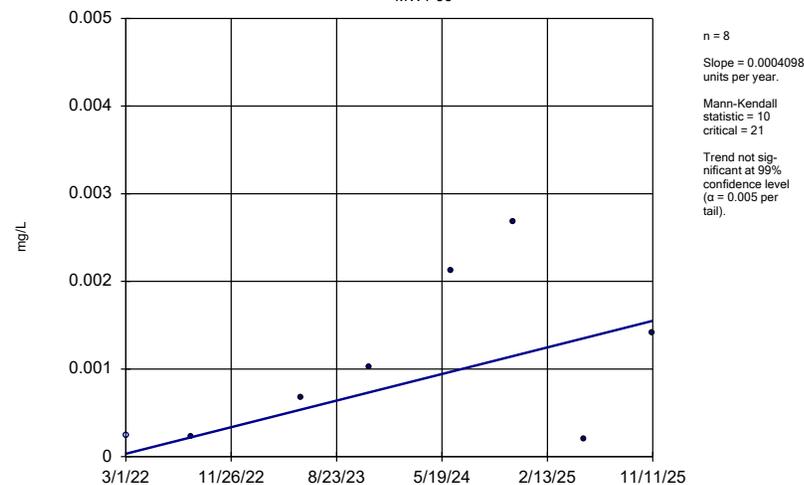
PZ-10



Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

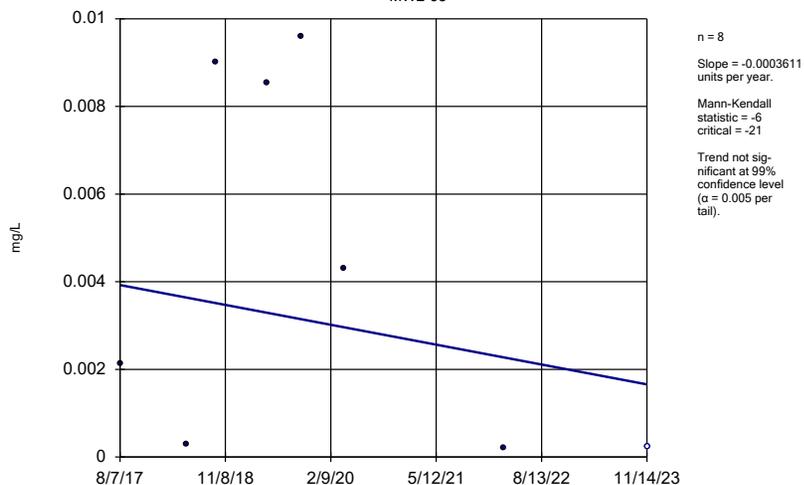
MW1-99



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

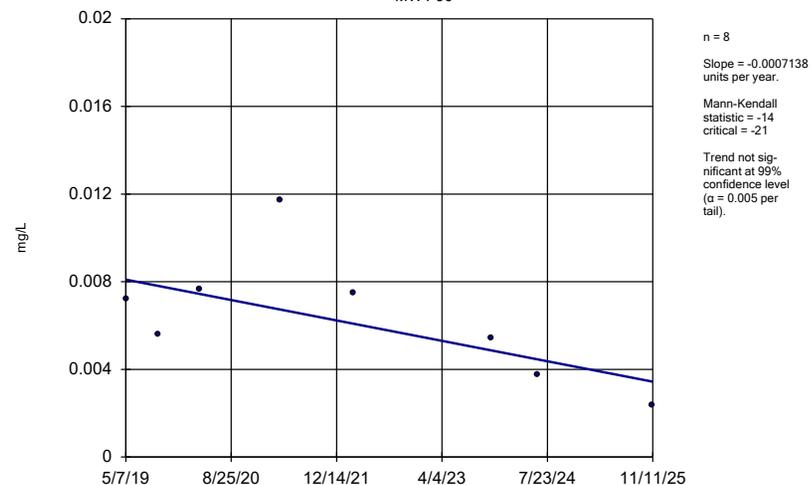
MW2-93



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

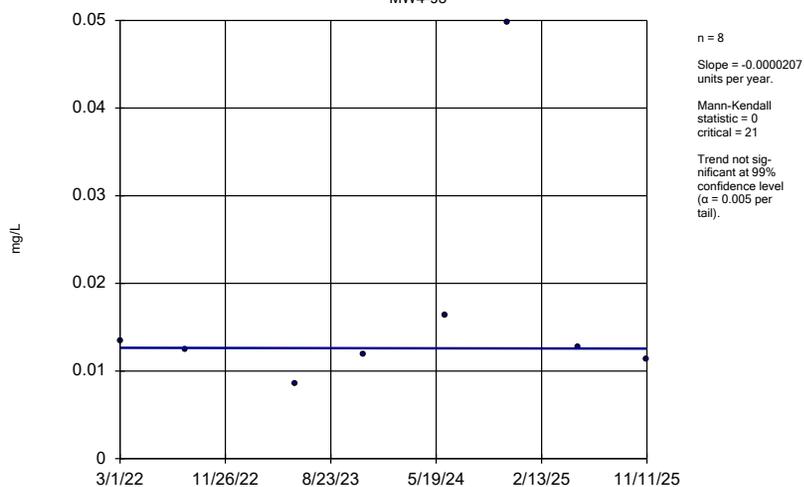
MW4-90



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

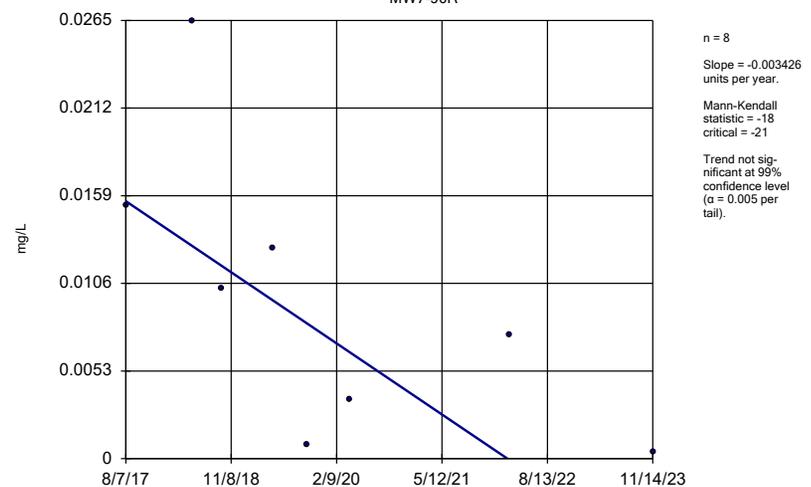
MW4-93



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

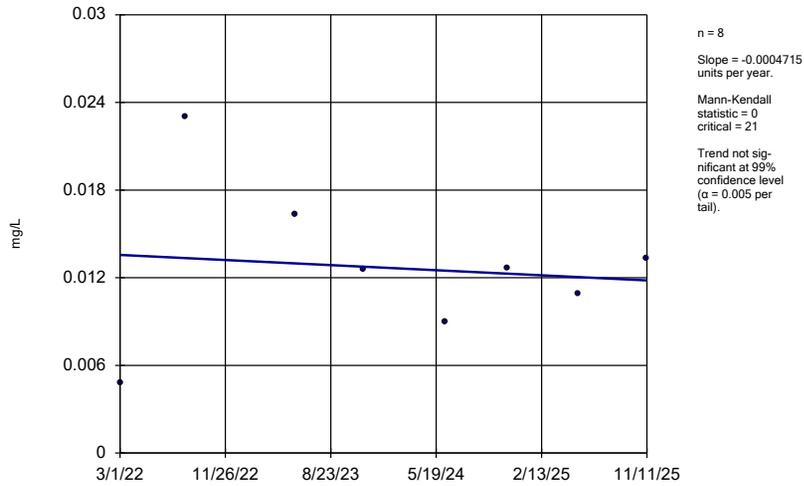
MW7-90R



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

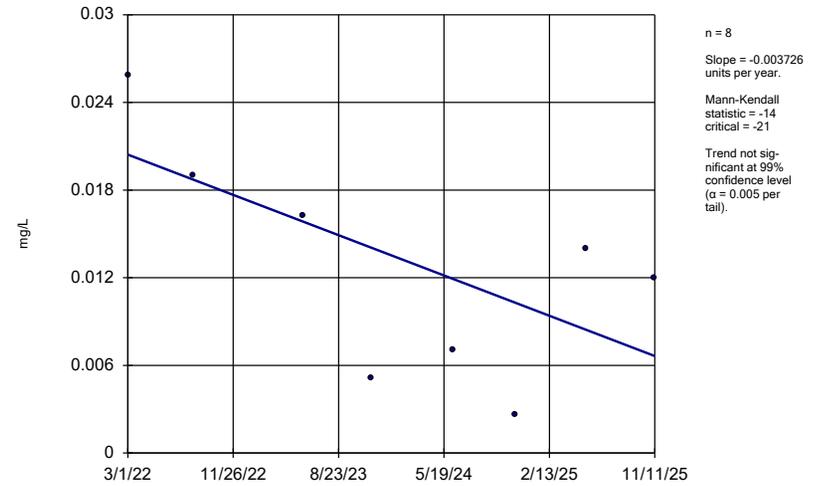
MW7-93



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

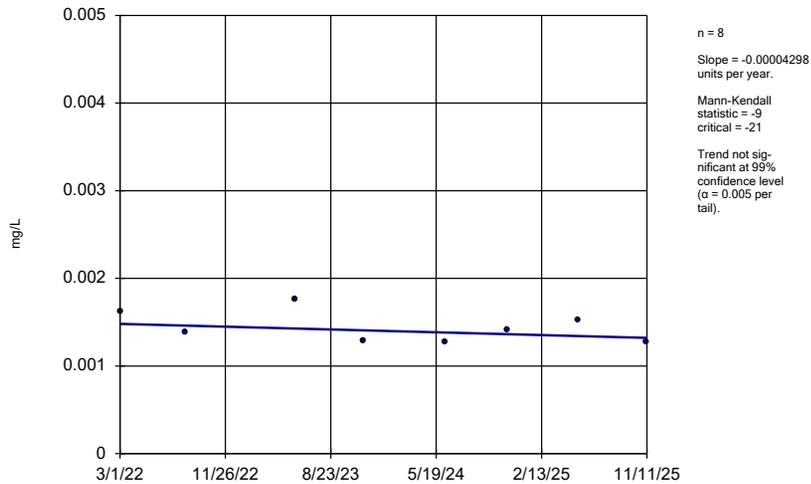
MW-37



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

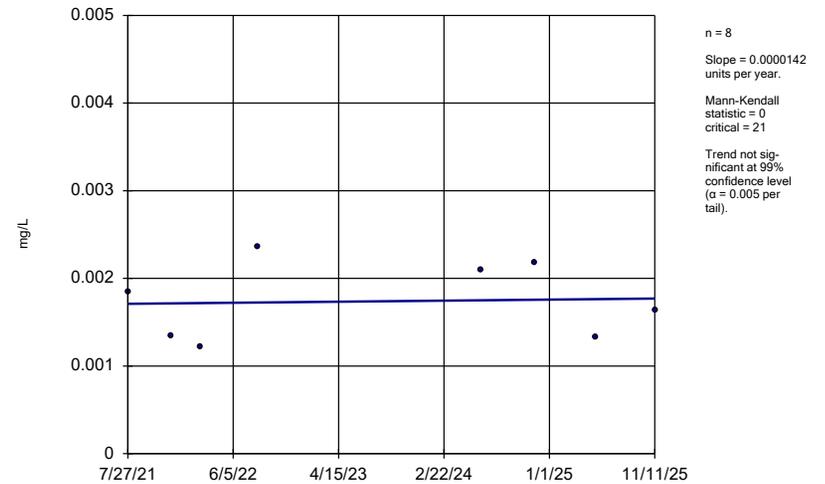
MW-39R



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

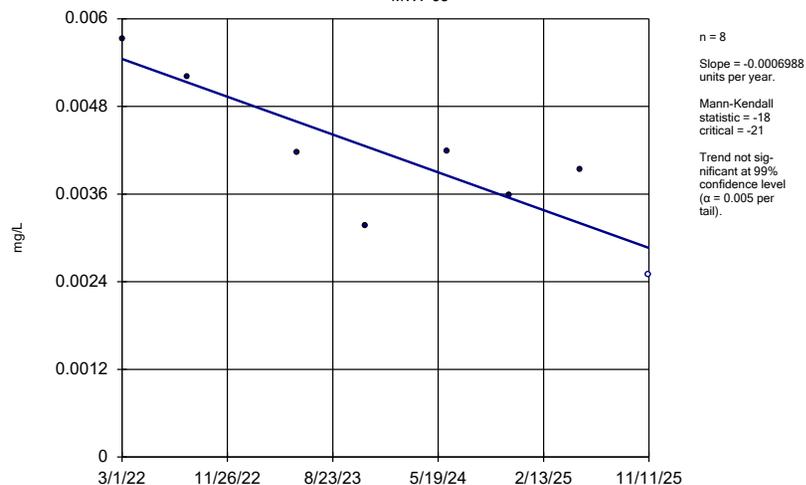
MW-43



Constituent: Cobalt Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

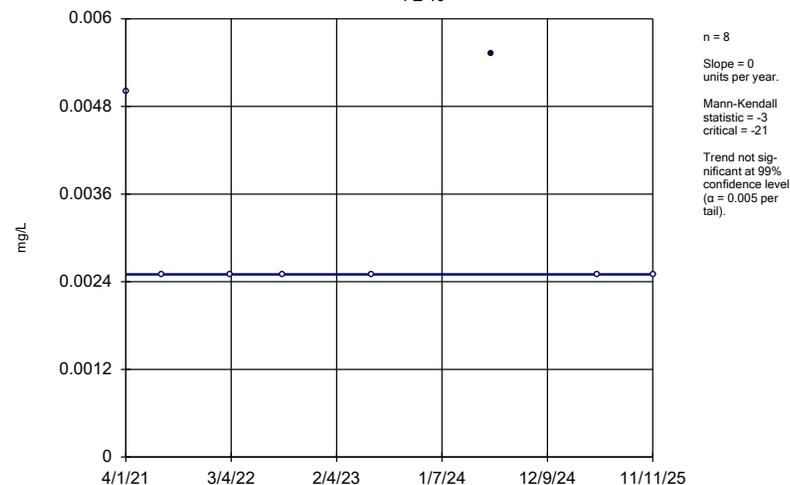
MW7-93



Constituent: Copper Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

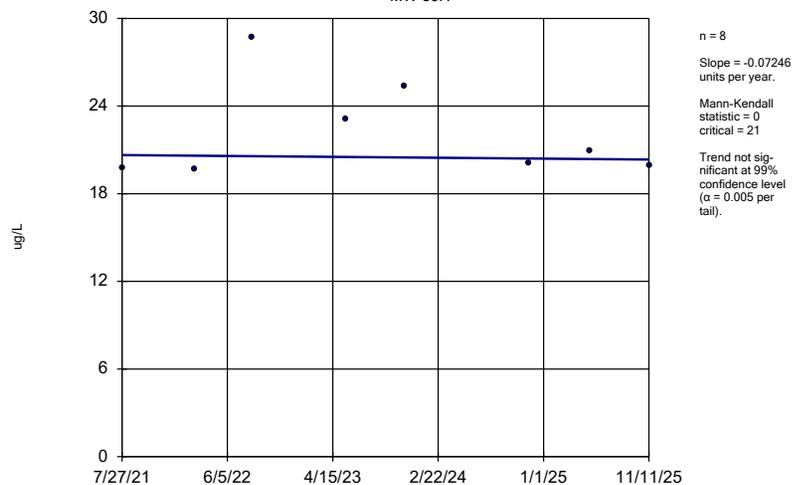
PZ-10



Constituent: Copper Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

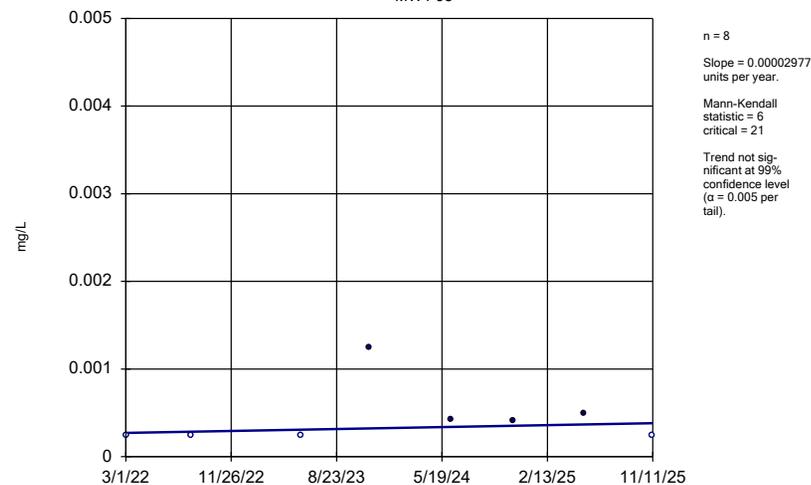
MW-39R



Constituent: Dichlorodifluoromethane Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kend
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

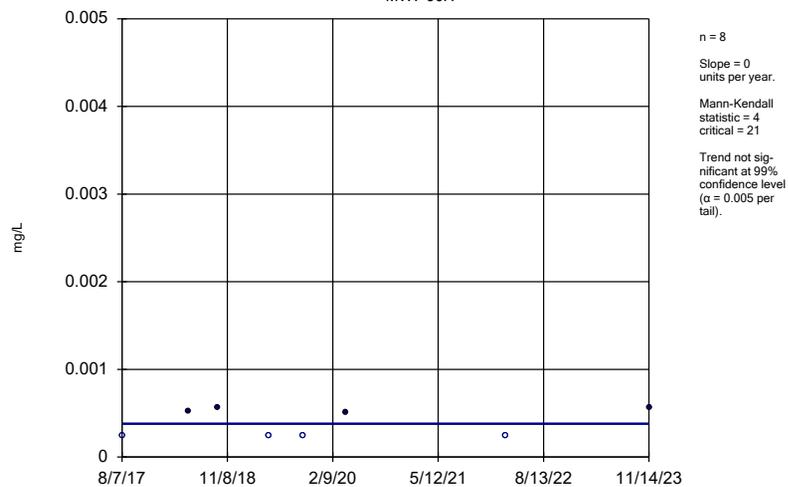
MW4-93



Constituent: Lead Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

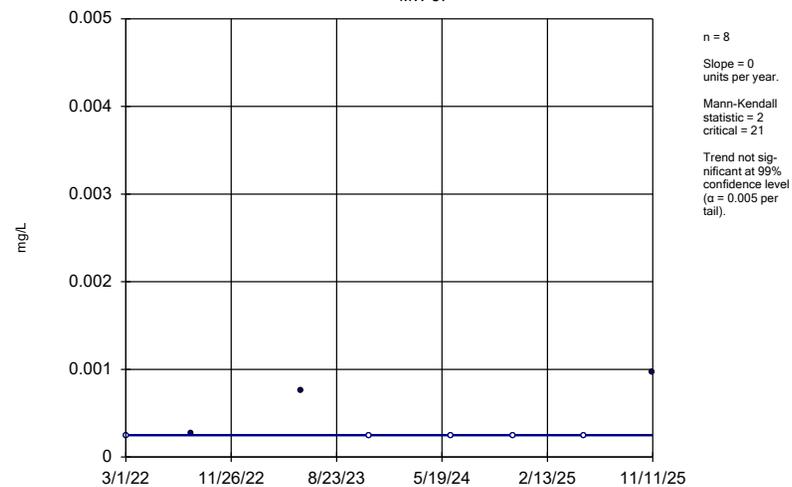
MW7-90R



Constituent: Lead Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

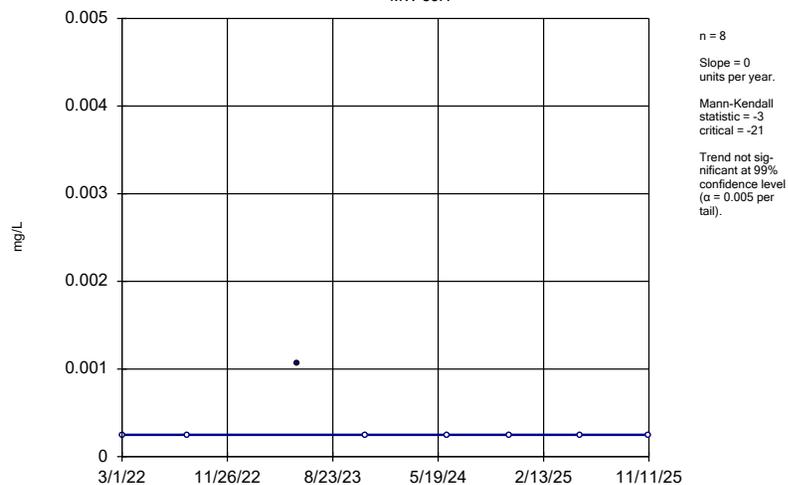
MW-37



Constituent: Lead Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

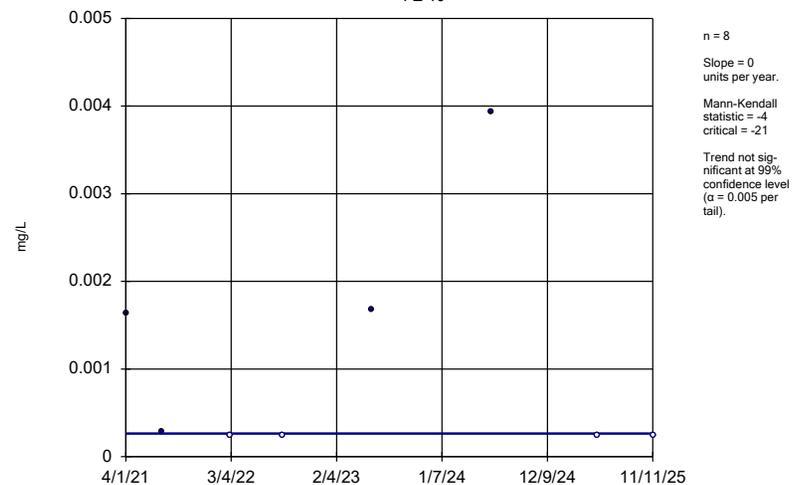
MW-39R



Constituent: Lead Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

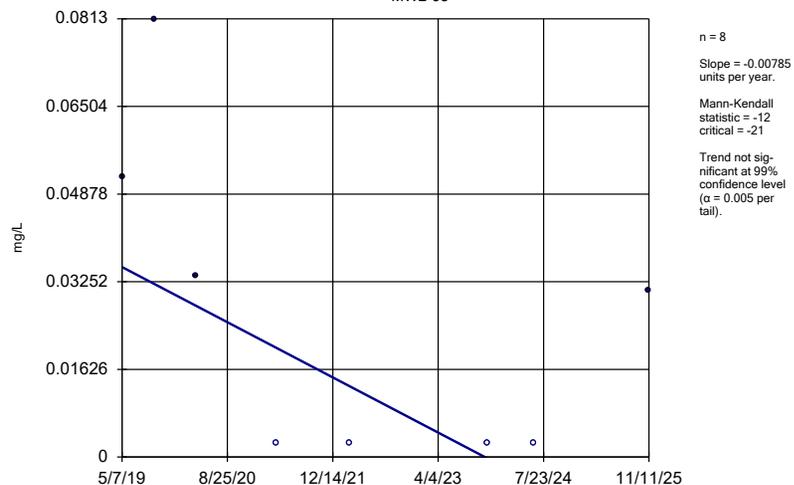
PZ-10



Constituent: Lead Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

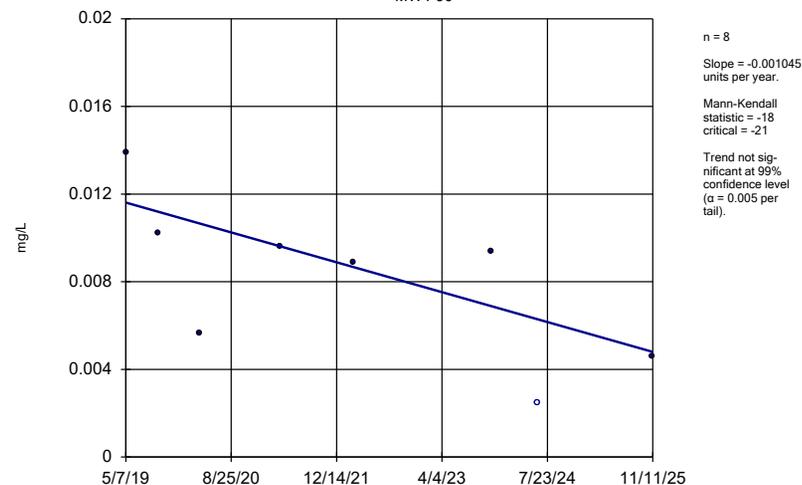
MW2-93



Constituent: Nickel Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

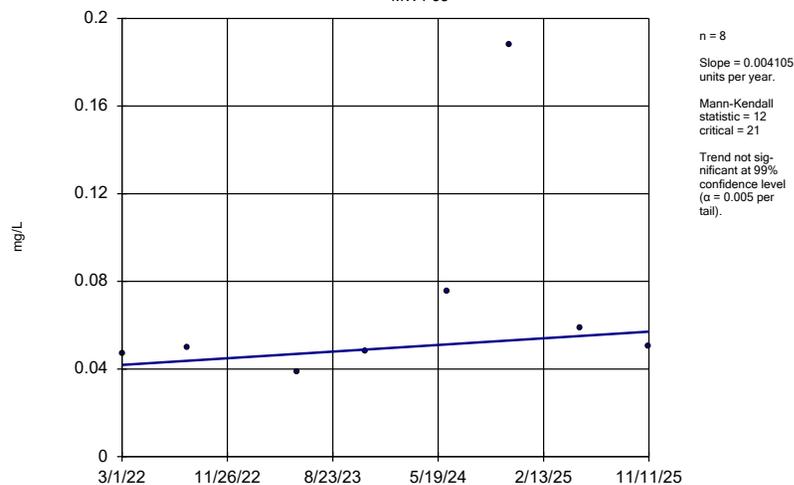
MW4-90



Constituent: Nickel Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

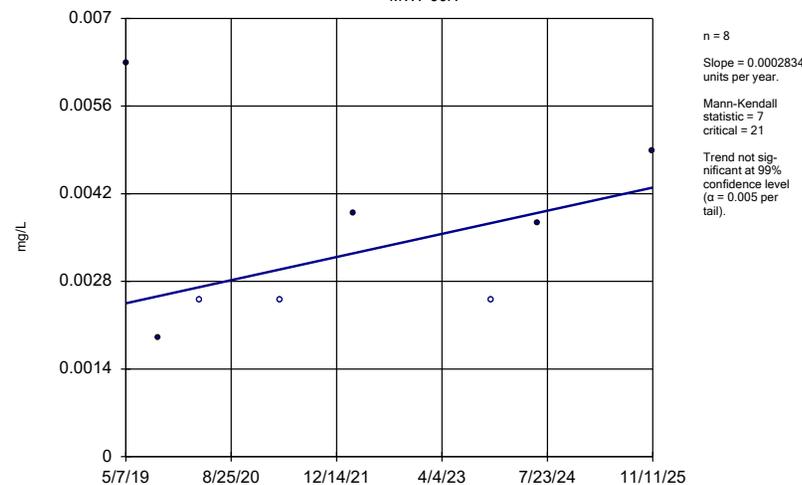
MW4-93



Constituent: Nickel Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

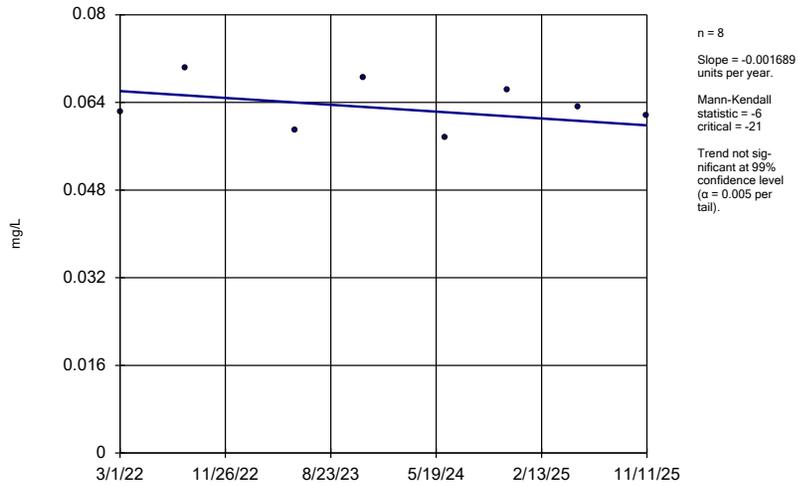
MW7-90R



Constituent: Nickel Analysis Run 12/16/2025 8:35 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

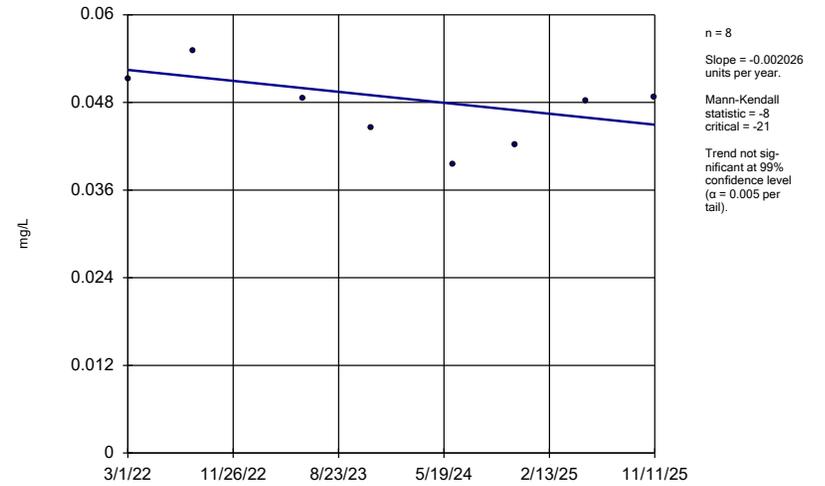
MW7-93



Constituent: Nickel Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

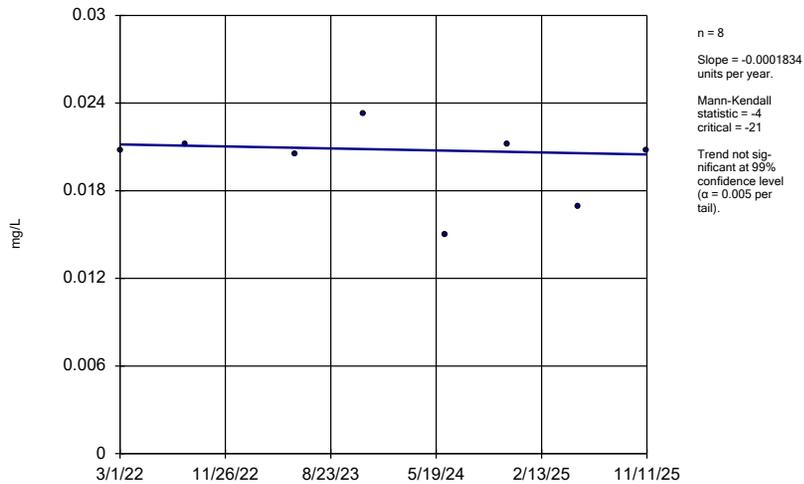
MW-37



Constituent: Nickel Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

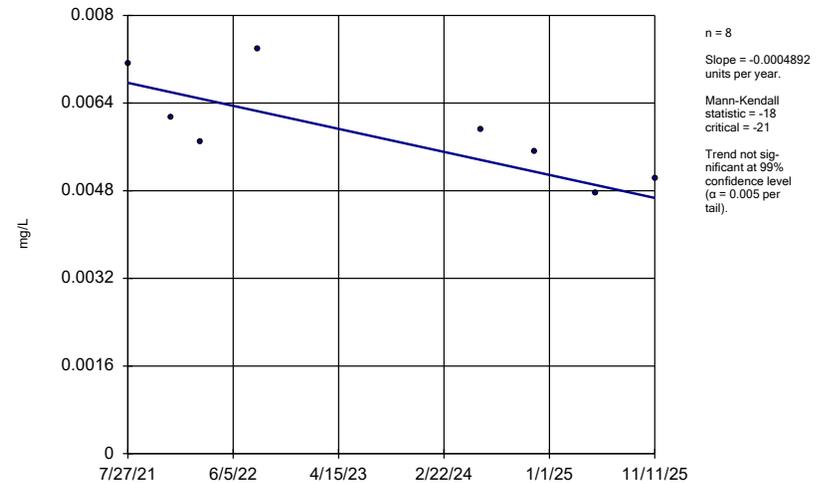
MW-39R



Constituent: Nickel Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

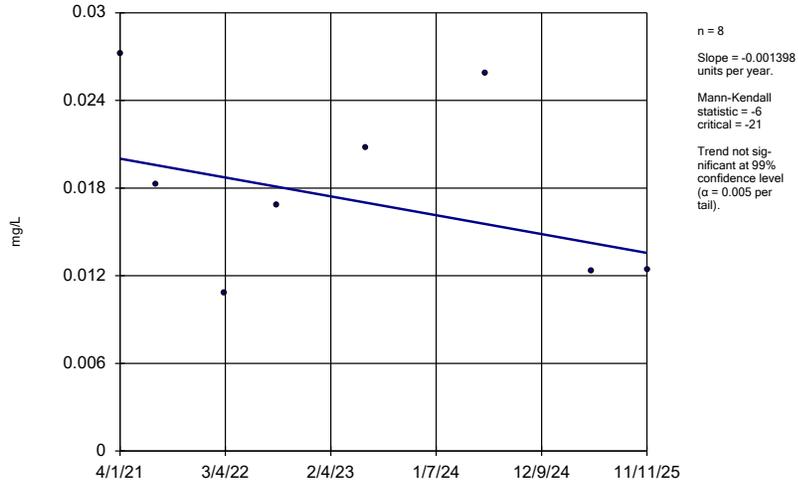
MW-43



Constituent: Nickel Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

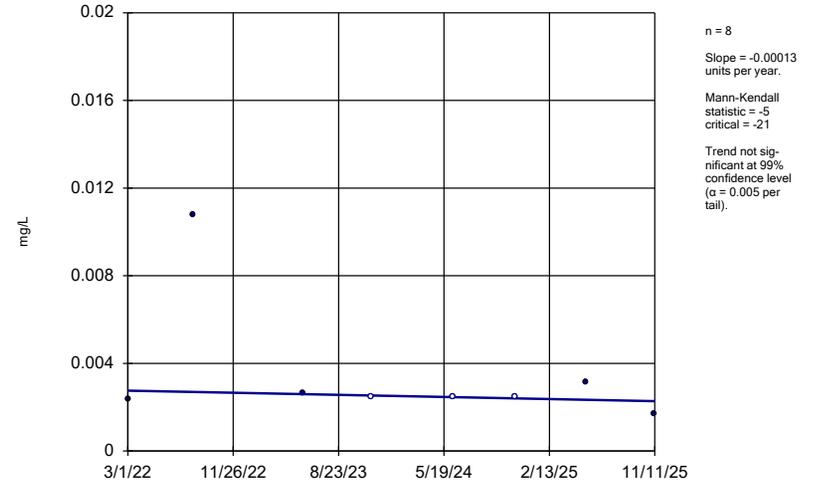
PZ-10



Constituent: Nickel Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

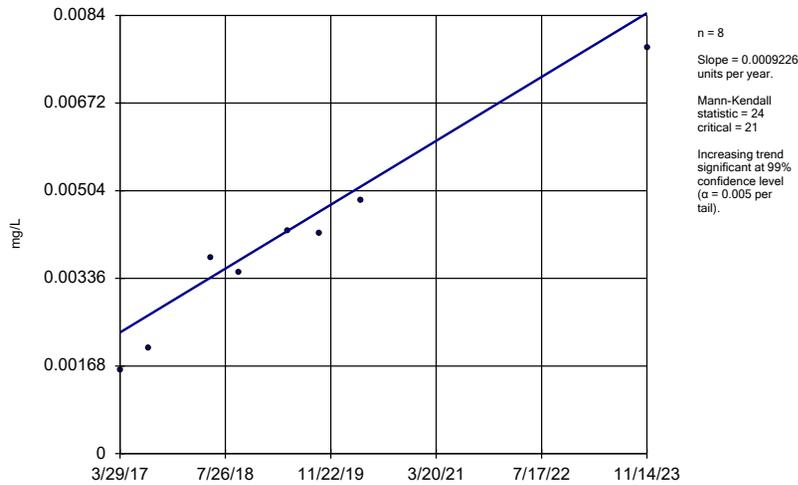
MW1-99



Constituent: Selenium Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

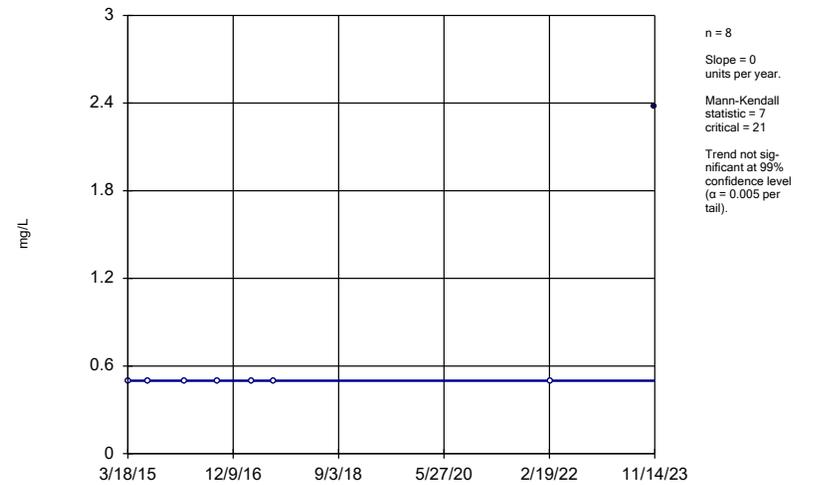
MW-38



Constituent: Selenium Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

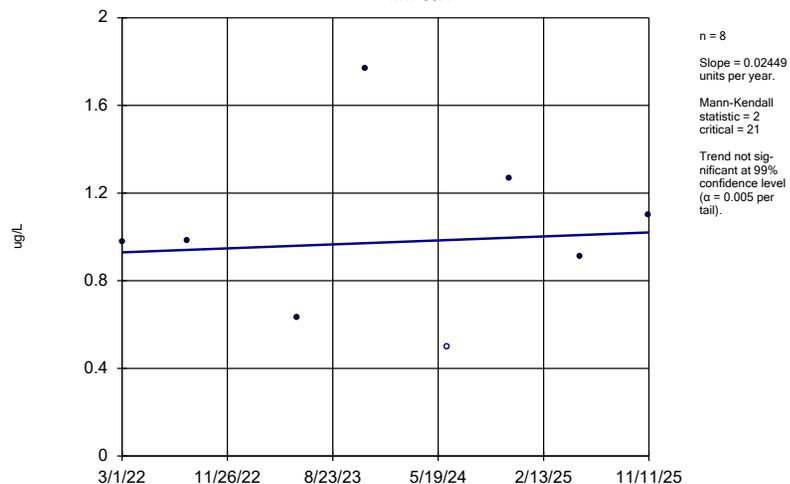
MW7-90R



Constituent: Sulfide Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

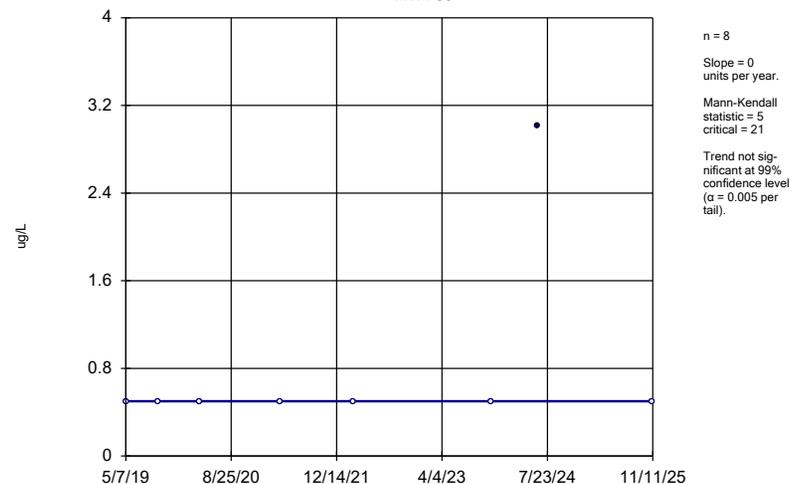
MW-39R



Constituent: Tetrachloroethene Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

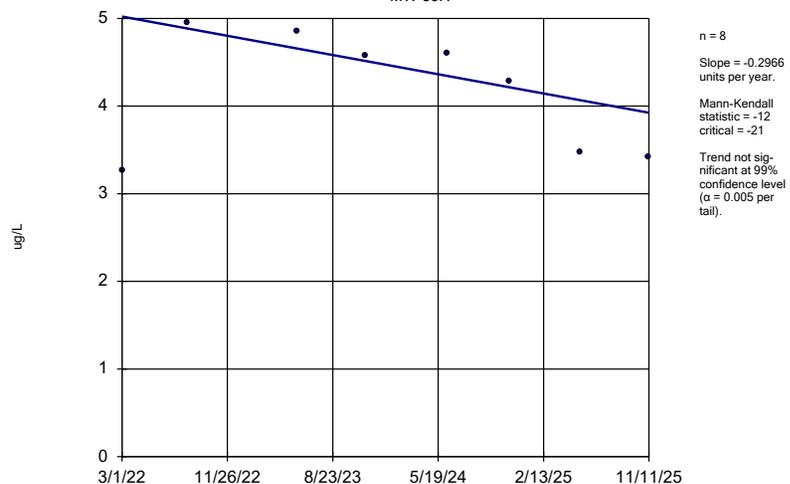
MW4-90



Constituent: Toluene Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

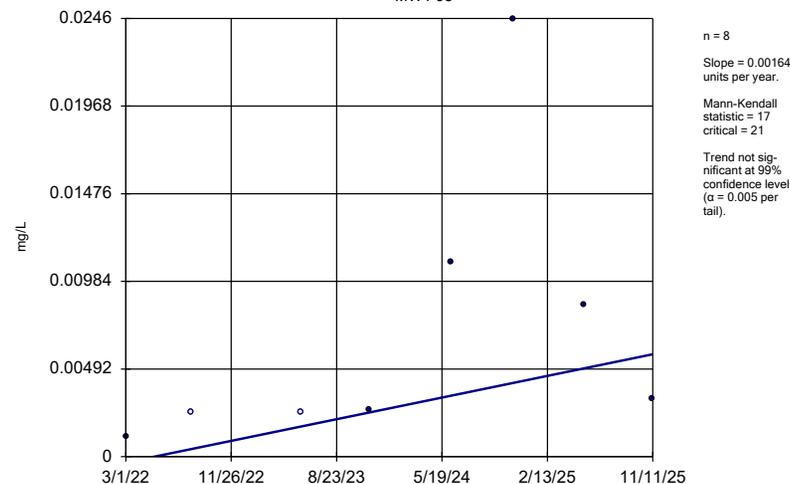
MW-39R



Constituent: Trichloroethene Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

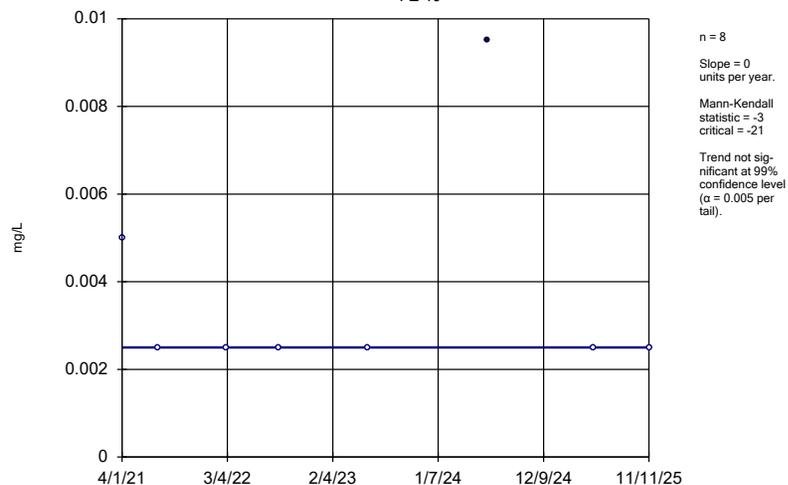
MW4-93



Constituent: Vanadium Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

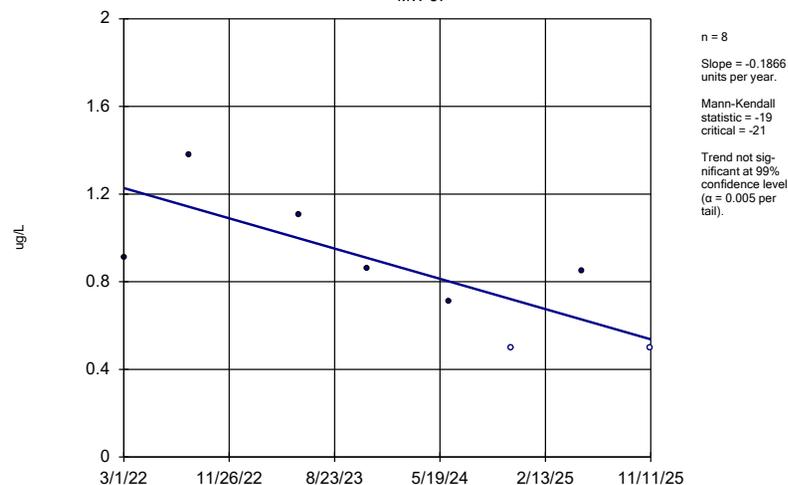
PZ-10



Constituent: Vanadium Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

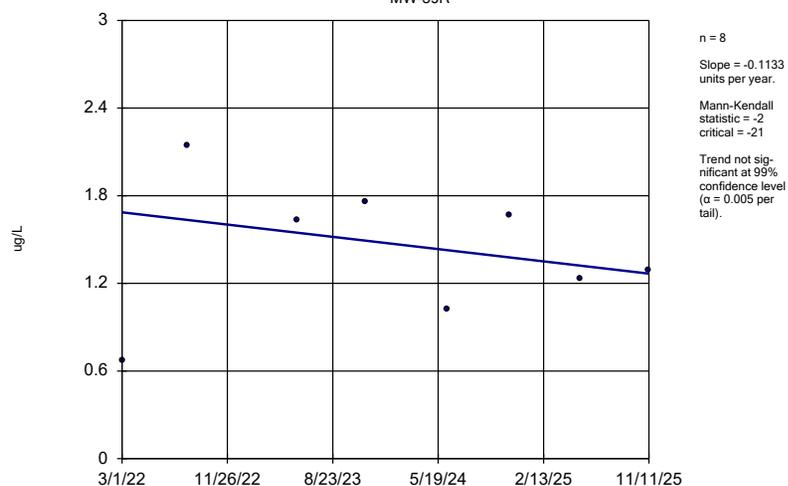
MW-37



Constituent: Vinyl Chloride Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

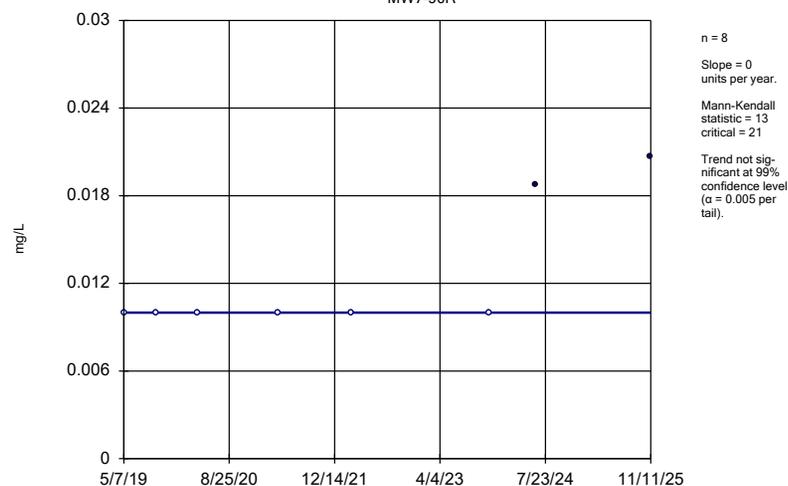
MW-39R



Constituent: Vinyl Chloride Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope Estimator

MW7-90R



Constituent: Zinc Analysis Run 12/16/2025 8:36 AM View: 2025_AWQR-Mann_Kendall
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Confidence Interval Table and Graphs

Confidence Interval

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/16/2025, 8:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
1,1,1-Trichloroethane (ug/L)	MW1-99	3.07	0.5	200	No	8	87.5	No	0.004	NP (NDs)
1,1-Dichloroethane (ug/L)	MW2-93	4.704	0.501	140	No	8	50	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW4-93	3.08	1.1	140	No	8	0	No	0.004	NP (normality)
1,1-Dichloroethane (ug/L)	MW-37	58.68	39.65	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MW-39R	51.45	37.82	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	PZ-10	1.308	0.6498	140	No	8	12.5	No	0.01	Param.
1,1-Dichloroethene (ug/L)	MW1-99	6.23	1	7	No	8	87.5	No	0.004	NP (NDs)
1,1-Dichloroethene (ug/L)	MW2-93	3.13	1	7	No	8	75	No	0.004	NP (NDs)
1,1-Dichloroethene (ug/L)	MW-37	4.982	2.193	7	No	8	0	No	0.01	Param.
1,2-Dichloroethane (ug/L)	MW1-99	1.11	0.5	5	No	8	87.5	No	0.004	NP (NDs)
1,2-Dichloropropane (ug/L)	MW1-99	1.76	0.5	5	No	8	87.5	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/L)	MW2-93	2.02	0.5	75	No	8	75	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/L)	MW4-90	1.39	0.253	75	No	8	62.5	No	0.004	NP (NDs)
1,4-Dichlorobenzene (ug/L)	MW4-93	2.37	1.277	75	No	8	0	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW7-90R	1.463	0.4893	75	No	8	37.5	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	PZ-10	9.266	5.694	75	No	8	0	No	0.01	Param.
2,4,5-TP [Silvex] [2C] (ug/L)	MW-39R	0.585	0.2	50	No	6	83.33	No	0.0155	NP (NDs)
Acetone (ug/L)	MW-43	11.35	4.065	6300	No	8	37.5	No	0.004	NP (normality)
alpha-BHC (ug/L)	MW-39R	0.07955	0.02207	0.028	No	8	50	No	0.01	Param.
Antimony (mg/L)	MW4-93	0.002035	0	0.006	No	8	50	No	0.01	Param.
Arsenic (mg/L)	MW2-93	0.002777	0.001154	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW4-90	0.004988	0.0008218	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	MW4-93	0.004521	0.0002767	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW7-90R	0.05925	0.002677	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-37	0.006232	0.001174	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-43	0.007871	0.004137	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	PZ-10	0.04123	0.0005282	0.01	No	8	0	No	0.01	Param.
Barium (mg/L)	MW1-99	0.05429	0.02219	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW2-93	0.2283	0.07466	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW4-90	0.2093	0.1071	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW4-93	0.03808	0.02419	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW7-93	0.1098	0.06984	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-37	0.02014	0.01806	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-38	0.4171	0.3592	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-39R	0.2346	0.1889	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-43	0.6445	0.5364	2	No	8	0	No	0.01	Param.
Barium (mg/L)	PZ-10	0.3702	0.2745	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW4-90	0.57	0.25	5	No	8	87.5	No	0.004	NP (NDs)
Benzene (ug/L)	MW4-93	0.4537	0.2841	5	No	8	25	No	0.01	Param.
Benzene (ug/L)	MW7-90R	1.334	0.2319	5	No	8	37.5	No	0.01	Param.
Benzene (ug/L)	MW-37	0.8023	0.4787	5	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-39R	1.252	0.386	5	No	8	12.5	No	0.01	Param.
Benzene (ug/L)	PZ-10	4.388	1.522	5	No	8	0	No	0.01	Param.
Beryllium (mg/L)	MW4-93	0.00161	0.0005	0.004	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	MW2-93	0.0003015	0.00006864	0.005	No	8	50	No	0.01	Param.
Cadmium (mg/L)	MW4-93	0.0004631	0	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW7-93	0.0003076	0.0001104	0.005	No	8	12.5	No	0.01	Param.
Cadmium (mg/L)	PZ-10	0.00025	0.00005	0.005	No	8	87.5	No	0.004	NP (NDs)
Chlorobenzene (ug/L)	MW2-93	19.2	0.5	100	No	8	50	No	0.004	NP (normality)
Chlorobenzene (ug/L)	MW4-90	2.92	0.5	100	No	8	75	No	0.004	NP (NDs)

Confidence Interval

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/16/2025, 8:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chlorobenzene (ug/L)	MW4-93	28.35	16.8	100	No	8	0	No	0.01	Param.
Chlorobenzene (ug/L)	MW-37	6.322	2.253	100	No	8	0	No	0.01	Param.
Chlorobenzene (ug/L)	PZ-10	12.26	9.827	100	No	8	0	No	0.01	Param.
Chloroethane (ug/L)	MW4-90	20.94	0.7221	2800	No	8	0	No	0.01	Param.
Chloroethane (ug/L)	MW-37	21.8	14.24	2800	No	8	0	No	0.01	Param.
Chloroethane (ug/L)	PZ-10	5.901	2.519	2800	No	8	0	No	0.01	Param.
Chromium (mg/L)	MW-38	0.004921	0.001987	0.1	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW2-93	1.65	0.497	70	No	8	50	No	0.004	NP (normality)
cis-1,2-Dichloroethene (ug/L)	MW4-93	1.31	0.453	70	No	8	12.5	No	0.004	NP (normality)
cis-1,2-Dichloroethene (ug/L)	MW-37	3.255	2.625	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-39R	23.39	16.58	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	PZ-10	0.9004	0.3906	70	No	8	25	No	0.01	Param.
Cobalt (mg/L)	MW1-99	0.002067	0.000084	0.004646	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW2-93	0.008723	0	0.004646	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW4-90	0.009415	0.003388	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW4-93	0.0498	0.00852	0.004646	Yes	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	MW7-90R	0.01886	0.0004254	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW7-93	0.01846	0.007187	0.004646	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-37	0.02095	0.004561	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-39R	0.00163	0.001255	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-43	0.002208	0.001292	0.004646	No	8	0	No	0.01	Param.
Cobalt (mg/L)	PZ-10	0.03703	0.01162	0.004646	Yes	8	0	No	0.01	Param.
Copper (mg/L)	MW2-93	0.0117	0.00237	1.3	No	8	62.5	No	0.004	NP (NDs)
Copper (mg/L)	MW4-93	0.0131	0.0025	1.3	No	8	62.5	No	0.004	NP (NDs)
Copper (mg/L)	MW7-90R	0.0025	0.00203	1.3	No	8	75	No	0.004	NP (NDs)
Copper (mg/L)	MW7-93	0.005163	0.002956	1.3	No	8	12.5	No	0.01	Param.
Copper (mg/L)	PZ-10	0.00553	0.0025	1.3	No	8	87.5	No	0.004	NP (NDs)
Dichlorodifluoromethane (ug/L)	MW-39R	25.71	18.69	1000	No	8	0	No	0.01	Param.
Lead (mg/L)	MW4-93	0.00124	0.00025	0.015	No	8	50	No	0.004	NP (normality)
Lead (mg/L)	MW7-90R	0.000568	0.00025	0.015	No	8	50	No	0.004	NP (normality)
Lead (mg/L)	MW-37	0.00097	0.00025	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-39R	0.00106	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	PZ-10	0.00394	0.00025	0.015	No	8	50	No	0.004	NP (normality)
Nickel (mg/L)	MW2-93	0.0552	0	0.1	No	8	50	No	0.01	Param.
Nickel (mg/L)	MW4-90	0.01195	0.004252	0.1	No	8	12.5	No	0.01	Param.
Nickel (mg/L)	MW4-93	0.188	0.0386	0.1	No	8	0	No	0.004	NP (normality)
Nickel (mg/L)	MW7-90R	0.005364	0.002516	0.1	No	8	37.5	No	0.01	Param.
Nickel (mg/L)	MW7-93	0.06836	0.05881	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-37	0.05257	0.04196	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-39R	0.02279	0.01713	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-43	0.006933	0.004964	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	PZ-10	0.02467	0.01145	0.1	No	8	0	No	0.01	Param.
Selenium (mg/L)	MW1-99	0.0108	0.00172	0.05	No	8	37.5	No	0.004	NP (normality)
Sulfide (mg/L)	MW7-90R	2.38	0.5	1	No	8	87.5	No	0.004	NP (NDs)
Tetrachloroethene (ug/L)	MW-39R	1.431	0.604	5	No	8	12.5	No	0.01	Param.
Toluene (ug/L)	MW4-90	3.01	0.5	1000	No	8	87.5	No	0.004	NP (NDs)
Trichloroethene (ug/L)	MW-39R	4.907	3.453	5	No	8	0	No	0.01	Param.
Vanadium (mg/L)	MW4-93	0.0246	0.00116	0.035	No	8	25	No	0.004	NP (normality)
Vanadium (mg/L)	PZ-10	0.0095	0.0025	0.035	No	8	87.5	No	0.004	NP (NDs)
Vinyl Chloride (ug/L)	MW-37	1.148	0.7231	2	No	8	25	No	0.01	Param.

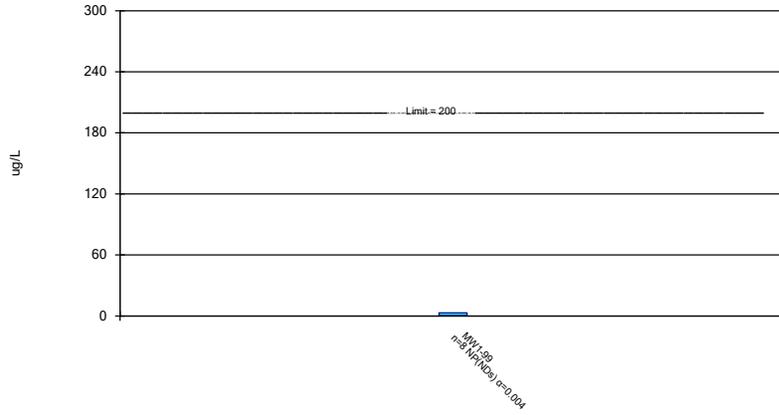
Confidence Interval

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/16/2025, 8:55 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Vinyl Chloride (ug/L)	MW-39R	1.919	0.9338	2	No	8	0	No	0.01	Param.
Zinc (mg/L)	MW7-90R	0.0207	0.01	2	No	8	75	No	0.004	NP (NDs)

Non-Parametric Confidence Interval

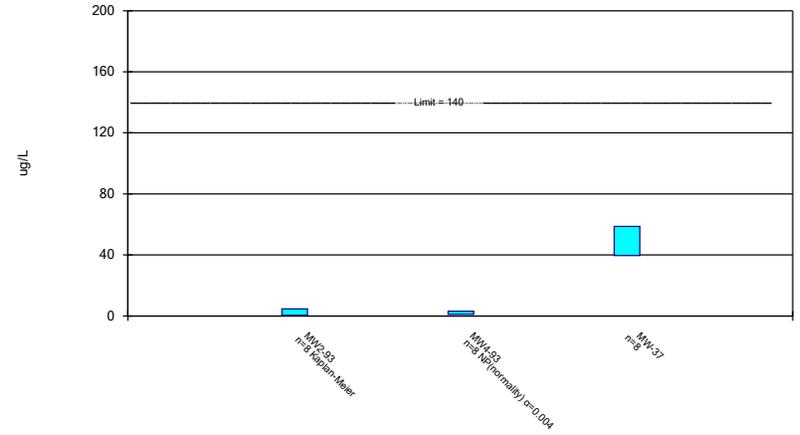
Compliance Limit is not exceeded.



Constituent: 1,1,1-Trichloroethane Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Int
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric and Non-Parametric (NP) Confidence Interval

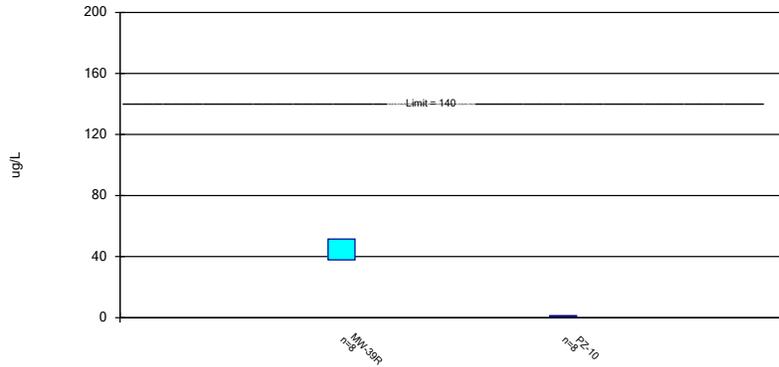
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

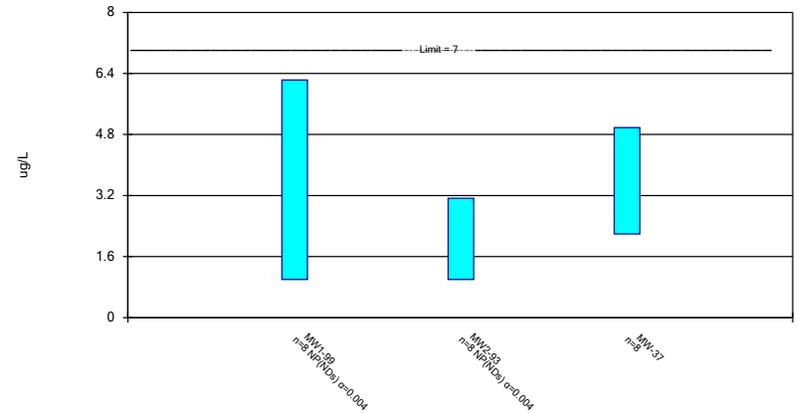
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric and Non-Parametric (NP) Confidence Interval

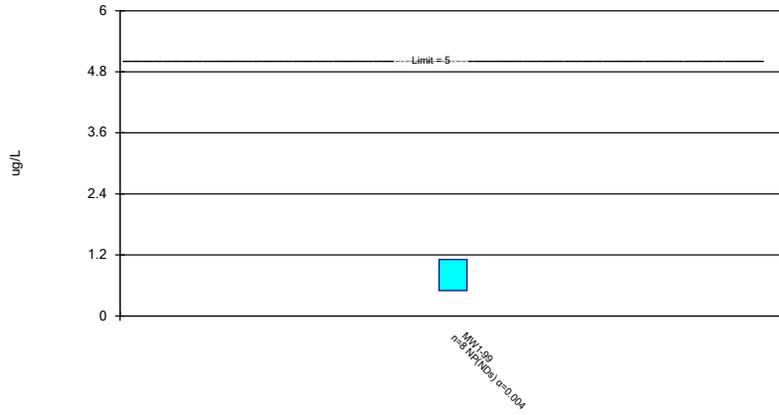
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethene Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

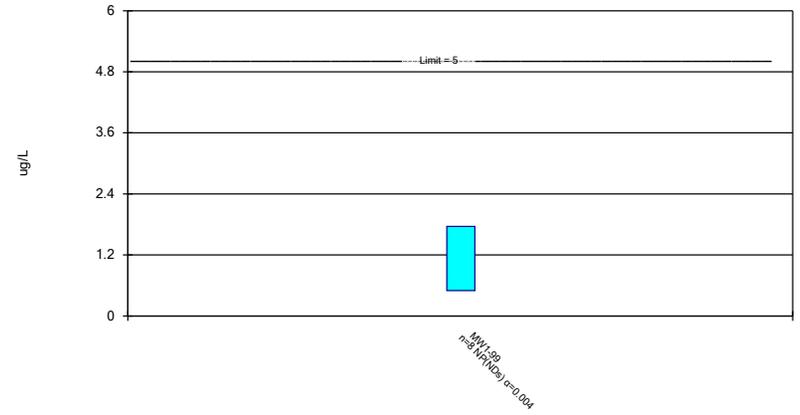
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

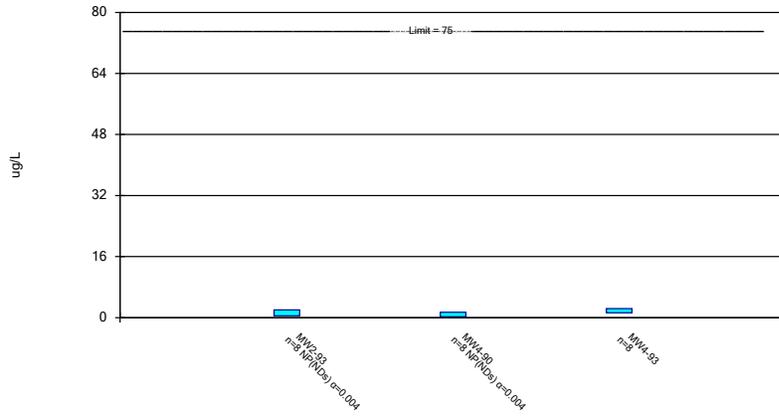


Constituent: 1,2-Dichloroethane Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Constituent: 1,2-Dichloropropane Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

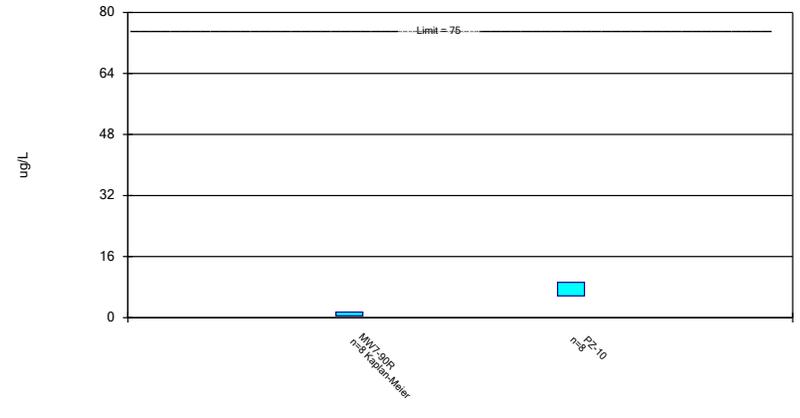
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.

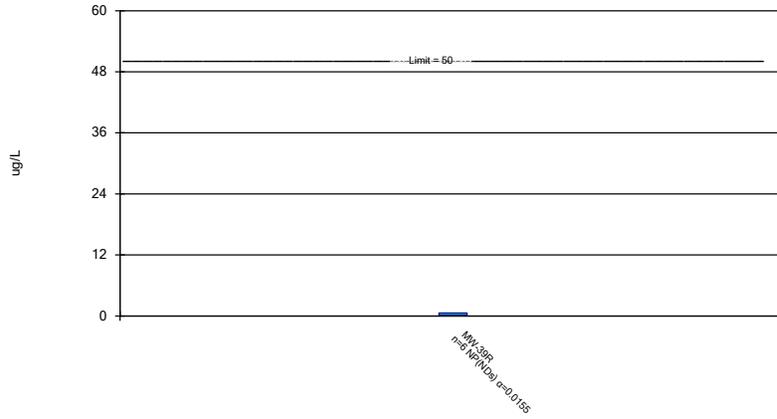


Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

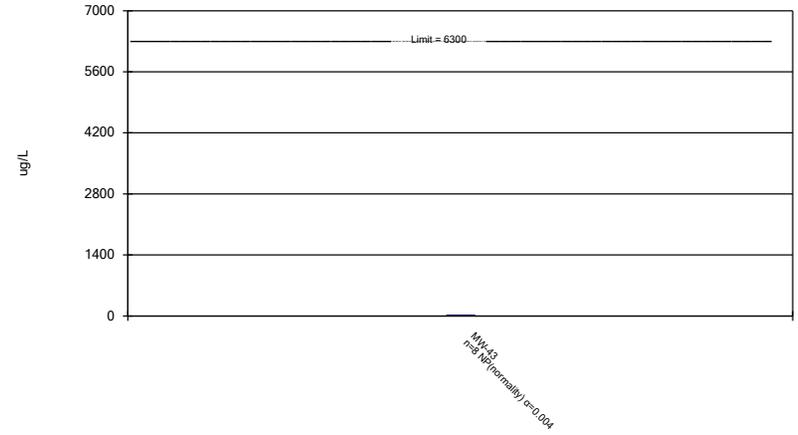
Compliance Limit is not exceeded.



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Inte
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

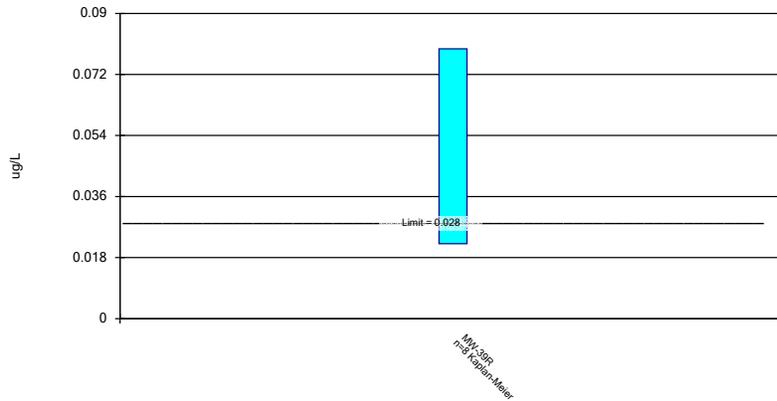
Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

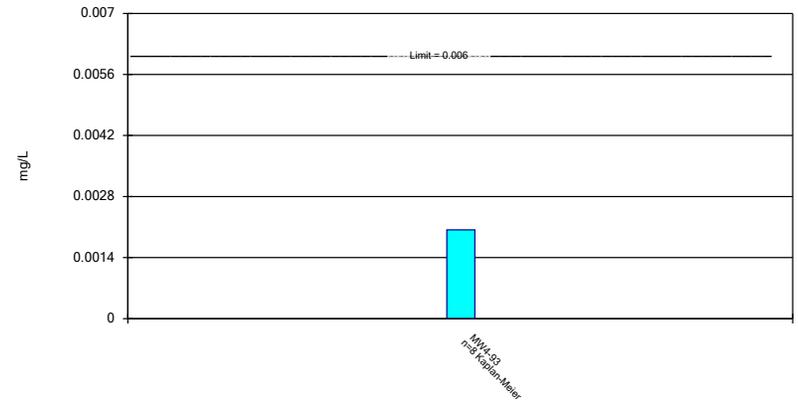
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: alpha-BHC Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

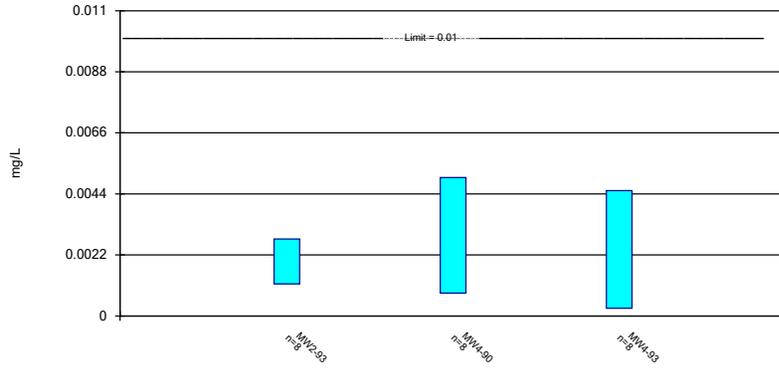
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Antimony Analysis Run 12/16/2025 8:42 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

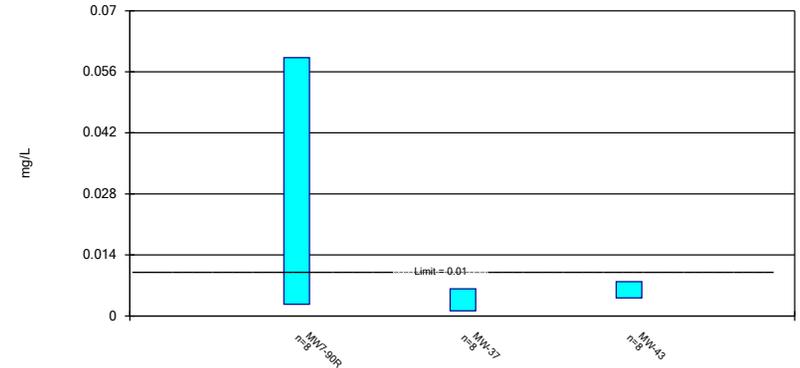
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

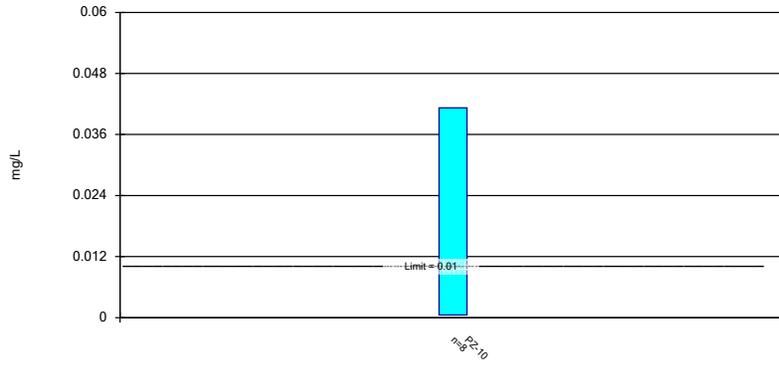
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

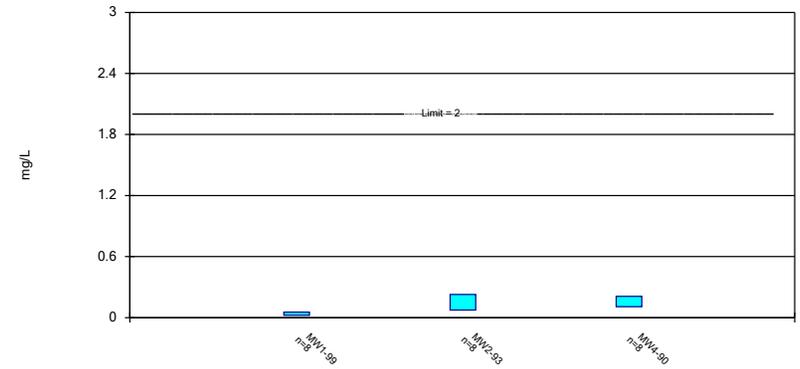
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

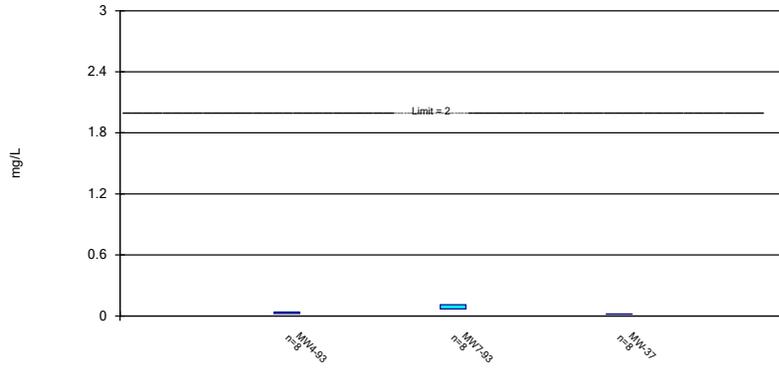
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Constituent: Barium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

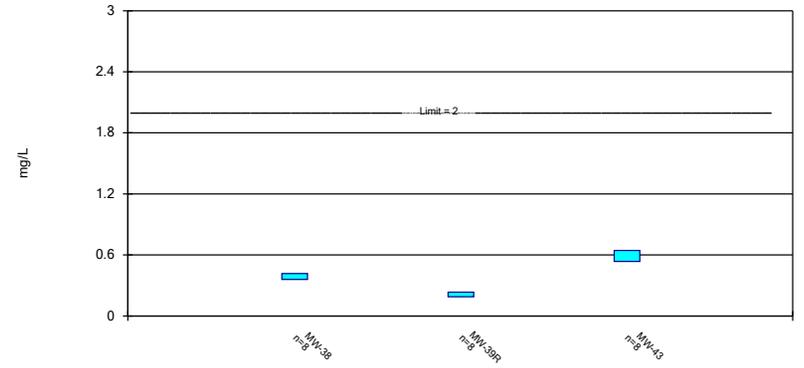
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

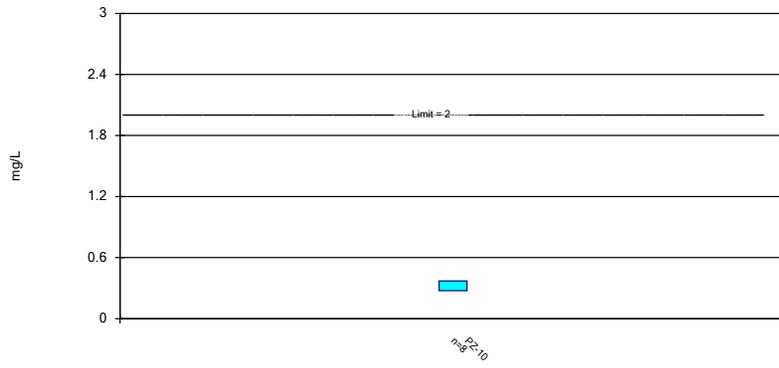
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Constituent: Barium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

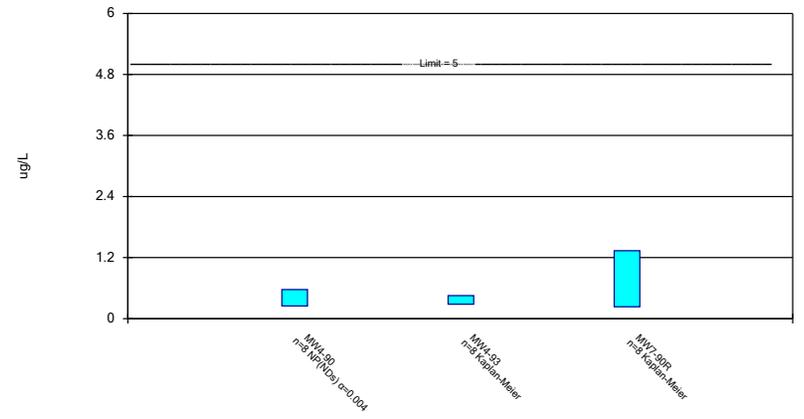
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric and Non-Parametric (NP) Confidence Interval

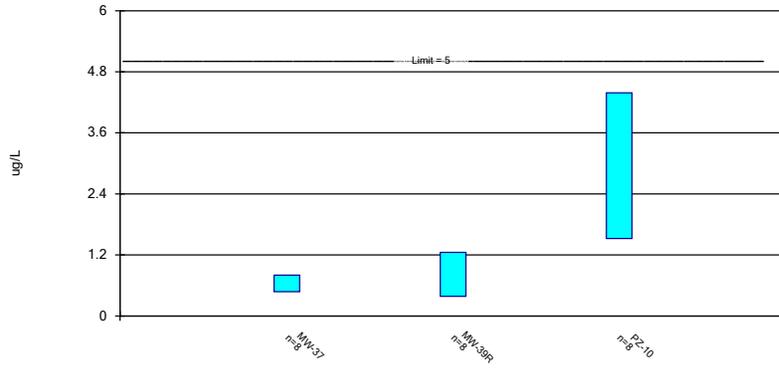
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

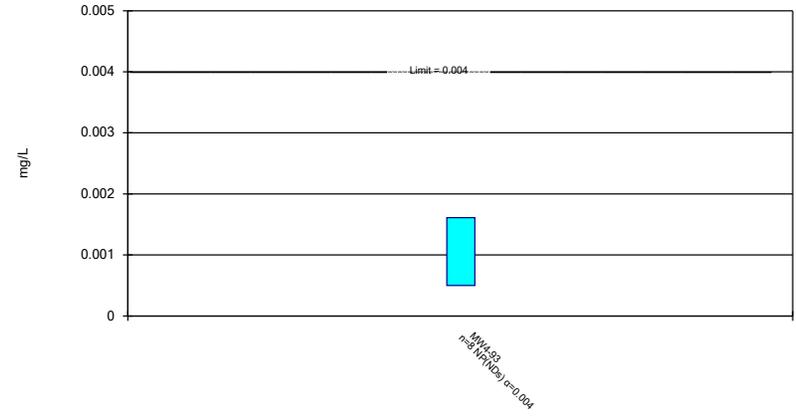
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Constituent: Benzene Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

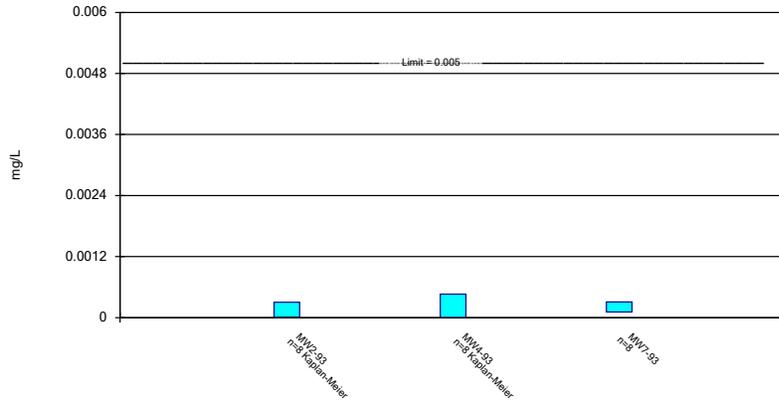
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

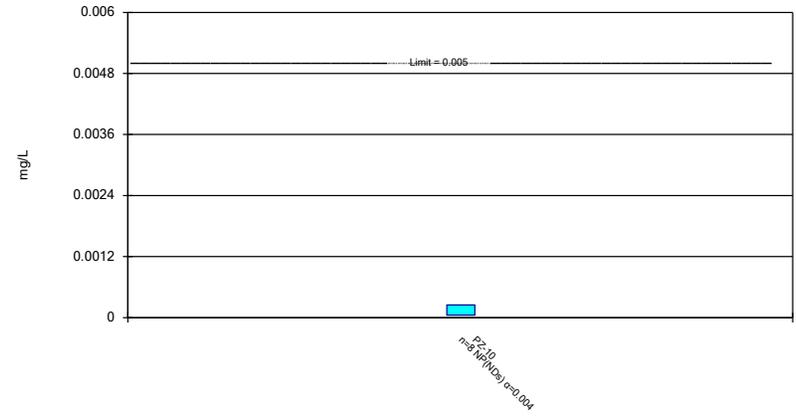
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

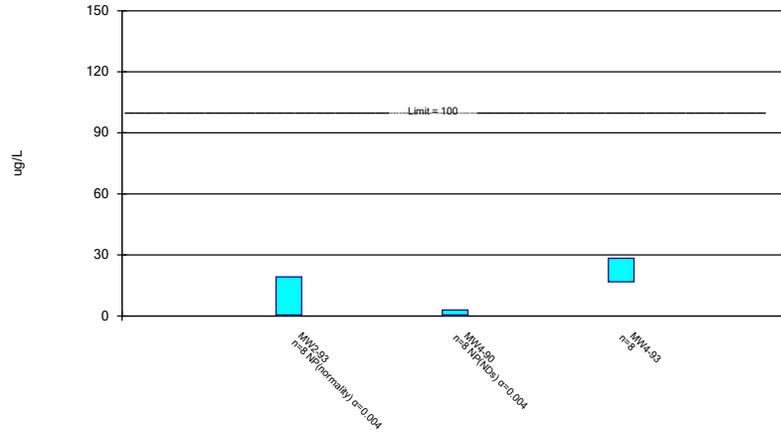
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric and Non-Parametric (NP) Confidence Interval

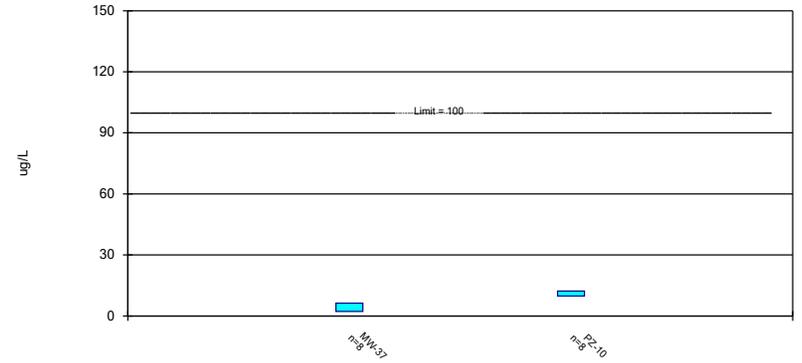
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chlorobenzene Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

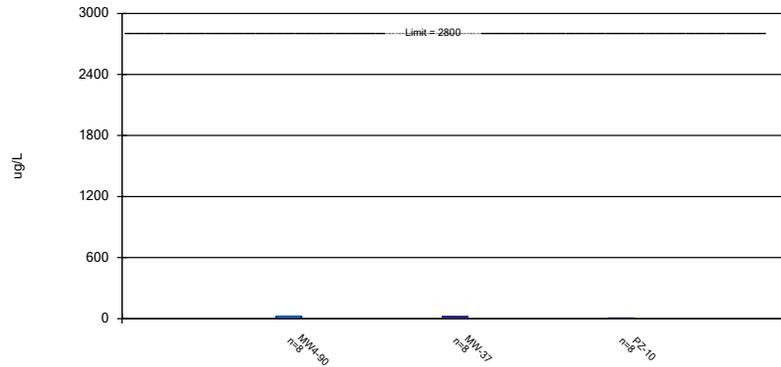
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Constituent: Chlorobenzene Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
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Parametric Confidence Interval

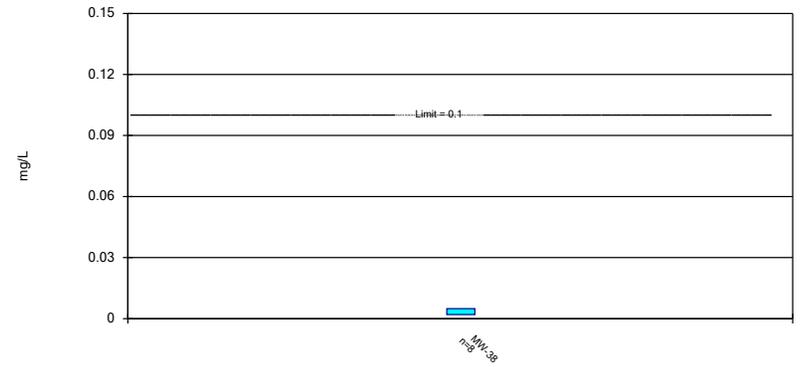
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Constituent: Chloroethane Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

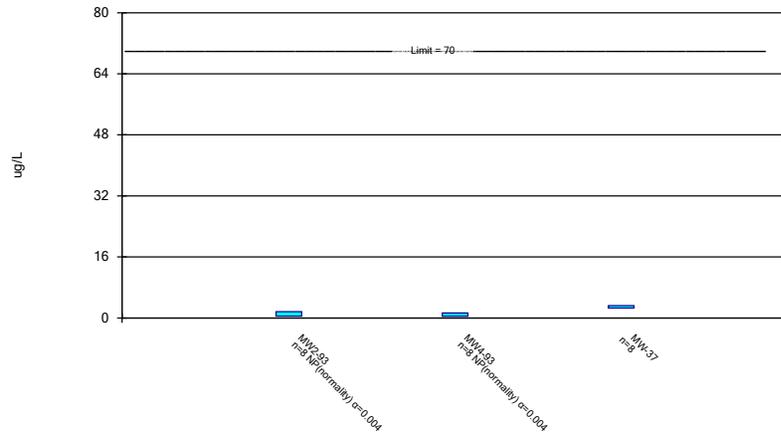
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Constituent: Chromium Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
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Parametric and Non-Parametric (NP) Confidence Interval

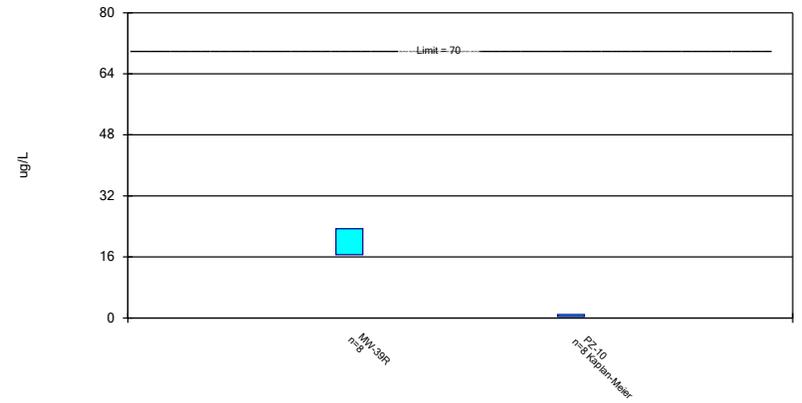
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Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Int
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Parametric Confidence Interval

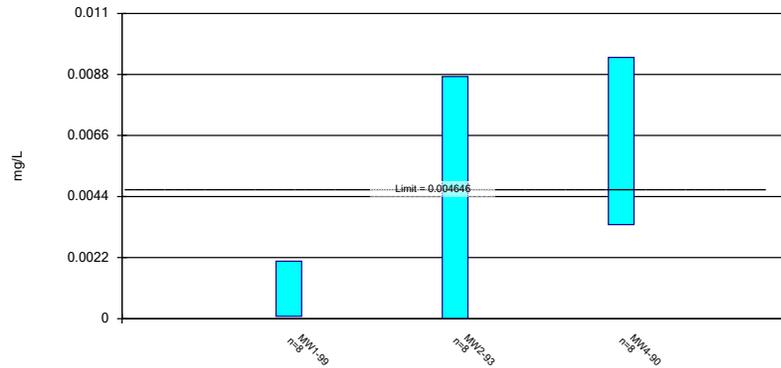
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Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

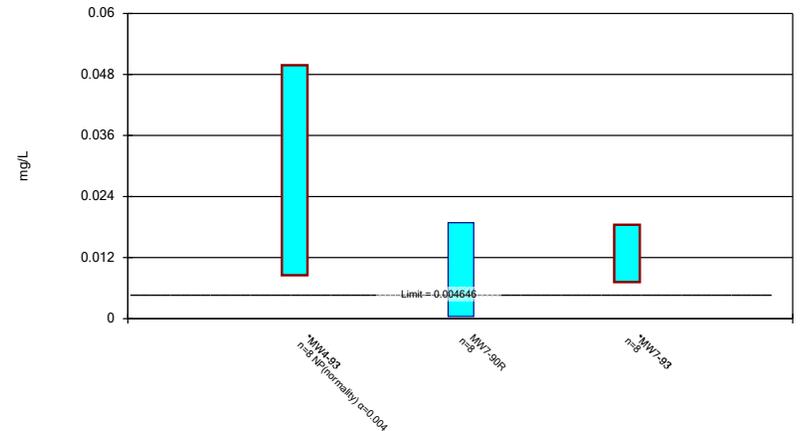
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Parametric and Non-Parametric (NP) Confidence Interval

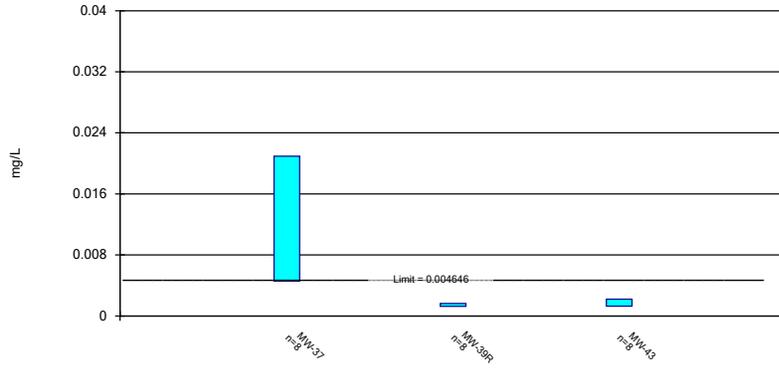
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Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

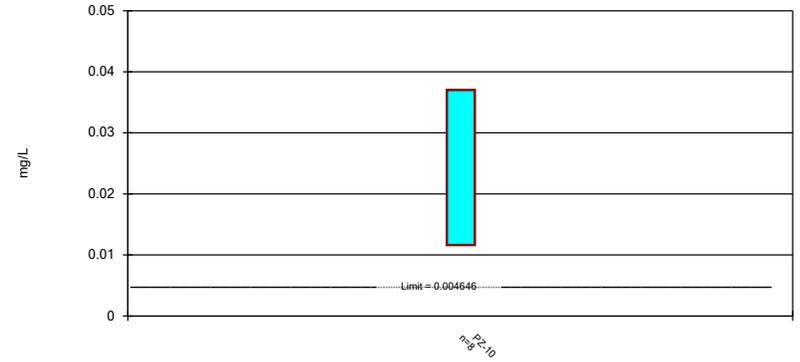
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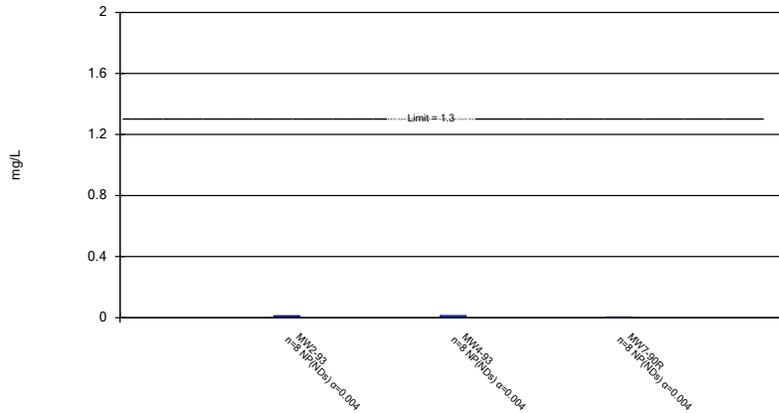
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Constituent: Cobalt Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

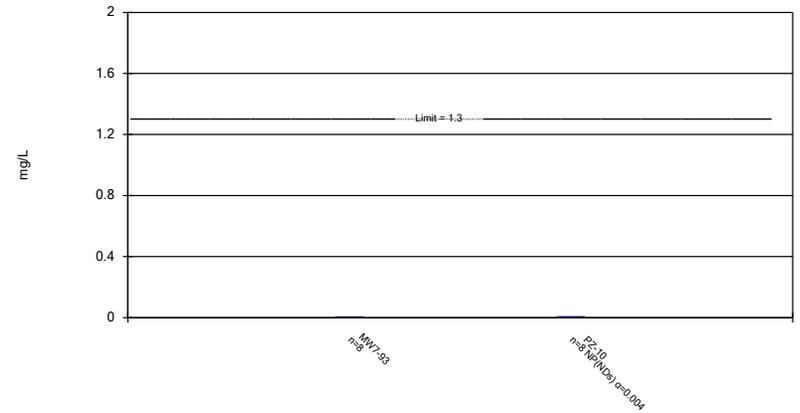
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Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric and Non-Parametric (NP) Confidence Interval

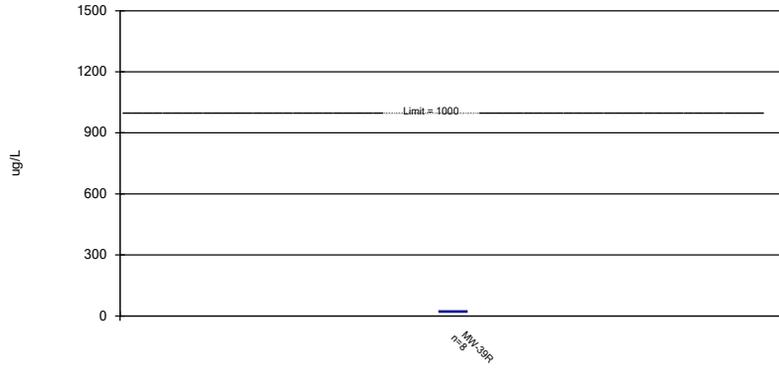
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Constituent: Copper Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

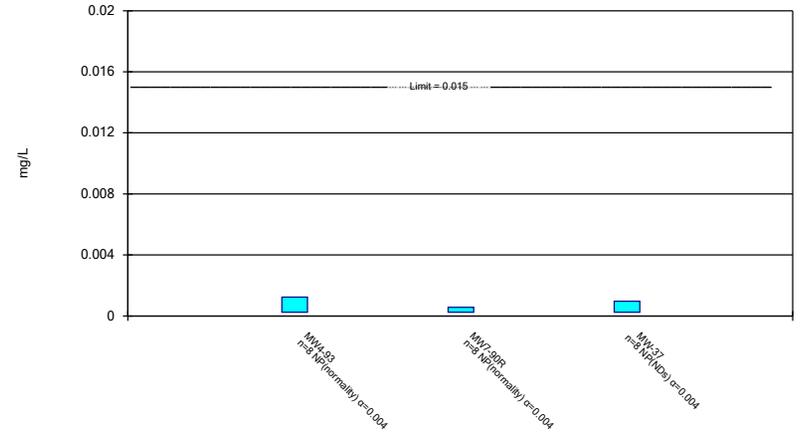
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Constituent: Dichlorodifluoromethane Analysis Run 12/16/2025 8:43 AM View: 2025_AWQR-Confidence_I
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

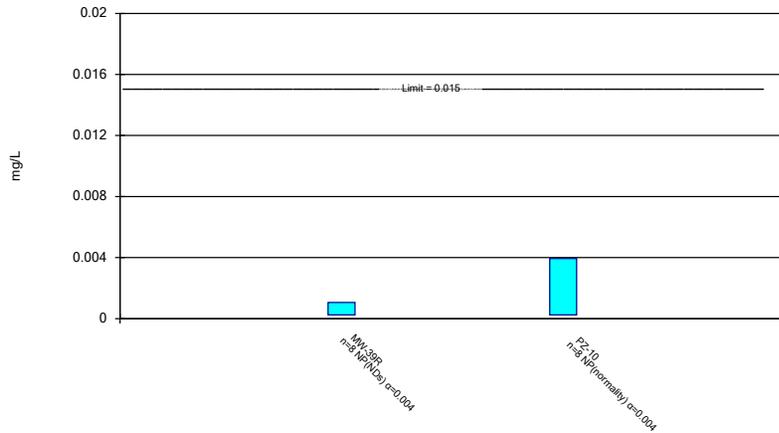
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Constituent: Lead Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

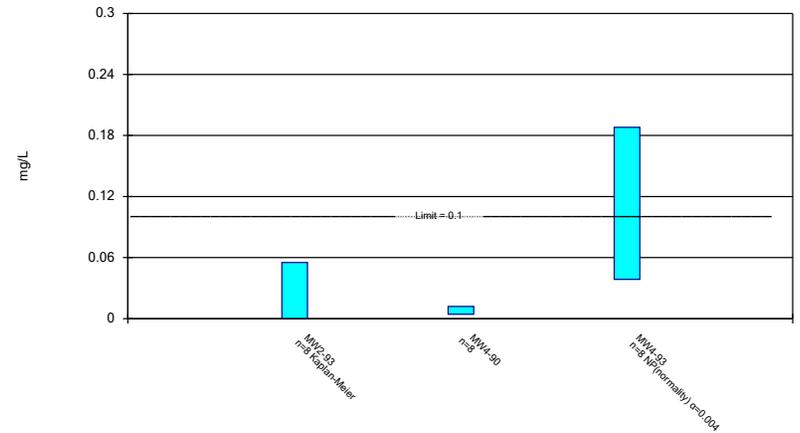
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Constituent: Lead Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric and Non-Parametric (NP) Confidence Interval

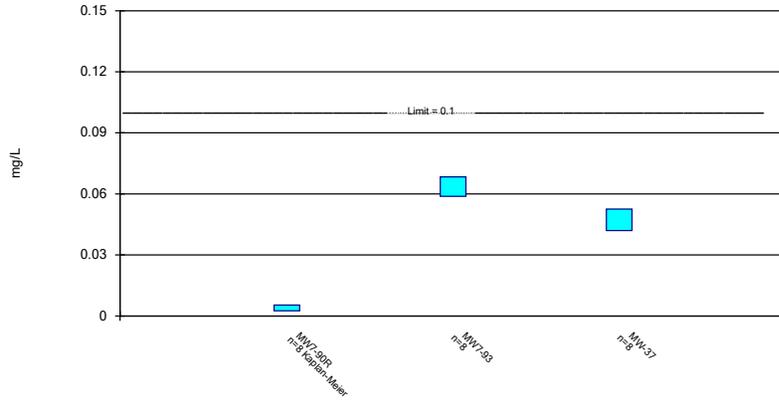
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Constituent: Nickel Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

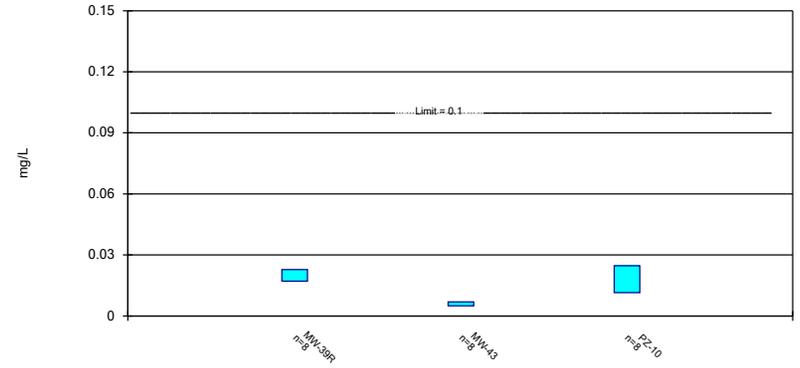
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Parametric Confidence Interval

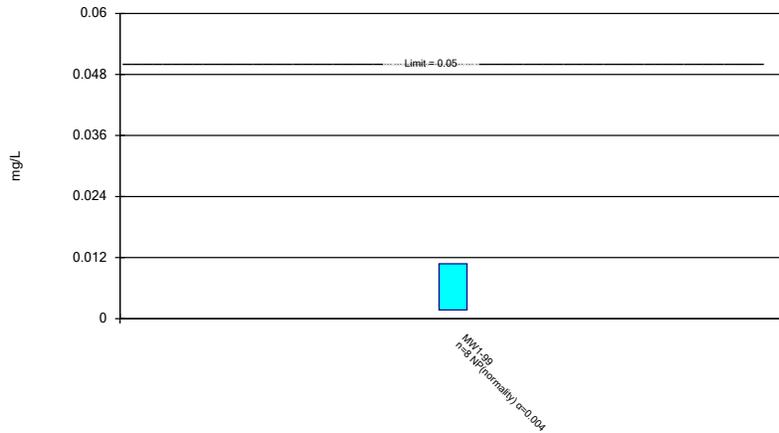
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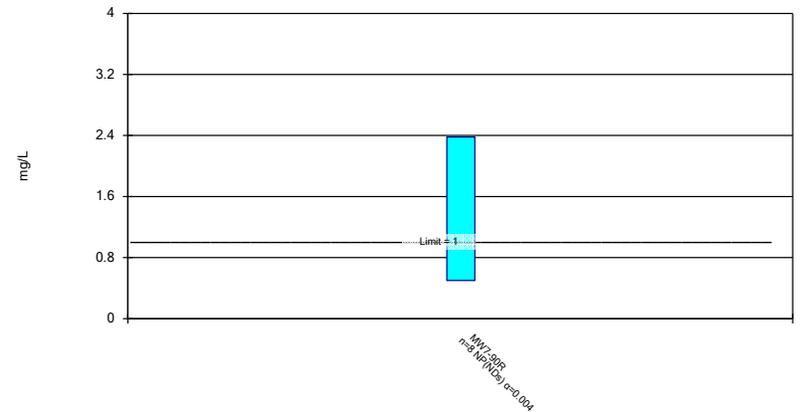
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Constituent: Selenium Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

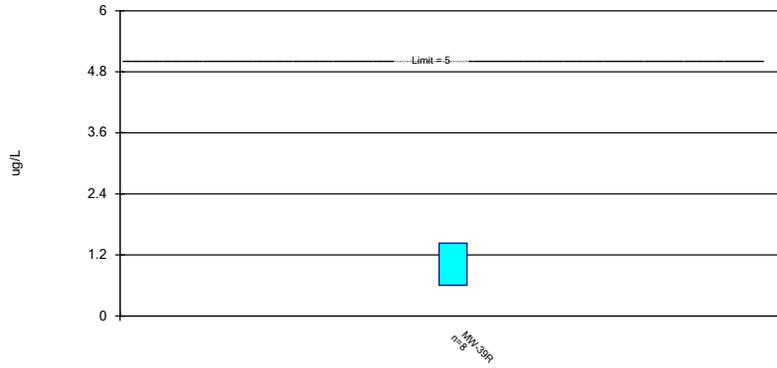
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Constituent: Sulfide Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

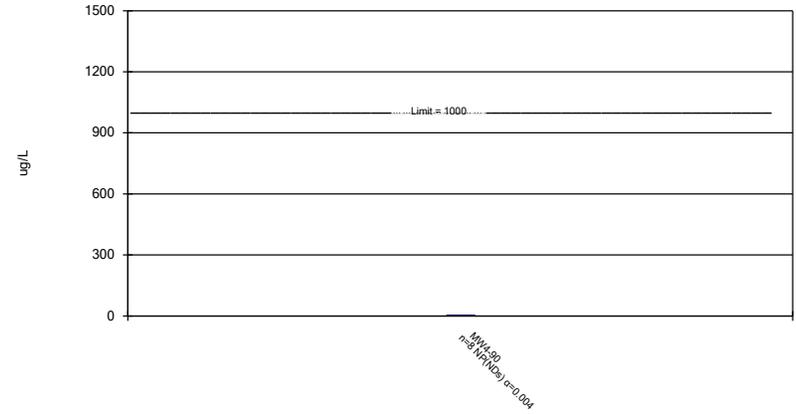
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Constituent: Tetrachloroethene Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

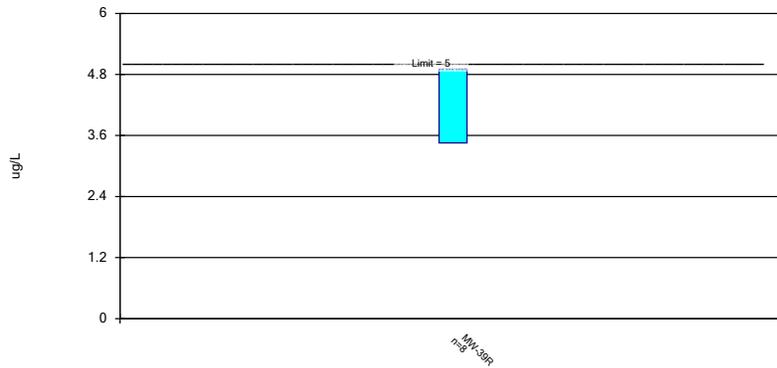
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Constituent: Toluene Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interv
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Parametric Confidence Interval

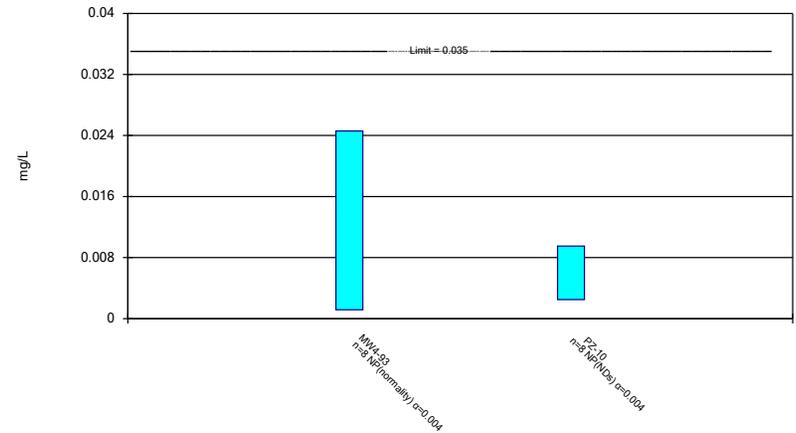
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Constituent: Trichloroethene Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interv
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Non-Parametric Confidence Interval

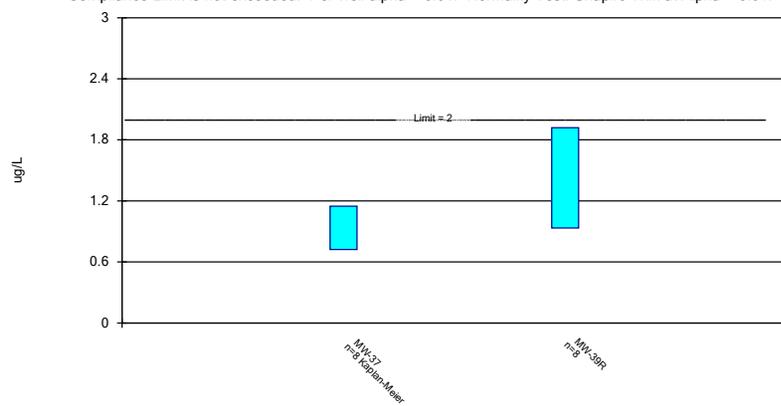
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Constituent: Vanadium Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interv
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Parametric Confidence Interval

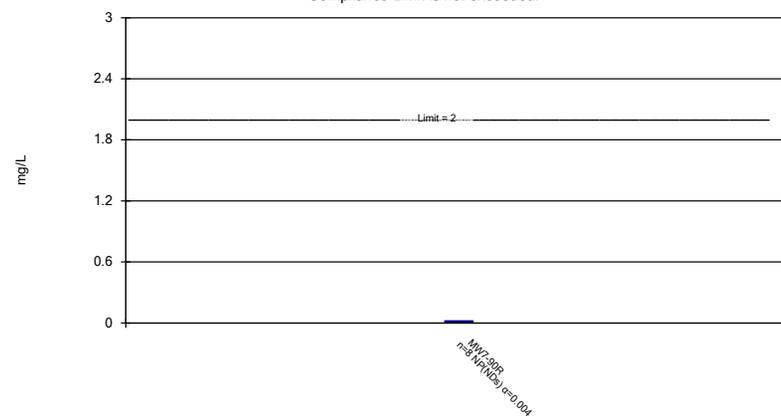
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Constituent: Vinyl Chloride Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 12/16/2025 8:44 AM View: 2025_AWQR-Confidence_Interval
Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Theil-Sen Confidence Bands Summary Table and Graphs

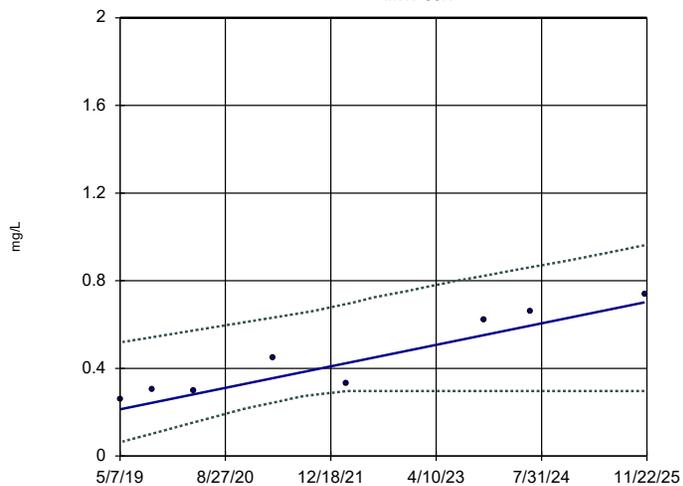
Trend Test

Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR Printed 12/8/2025, 11:12 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	MW7-90R	0.07484	24	21	Yes	8	0	0.01	NP
Selenium (mg/L)	MW-38	0.0009226	24	21	Yes	8	0	0.01	NP

Sen's Slope and 99% Confidence Band

MW7-90R

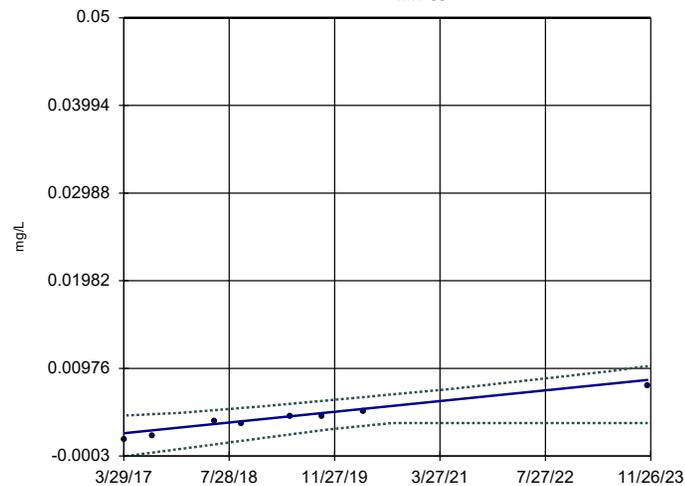


n = 8
 Slope = 0.07484
 units per year.
 Mann-Kendall
 statistic = 24
 critical = 21
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).
 Confidence band is
 below GWPS mg/L (2).

Constituent: Barium Analysis Run 12/8/2025 11:11 AM View: 2025_AWQR-Theil_Sen
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Sen's Slope and 99% Confidence Band

MW-38



n = 8
 Slope = 0.0009226
 units per year.
 Mann-Kendall
 statistic = 24
 critical = 21
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).
 Confidence band is
 below GWPS mg/L (0.05).

Constituent: Selenium Analysis Run 12/8/2025 11:11 AM View: 2025_AWQR-Theil_Sen
 Des Moines County Regional SLF Client: SCS Engineers Data: DMCSW_AM_2025_AWQR

Appendix E

Leachate Control System Performance Evaluation Report

**2025 LEACHATE CONTROL SYSTEM PERFORMANCE EVALUATION REPORT
FOR
DES MOINES COUNTY REGIONAL SANITARY LANDFILL**

WEST BURLINGTON, IOWA

SUBMITTAL DATE: FEBRUARY 2026

**PREPARED FOR:
DES MOINES COUNTY REGIONAL SOLID WASTE COMMISSION**

**PREPARED BY:
SCS ENGINEERS**

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- ATTACHMENT B HISTORICAL LEACHATE COLUMN THICKNESSES
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Section 1.0

Description of Existing Leachate Control System

SCS Engineers (SCS), on behalf of the Des Moines County Regional Solid Waste Commission (Commission), has prepared this Leachate Control System Performance Evaluation Report (LCSPER) for the Des Moines County Regional Sanitary Landfill (Landfill). This LCSPER was prepared in general accordance with the requirements of Iowa Administrative Code (IAC) 567-113.7(5)"b"(14) and additional Iowa Department of Natural Resources (DNR) requirements specified in the Landfill's operating permit issued on January 3, 2024 (Doc #108566). This LCSPER describes the leachate control system monitoring program, provides an evaluation of the effectiveness of the system, and, if necessary, makes recommendations for additional control measures. The reporting period for this LCSPER is January through December 2025.

1.1 Location of Control System

The Landfill area is depicted in **Figure 1** and is generally described as a portion of the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ and a portion of the SW $\frac{1}{4}$ of Section 15; a portion of the E $\frac{1}{2}$ of the SE $\frac{1}{4}$ and a portion of the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 21; the N $\frac{1}{2}$ of the SW $\frac{1}{4}$, the W $\frac{1}{2}$ of the NW $\frac{1}{4}$, and a portion of the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 22, all in Township 70 North, Range 3 West, Des Moines County, Iowa.

The constructed areas include Cells 1 and 2 (alternatively clay-lined Subtitle D cells), Cells 3, 4, and 5 (Subtitle D composite-lined cells) and associated abutments, abutment areas D-1 and D-2, Cell 1 West (clay-lined construction and demolition (C & D) cell), and a closed area that does not have a constructed liner (unlined area). Leachate is collected from the lined areas and abutments via leachate underdrains and from the unlined area via toe drains and extraction wells. In addition, groundwater from the underdrains beneath Cells 1, 3, and 4 is collected and treated with the leachate. A supervisory control and data acquisition (SCADA) system is used to monitor a majority of the leachate control system.

The leachate column thickness is required to be less than 15 feet in a portion of the unlined areas as noted in the 2007 Supplemental Leachate Control Plan (SLCP). The remainder of the unlined areas require the "lowest possible leachate head" as they are not over a Subtitle D-compliant liner and do not have a leachate drainage layer. The lined areas require maintenance of less than 12 inches of leachate thickness over the liner.

1.2 Effectiveness of the Leachate Control System

The Leachate Management Summary table in **Attachment A** provides monthly leachate column thicknesses for the Landfill. As noted above, most of the unlined areas leachate wells (except LW-3 and LW-16) were required to have a leachate column thickness less than 15 feet; with the exception of some short-lived spikes, this requirement was met during the 2025 reporting period. Lined area leachate wells require maintenance of thickness less than 12 inches over the liner, this requirement was met with the exception of leachate wells LM-1 and LM-2. LPZ-6 is in the Cell 5 sump, and approximately 2 feet below the liner. Thickness measurements in LM-1 and LM-2 were consistent with the prior reporting period. The graph for LPZ-7 indicates an equipment malfunction lasted 3 months during a period where column thickness measurements were high; however, the last five months of this reporting period were below the compliance limit likely indicating the high column thickness measurements were due to the equipment malfunction.

Leachate thickness trends are described below, and a historical table and graphs are included in **Attachments B** and **C**, respectively.

Unlined Cells

LW-3 – Leachate thicknesses during this reporting period were generally stable with column thickness around 16 feet with a reporting period maximum of 17.80 feet in March; however, all measurements were within the historical range.

LW-4R – Leachate thicknesses ranged from 3.94 feet in April 2025 to 26.17 feet in February 2025 and were within the historical range.

LW-6R – Leachate thicknesses were generally stable with column thickness of approximately 3 feet with the exception of 10.97 feet in January and 11.76 feet in February. Thicknesses were within the historical range.

LW-7R – Leachate thicknesses ranged from 6.03 feet in January 2025 to 14.99 feet in November 2025 and were within the historical range.

LW-8R – Leachate thicknesses were generally stable with column thickness of approximately 10 feet with the exception of 19.23 feet in January, 23.09 feet in February, and 20.87 in December. Thicknesses were within the historical range.

LW-9R – Leachate thicknesses were generally stable with column thickness of approximately 5 feet with the exception of 11.04 feet in January. Thicknesses were generally near a historical low.

LW-10 – Leachate thicknesses during this period were stable around 5.7 feet and were within the historical range.

LW-11R – Leachate column thicknesses were higher at the beginning of this period; the largest column thickness was 10.02 in February 2025. Column thickness decreased in March and remained generally stable around 7 feet for the remainder of this period.

LW-12R – Leachate thickness measurements ranged from 9.83 in July 2025 to 16.31 in February 2025. Column thickness remained within the historical range.

LW-13R – Leachate thicknesses measurements were generally stable around 14 feet throughout the reporting period, with the exception of 21.93 feet in February 2025.

LW-14 – Leachate column thicknesses were higher at the beginning of this period; the largest column thickness was 7.93 feet in January 2025. Column thickness decreased in March and remained generally stable around 3.95 feet for the remainder of this period.

LW-15 – Leachate thicknesses measurements ranged from 4.13 feet in November 2025 to 11.18 feet in January 2025 and were within the historical range.

LW-16 – Leachate thicknesses during this period were stable around 6 feet and were within the historical range. No measurement was available for January 2025 due to equipment malfunction.

Lined Cells

LPZ-3 – The piezometer was dry during most of this period with some measurements of 0.10 feet.

LPZ-4 – The piezometer was dry during most of this period with measurements of 0.10 feet each quarter.

LPZ-5 – The piezometer was dry during most of this period with some measurements of 0.10 - 0.20 feet.

LPZ-6 – The piezometer measurements were generally stable around 3.30 feet.

LPZ-7 – The piezometer measurements ranged from 0.90 feet to 3.37 feet with the exception of 11.59 feet in January, February, June and July. No measurements were available from March to May due to equipment malfunction.

LPZ-C1W – The piezometer measurements ranged from 0.10 feet in March 2025 to 0.20 feet in November 2025. Five of the months were reported dry.

LM-1 – The piezometer measurements were generally stable around 9.00 feet and were within historical range. No measurement was available in July due to equipment malfunction.

LM-2 – The piezometer measurements were stable at 12.63 feet throughout the period and were within the historical range. No measurement was available in September due to equipment malfunction.

1.3 Approved Changes to System

There were no approved changes to the monitoring or control systems during this reporting period.

1.4 Proposed Changes to System

There are no proposed changes to the monitoring or control systems at this time.

Section 2.0 Maintenance

2.1 Maintenance Performed on Pumps, Valves, Tanks, Lagoons, Controls, etc.

No maintenance was performed during the 2025 reporting period.

2.2 Recommendations

SCS recommends the following to maintain leachate control at the Des Moines County Regional Sanitary Landfill:

- Continue monthly measurements of leachate head levels in leachate piezometers. In addition, as leachate levels are collected, continue measuring the total depth of each leachate piezometer in order to maintain a record of leachate well extensions as they occur during filling operations or to verify the integrity of the leachate piezometers in the closed area.
- Continue recording the volume of leachate pumped to the City of West Burlington Wastewater Treatment Plant via the direct force main. Analytical data from the facility is included in **Attachment D**.
- Continue recording the volume of leachate recirculated in the leachate recirculation blanket and injection trench systems as well as by surface application methods.
- Continue cleaning the leachate collection system once every three years or more frequently if leachate head or the volume of leachate collected indicates cleanout is necessary.

Attachment A

Leachate Management Summary

Leachate Management Summary
2025 Leachate Collection System Performance Evaluation Report
Des Moines County Regional Sanitary Landfill
Permit No. 29-SDP-01-76P

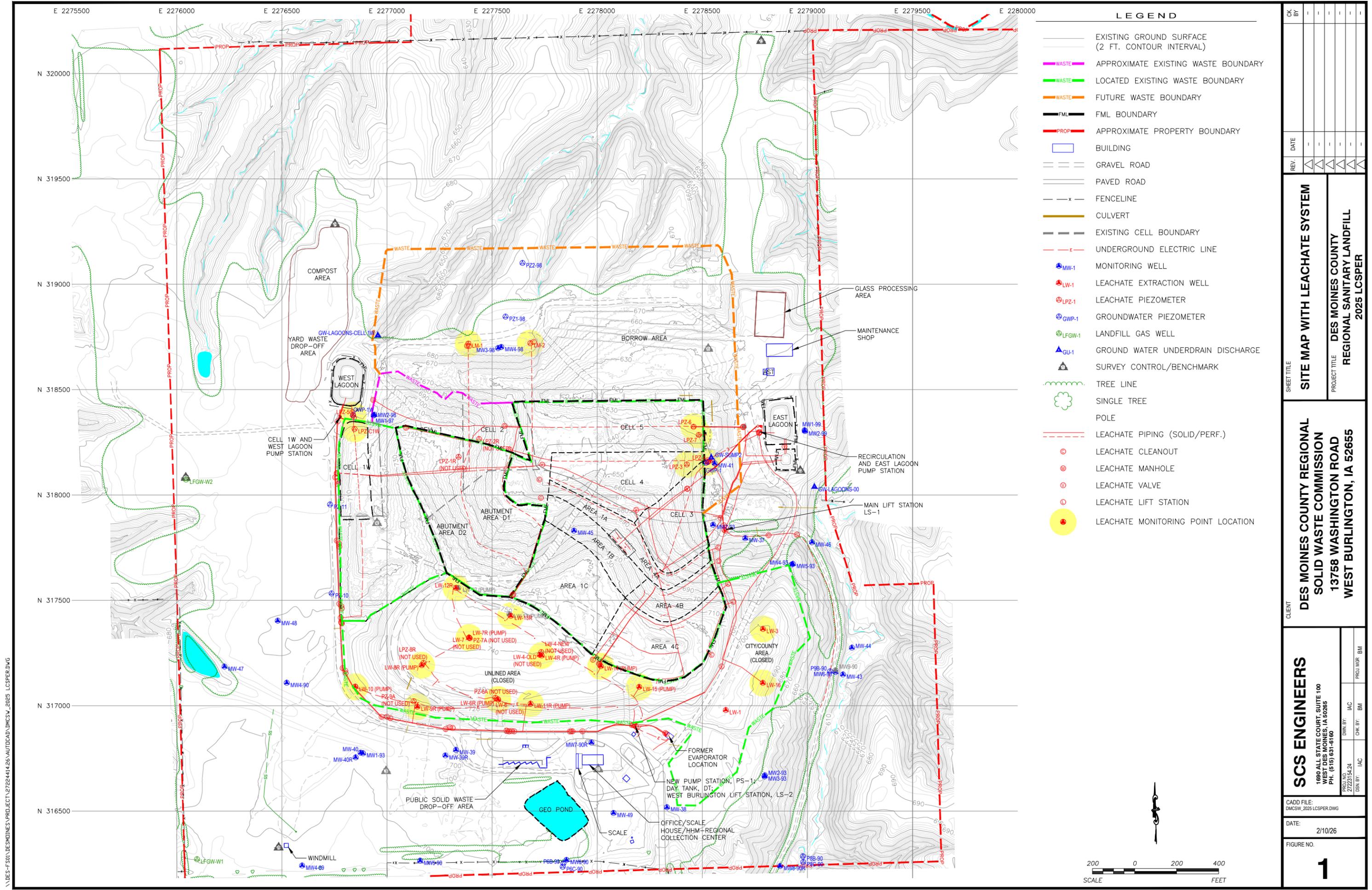
Month	Unlined Cells - Column Thickness (ft) ⁽¹⁾													Lined Cells - Maximum Head on Liner (ft) ^(1,2)							Volume Recirculated (gal)		Pumped to City of West Burlington WWTP (gal)	Precipitation (in) ⁽³⁾		
	LW-3	LW-4R	LW-6R	LW-7R	LW-8R	LW-9R	LW-10	LW-11R	LW-12R	LW-13R	LW-14	LW-15	LW-16	LPZ-3	LPZ-4	LPZ-5	LPZ-6	LPZ-7	LPZ-C1W	LM-1	LM-2	Trenches			Working Face	
January	16.70	22.26	10.97	6.03	19.23	11.04	5.80	9.46	10.04	13.71	6.80	11.18	NM	DRY	DRY	DRY	3.30	11.59	DRY	9.01	12.63			0	0.64	
February	17.20	26.17	11.76	6.94	23.09	5.23	5.70	10.02	16.31	21.93	7.93	11.11	6.14	DRY	DRY	DRY	3.41	11.59	DRY	9.00	12.63			464,407	0.19	
March	17.80	3.94	2.78	10.07	9.64	5.09	5.50	6.44	10.02	13.33	3.85	4.56	5.95	0.10	0.10	0.10	3.29	NM	0.10	8.99	12.63			33,732	2.58	
April	17.40	3.94	3.00	10.73	9.85	5.08	5.60	6.18	10.01	14.18	3.83	10.93	6.14	DRY	DRY	DRY	3.28	NM	DRY	8.99	12.63			434,055	2.80	
May	16.80	4.13	2.85	6.94	9.89	5.11	5.80	6.63	9.91	14.19	3.84	10.92	6.30	DRY	DRY	0.20	3.35	NM	0.20	8.99	12.63			0	3.88	
June	17.20	17.88	2.85	7.82	9.71	5.11	5.70	6.47	10.08	14.18	3.88	11.05	6.23	DRY	0.10	0.10	3.30	11.59	0.10	9.00	12.63			914,258	4.42	
July	17.10	28.94	2.84	7.72	10.38	5.13	5.50	6.46	9.83	14.18	3.95	10.98	6.23	DRY	DRY	DRY	3.21	11.59	DRY	NM	12.63			0	8.80	
August	17.20	19.23	2.91	10.83	10.30	5.24	6.00	6.63	10.02	14.18	3.83	10.16	6.03	DRY	DRY	DRY	3.09	3.37	DRY	8.99	12.63			431,012	1.83	
September	16.90	4.29	2.81	7.16	11.16	5.98	6.40	6.51	10.04	14.15	3.95	4.39	6.17	0.10	0.10	0.20	3.27	2.19	0.20	8.98	NM			680,645	1.13	
October	16.70	4.29	2.84	6.60	12.39	5.22	6.10	6.20	9.85	14.21	3.88	10.89	6.10	DRY	DRY	0.10	3.24	2.02	0.10	8.98	12.63			0	1.78	
November	16.30	3.98	2.75	14.99	10.12	5.31	6.20	6.26	9.95	14.15	3.80	4.13	5.99	DRY	DRY	0.20	3.29	0.97	0.20	8.99	12.63			0	1.11	
December	16.10	4.29	2.81	6.42	20.87	5.17	5.90	6.17	9.89	14.30	3.81	8.66	5.95	0.10	0.10	0.10	3.27	0.90	0.10	8.99	12.63			582,296	1.54	
Reporting Period Total																							0	0	3,540,405	30.70

Notes:

- (1) Levels for points in "Unlined Cells", with the exception of LW-3 and LW-16, shall be less than 15'; levels for points in "Lined Cells" shall be less than 12".
 - (2) LPZ-6 is in the Cell 5 sump, approximately 2' below the liner surface. LPZ-7 is on the Cell 5 liner.
 - (3) Precipitation data obtained from weather station located in Burlington, Iowa (approximately 3.4 miles from landfill).
URL: <https://www.wunderground.com/history/daily/us/ia/burlington/KBRL>
 - (4) Measurements not collected by SCADA are collected by landfill staff.
- NM- Not Measured, transducer malfunction.

Comments:

- 1) The operating permit issued January 3, 2024 (Doc #108566) requires monthly leachate head level and elevation measurements.
- 2) The operating permit issued January 3, 2024 (Doc #108566) requires the permit holder to record the volume of leachate collected and transported to the treatment works.
- 3) Reporting Period: January 2025 through December 2025.
- 4) Approved Changes to Leachate Collection System: See Section 1.3.
- 5) Proposed Changes to Leachate Collection System: See Section 1.4.
- 6) Date of Last Cleaning and Inspection: October 2022.
- 7) Date of Next Cleaning and Inspection: 2026.
- 8) The leachate discharge line to the city was jetted in November 2025.
- 9) Volume of Leachate Recirculated: 0 gallons.
- 10) Volume of Leachate Treated Off-Site: Approximately 3,540,405 gallons of leachate were pumped to the City of West Burlington POTW via the direct connection.
- 11) Volume of Leachate Treated On-Site: The evaporator system was not operated during the reporting period.
- 12) The total storage capacity of the three leachate lagoons is approximately 1,924,969 gallons (956,711 gallons in east lagoons, 968,258 gallons in west lagoon).
- 13) Historical leachate levels and graphs are provided in Attachments B and C, respectively.
- 14) Laboratory testing results of the leachate samples are provided in Attachment D.



LEGEND

- EXISTING GROUND SURFACE (2 FT. CONTOUR INTERVAL)
- WASTE APPROXIMATE EXISTING WASTE BOUNDARY
- WASTE LOCATED EXISTING WASTE BOUNDARY
- WASTE FUTURE WASTE BOUNDARY
- FML FML BOUNDARY
- PROP APPROXIMATE PROPERTY BOUNDARY
- BUILDING
- GRAVEL ROAD
- PAVED ROAD
- FENCELINE
- CULVERT
- EXISTING CELL BOUNDARY
- UNDERGROUND ELECTRIC LINE
- MW-1 MONITORING WELL
- LW-1 LEACHATE EXTRACTION WELL
- LPZ-1 LEACHATE PIEZOMETER
- GWP-1 GROUNDWATER PIEZOMETER
- LFGW-1 LANDFILL GAS WELL
- GU-1 GROUND WATER UNDERDRAIN DISCHARGE
- SURVEY CONTROL/BENCHMARK
- TREE LINE
- SINGLE TREE
- POLE
- LEACHATE PIPING (SOLID/PERF.)
- LEACHATE CLEANOUT
- LEACHATE MANHOLE
- LEACHATE VALVE
- LEACHATE LIFT STATION
- LEACHATE MONITORING POINT LOCATION

REV.	DATE	BY	CHK
1			
2			
3			
4			
5			

SHEET TITLE
SITE MAP WITH LEACHATE SYSTEM

PROJECT TITLE
DES MOINES COUNTY REGIONAL SANITARY LANDFILL 2025 LCS PER

CLIENT
DES MOINES COUNTY REGIONAL SOLID WASTE COMMISSION
13758 WASHINGTON ROAD
WEST BURLINGTON, IA 52655

SCS ENGINEERS
 1680 ALL STATE COURT, SUITE 100
 WEST DES MOINES, IA 50265
 PH. (515) 831-6160

PROJ. NO. 222315424
 DWN. BY: IAC
 CHK. BY: BNI
 PROJ. MGR. BM

CADD FILE:
 DMCSW_2025 LCS PER.DWG

DATE:
 2/10/26

FIGURE NO.
1



\\DES-F501\DES\MINES\PROJECT\2722414.26\AUTOCAD\DMCSW_2025 LCS PER.DWG

Attachment B

Historical Leachate Column Thicknesses

Historical Leachate Column Thicknesses
 2025 Leachate Control System Performance Evaluation Report
 Des Moines County Regional Sanitary Landfill
 Permit No. 29-SDP-01-76P

Leachate Piezometer		Date of Measurement																											
		1/25/13	2/28/13	3/22/13	4/30/13	5/31/13	6/27/13	7/31/13	8/30/13	9/30/13	10/31/13	11/29/13	12/31/13 ⁽¹⁾	1/30/14	2/27/14	3/31/14	4/30/14	5/31/14	6/30/14 ⁽²⁾	7/31/14	8/29/14	9/30/14	10/31/14	11/28/14	12/31/14 ⁽²⁾	1/30/15 ⁽³⁾	2/20/15 ⁽³⁾	3/31/15	4/30/15
LW-3	FLUID LEVEL	14.00	11.30	9.30	11.00	10.60	14.50	14.60	14.70	18.70	19.30	19.50	19.60	14.70	12.90	13.20	11.80	11.50	12.00	16.30	16.80	13.80	15.70	NM	10.90	11.20	15.60	15.70	
	MEASURED PIEZO DEPTH	28.10	28.00	28.00	28.00	28.00	29.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.20	28.20	28.20	28.20	28.10	28.10	28.10	28.10	28.10	28.10	
	MEASURED COLUMN THICKNESS	14.20	16.90	18.90	17.20	17.60	13.70	13.60	13.50	9.50	8.90	8.70	8.70	8.60	13.50	15.00	15.00	16.40	16.70	16.20	11.90	11.40	14.40	12.50	NA	17.30	17.00	12.60	12.50
LW-4R ⁽³⁾	FLUID LEVEL	77.42	67.45	77.49	77.74	77.74	77.57	77.33	77.52	70.23	77.85	76.80	55.33	46.10	77.21	77.59	77.32	76.98	61.75	49.19	44.81	76.89	76.32	54.76	76.00	75.89	66.94	77.59	76.03
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	4.58	14.55	4.51	4.26	4.26	4.43	4.67	4.48	11.77	4.15	5.20	26.67	35.90	4.79	4.41	4.68	5.02	20.25	32.81	37.19	5.11	5.68	27.24	6.00	6.11	15.06	4.41	5.97
LW-6R	FLUID LEVEL	69.10	56.10	69.07	69.15	69.12	69.02	67.75	69.12	69.12	69.07	69.49	54.61	52.13	53.85	63.58	52.36	50.39	44.27	42.62	41.44	69.11	69.81	54.34	69.89	69.24	NM	63.58	67.20
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	4.70	17.70	4.73	4.65	4.68	4.78	6.05	4.68	4.68	4.73	4.31	19.19	21.67	19.95	10.22	21.44	23.41	29.53	31.18	32.36	4.69	3.99	19.46	3.91	4.56	NA	10.22	6.60
LW-7R	FLUID LEVEL	78.42	76.51	83.01	83.38	83.47	81.56	79.57	83.28	79.72	84.46	83.26	83.70	83.97	68.91	55.25	53.06	51.78	50.50	49.62	48.88	48.20	47.35	47.05	47.19	63.56	59.59	55.25	58.95
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	12.58	14.49	7.99	7.62	7.53	9.44	11.43	7.72	11.28	6.54	7.74	7.30	7.03	22.09	35.75	37.94	39.22	40.50	41.38	42.12	42.80	43.65	43.95	43.81	27.44	31.41	35.75	32.05
LW-8R	FLUID LEVEL	73.39	66.66	72.25	73.34	73.61	74.35	73.61	71.83	59.55	62.58	75.53	NM	NM	63.73	74.10	73.99	73.71	74.06	54.51	50.74	NM	73.87	61.66	72.41	54.11	51.23	74.10	74.19
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	11.81	18.54	12.95	11.86	11.59	10.85	11.59	13.37	25.65	22.62	9.67	NA	NA	21.47	11.10	11.21	11.49	11.14	30.69	34.46	NA	11.33	23.54	12.79	31.09	33.97	74.10	11.01
LW-9R	FLUID LEVEL	45.15	42.70	45.32	38.68	28.10	45.43	45.20	43.37	44.83	45.78	44.73	27.94	26.21	24.64	36.44	45.46	45.12	45.45	27.58	25.15	45.25	44.92	31.36	44.59	44.65	44.25	36.44	45.21
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	7.85	10.30	7.68	14.32	24.90	7.57	7.80	7.63	8.17	7.22	8.27	25.06	26.79	28.36	16.56	7.54	7.88	7.55	25.42	27.85	7.75	8.08	21.64	8.41	8.35	8.75	16.56	7.79
LW-10	FLUID LEVEL	12.20	10.20	10.20	10.80	11.70	11.80	10.00	10.50	10.60	NM	9.80	10.10	10.30	8.30	9.80	9.50	9.80	8.90	10.20	10.40	10.60	9.60	9.00	9.40	10.80	8.90	10.60	8.90
	MEASURED PIEZO DEPTH	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.70	14.70	14.70	14.00	14.00	14.00	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
	MEASURED COLUMN THICKNESS	2.60	4.60	4.60	4.00	3.10	3.00	4.80	4.30	4.20	NA	5.00	4.70	4.50	6.50	5.00	5.30	5.00	5.90	4.60	4.40	4.20	5.20	5.80	5.40	4.00	5.90	4.20	5.90
LW-11R	FLUID LEVEL	40.12	37.07	40.18	39.79	39.76	39.62	39.36	39.53	37.32	39.89	38.84	31.33	30.72	39.20	33.14	39.61	39.25	39.62	31.52	30.28	39.35	38.94	32.75	33.20	38.82	36.29	39.41	39.37
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	7.88	10.93	7.82	8.21	8.24	8.38	8.64	8.47	10.68	8.11	9.16	16.67	17.28	8.80	14.86	8.39	8.75	8.38	16.48	17.72	8.65	9.06	15.25	14.80	9.18	11.71	8.59	8.63
LW-12R	FLUID LEVEL	Installed May 2019																											
LW-13R	MEASURED PIEZO DEPTH	Installed May 2019																											
	MEASURED COLUMN THICKNESS	Installed May 2019																											
	MEASURED COLUMN THICKNESS	Installed May 2019																											
LW-14	FLUID LEVEL	55.43	50.92	45.57	55.60	43.05	55.32	55.11	55.26	55.24	55.59	54.50	48.45	38.89	54.85	55.23	37.64	47.72	54.57	42.16	37.28	55.17	55.03	42.60	55.16	55.03	55.77	55.23	56.07
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	5.37	9.88	15.23	5.20	17.75	5.48	5.69	5.54	5.56	5.21	6.30	12.35	21.91	5.95	5.57	23.16	13.08	6.23	18.64	23.52	5.63	5.77	18.20	5.64	5.77	5.03	5.57	4.73
LW-15	FLUID LEVEL	37.20	34.26	37.29	37.25	37.49	37.57	37.66	37.74	37.59	37.79	37.70	32.57	30.96	37.73	37.76	37.75	37.84	37.85	30.63	30.67	37.78	37.76	31.71	37.77	37.82	36.05	37.76	37.86
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	15.30	18.24	15.21	15.25	15.01	14.93	14.84	14.76	14.91	14.71	14.80	19.93	21.54	14.77	14.74	14.75	14.66	14.65	21.87	21.83	14.72	14.74	20.79	14.73	14.68	16.45	14.74	14.64
LW-16	FLUID LEVEL	Installed May 2019																											
	MEASURED PIEZO DEPTH	Installed May 2019																											
	MEASURED COLUMN THICKNESS	Installed May 2019																											
LPZ-3 ⁽⁷⁾	FLUID LEVEL	27.10	27.10	27.00	27.10	27.00	27.00	27.00	27.10	27.10	27.10	27.10	27.00	26.90	23.40	26.70	27.00	27.00	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90
	MEASURED PIEZO DEPTH	27.10	27.10	27.10	27.10	27.10	27.10	27.10	27.10	27.10	27.10	27.10	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
	MEASURED COLUMN THICKNESS	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	3.50	0.20	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
LPZ-4 ⁽⁸⁾	FLUID LEVEL	11.90	11.90	11.80	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.70	6.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
	MEASURED PIEZO DEPTH	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
	MEASURED COLUMN THICKNESS	DRY	DRY	0.30	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.20	5.00	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
LPZ-5	FLUID LEVEL	5.50	5.30	3.60	5.40	13.20	13.70	7.90	6.90	6.20	13.50	13.50	13.40	13.70	13.60	13.70	6.70	13.00	9.80	13.70	13.70	13.70	13.70	11.30	11.90	11.80	13.50	13.60	12.60
	MEASURED PIEZO DEPTH	13.70	13.90	13.90	13.90	13.70	13.70	13.70	13.70	13.70	13.50	13.50	13.40	13.70	13.60	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.60	13.60
	MEASURED COLUMN THICKNESS	8.20	8.40	10.10	8.30	0.50	DRY	5.80	6.80	7.50	0.20	DRY	DRY	DRY	DRY	DRY	DRY	0.70	3.90	DRY	DRY	DRY	DRY	2.40	1.80	0.20	0.10	0.10	1.10
LPZ-C1W ⁽⁹⁾	FLUID LEVEL	12.00	12.00	10.40	12.20	NM	17.90	15.20	13.70	13.20	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	14.80	17.90	17.90	17.90	17.90	15.80	15.90	17.70	17.90	17.80	
	MEASURED PIEZO DEPTH	17.90	17.90	17.90	17.90	NM	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90	17.90
	MEASURED COLUMN THICKNESS	5.9	5.9	7.5	5.7	NA	DRY	2.7	4.2	4.7	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.9	3.1	DRY	DRY	DRY	DRY	2.1	2.0	0.2	0.2	DRY	0.1
		01/25/13	02/28/13	03/22/13	04/30/13	05/31/13	06/																						

Historical Leachate Column Thicknesses
 2025 Leachate Control System Performance Evaluation Report
 Des Moines County Regional Sanitary Landfill
 Permit No. 29-SDP-01-76P

Leachate Piezometer		Date of Measurement																											
		5/28/15	06/25/15 ⁽²⁷⁾	7/30/15	8/31/15	9/25/15	10/28/15	11/30/15	12/30/15 ⁽²⁸⁾	1/30/16	2/29/16	3/31/16	4/29/16	5/25/16 ⁽²⁹⁾	6/17/16 ⁽³⁰⁾	7/29/16 ⁽³¹⁾	8/25/16 ⁽³²⁾	9/29/16	10/10/16 ⁽³³⁾	11/09/16	12/20/16	01/31/17	2/23/17 ⁽³⁴⁾	3/15/17 ⁽³⁵⁾	04/19/17	5/31/17 ⁽³⁶⁾	6/21/17 ⁽³⁷⁾	07/25/17	8/24/17 ⁽³⁸⁾
LW-3	FLUID LEVEL	12.00	13.10	13.80	12.10	18.20	16.80	11.10	11.90	12.60	12.90	10.80	11.70	12.80	12.00	16.00	12.30	12.20	12.20	11.60	27.00	12.40	12.10	12.00	13.40	11.90	11.80	11.60	
	MEASURED PIEZO DEPTH	28.00	28.40	28.20	27.90	28.20	28.20	NM	28.20	28.20	28.10	28.20	28.30	28.00	27.90	28.20	28.10	26.90	28.20	28.00	28.00	28.30	27.30	28.10	28.00	28.10	28.10	28.00	
	MEASURED COLUMN THICKNESS	16.20	15.10	14.40	16.10	10.00	11.40	17.10	16.30	15.60	15.30	17.40	16.50	15.40	16.20	12.20	15.90	16.00	16.00	16.60	1.20	15.80	16.10	16.20	18.20	14.80	16.30	16.40	16.60
LW-4R ⁽³⁾	FLUID LEVEL	75.66	68.23	75.40	46.86	74.82	74.61	74.88	57.39	74.99	48.97	75.04	74.30	74.42	74.27	74.33	74.19	74.85	73.96	50.75	74.00	73.99	74.20	73.41	73.80	73.65	73.84	73.63	73.69
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	6.34	13.77	6.80	35.14	7.18	7.39	7.12	24.61	7.01	33.03	6.96	7.70	7.58	7.73	7.67	7.81	7.15	8.04	31.25	8.00	8.01	7.80	8.59	8.20	8.35	8.16	8.37	8.31
LW-6R	FLUID LEVEL	49.72	43.74	40.57	43.25	65.76	54.82	47.27	43.10	43.07	48.68	61.39	54.06	56.84	68.61	68.75	53.82	68.42	68.41	51.40	68.45	68.85	69.04	65.94	68.78	68.58	52.82	68.58	68.61
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	24.08	30.06	33.23	30.55	8.04	18.98	26.53	30.70	30.73	25.12	12.41	19.74	16.96	5.19	5.05	19.98	5.38	5.39	22.40	5.35	4.95	4.76	7.86	5.02	5.22	20.98	5.22	5.19
LW-7R	FLUID LEVEL	58.55	66.55	65.85	62.02	81.71	65.56	63.55	63.63	82.80	82.46	83.17	82.46	82.63	70.82	68.18	68.34	68.24	68.24	67.37	67.89	82.53	75.70	70.34	83.02	82.85	74.39	80.88	83.04
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	32.45	24.45	25.15	28.98	9.29	25.44	27.45	27.37	8.20	8.54	7.83	8.54	8.37	20.18	22.82	22.66	22.76	22.76	23.63	23.11	8.47	15.30	20.66	7.98	8.15	16.61	10.12	7.96
LW-8R	FLUID LEVEL	74.06	69.11	74.11	54.42	74.11	65.56	59.64	53.23	74.74	74.47	74.96	74.28	74.47	74.32	74.40	64.89	74.18	74.17	59.21	74.22	74.67	74.18	73.31	73.25	73.25	73.26	73.99	73.87
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	11.14	16.09	11.09	30.78	11.09	19.64	25.56	31.97	10.46	10.73	10.24	10.92	10.73	10.88	10.80	20.31	11.02	11.03	25.99	10.98	10.53	11.02	11.89	11.95	11.95	11.94	11.21	11.33
LW-9R	FLUID LEVEL	45.05	30.36	45.14	26.89	45.11	45.01	45.27	45.04	45.66	45.40	45.84	45.19	47.46	47.38	29.23	25.34	25.62	28.77	24.08	25.95	25.89	43.12	28.79	27.92	25.04	23.54	42.46	30.34
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	7.95	22.64	7.86	26.11	7.89	7.99	7.73	7.96	7.34	7.60	7.16	7.81	5.54	5.62	23.77	27.66	27.38	24.23	28.92	27.05	27.11	9.88	24.21	25.08	27.96	29.46	10.54	22.66
LW-10	FLUID LEVEL	10.00	10.80	14.30	9.90	NM	NM	14.70	13.10	14.00	14.10	13.90	13.60	14.60	14.70	14.00	13.90	13.60	14.40	11.40	9.90	13.00	7.60	9.50	10.60	10.20	12.40	9.50	9.50
	MEASURED PIEZO DEPTH	14.60	14.60	14.70	14.60	NM	NM	14.80	14.80	14.70	14.80	14.80	14.80	14.80	14.80	14.70	14.80	14.70	14.80	14.80	14.80	14.00	14.80	14.70	14.80	14.70	14.80	14.80	14.40
	MEASURED COLUMN THICKNESS	4.80	4.00	0.50	4.90	NA	NA	0.10	1.70	0.80	0.70	0.90	1.20	0.20	0.10	0.80	0.90	1.20	0.40	3.40	4.90	1.80	7.20	5.30	4.20	4.60	2.40	5.30	5.30
LW-11R	FLUID LEVEL	39.21	34.53	39.20	31.53	39.06	39.02	31.53	31.94	31.58	30.47	39.96	39.35	39.47	39.39	27.77	32.24	39.15	39.09	36.28	37.10	31.77	38.63	38.82	39.26	39.34	39.40	39.16	39.17
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	8.79	13.47	8.80	16.47	8.94	8.98	15.95	16.06	16.42	17.53	8.04	8.65	8.53	8.61	20.23	15.76	8.85	8.91	11.72	10.90	16.23	9.37	9.18	8.74	8.66	8.60	8.84	8.83
LW-12R	FLUID LEVEL	Installed May 2019																											
LW-12R	MEASURED PIEZO DEPTH	Installed May 2019																											
LW-12R	MEASURED COLUMN THICKNESS	Installed May 2019																											
LW-13R	FLUID LEVEL	Installed May 2019																											
	MEASURED PIEZO DEPTH	Installed May 2019																											
	MEASURED COLUMN THICKNESS	Installed May 2019																											
LW-14	FLUID LEVEL	55.00	51.12	15.56	44.13	52.06	53.03	53.40	50.33	48.32	46.01	48.84	44.21	55.10	55.03	55.21	55.11	54.93	54.93	44.78	54.97	55.28	55.45	54.59	55.22	55.07	55.33	55.12	55.13
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	5.80	9.68	45.24	16.67	8.74	7.77	7.40	10.47	12.48	14.79	11.96	16.59	5.70	5.77	5.59	5.69	5.87	5.87	16.02	5.83	5.52	5.35	6.21	5.58	5.73	5.47	5.68	5.67
LW-15	FLUID LEVEL	37.88	37.46	37.90	27.59	37.89	37.86	37.98	33.90	44.83	44.86	44.84	45.03	45.05	45.06	45.04	45.03	45.03	35.79	45.03	44.58	44.34	44.22	43.75	43.27	41.95	41.83	41.78	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	14.62	15.04	14.60	24.91	14.61	14.64	14.52	18.60	7.67	7.64	7.66	7.47	7.45	7.44	7.46	7.47	7.47	7.47	16.71	7.47	7.92	8.16	8.28	8.75	9.23	10.55	10.67	10.72
LW-16	FLUID LEVEL	Installed May 2019																											
	MEASURED PIEZO DEPTH	Installed May 2019																											
	MEASURED COLUMN THICKNESS	Installed May 2019																											
LPZ-3 ⁽⁷⁾	FLUID LEVEL	26.80	26.70	26.90	27.00	26.90	26.60	26.80	26.90	26.90	26.80	26.90	26.90	26.90	26.90	27.00	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.80	26.70	27.00	26.10	26.10
	MEASURED PIEZO DEPTH	26.80	26.80	26.90	27.00	26.90	26.90	26.90	26.90	26.90	26.80	26.90	26.90	26.90	26.90	27.00	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	27.00	26.80
	MEASURED COLUMN THICKNESS	0.10	0.20	DRY	DRY	DRY	0.30	0.10	DRY	DRY	0.10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.10	0.20	DRY	0.80
LPZ-4 ⁽⁸⁾	FLUID LEVEL	11.90	11.90	11.90	11.90	7.30	8.70	11.90	11.90	11.90	11.90	11.85	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.80	11.80	11.80
	MEASURED PIEZO DEPTH	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
	MEASURED COLUMN THICKNESS	DRY	DRY	DRY	DRY	4.60	3.20	DRY	DRY	DRY	DRY	0.05	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.10	0.10	0.10
LPZ-5	FLUID LEVEL	13.30	2.30	4.60	2.00	8.70	9.80	11.20	1.70	13.70	13.50	13.60	13.60	13.60	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.60	13.40	13.50	13.50
	MEASURED PIEZO DEPTH	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.60	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70
	MEASURED COLUMN THICKNESS	0.40	11.4 ⁽⁹⁾	9.10	11.70	5.00	3.90	2.50	12.00	DRY	0.20	0.10	0.10	0.10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.10	0.30	0.20	0.20
LPZ-C1W ⁽⁹⁾	FLUID LEVEL	17.90	17.00	21.50	18.90	22.80	27.00	26.50	18.60	27.90	27.80	27.80	27.90	27.80	27.90	27.90	27.80	27.80	27.90	27.50	26.90	27.70	26.90	27.70	27.90	27.90	27.90	27.60	27.60
	MEASURED PIEZO DEPTH	17.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.80
	MEASURED COLUMN THICKNESS	DRY	10.9	6.4	9.0	5.1	0.9	1.4	9.3	DRY	0.1	0.																	

Historical Leachate Column Thicknesses
 2025 Leachate Control System Performance Evaluation Report
 Des Moines County Regional Sanitary Landfill
 Permit No. 29-SDP-01-76P

Leachate Piezometer		Date of Measurement																												
		9/26/17 ⁽³⁷⁾	10/13/17	11/20/17 ⁽³⁸⁾	12/19/17	1/31/18 ⁽³⁹⁾	02/23/18	03/28/18	4/17/18 ⁽⁴⁰⁾	05/24/18	06/21/18	07/31/18	08/20/18	09/21/18	10/25/18	11/13/18 ⁽⁴¹⁾	12/17/18	1/15/19 ⁽⁴²⁾	2/13/19 ⁽⁴³⁾	3/28/19 ⁽⁴⁴⁾	04/30/19	05/23/19	06/26/19	07/31/19	08/28/19	09/24/19	10/31/19 ⁽⁴⁵⁾	11/22/19	12/31/19	
LW-3	FLUID LEVEL	12.80	12.90	12.50	13.60	14.80	6.20	8.60	10.00	11.30	12.80	14.90	14.00	13.20	12.30	11.00	9.30	NM	9.80	14.90	16.10	8.90	11.50	11.60	12.00	12.20	12.10	11.30	10.00	
	MEASURED PIEZO DEPTH	28.10	28.00	28.00	26.10	27.10	28.00	27.90	28.20	28.10	28.20	24.10	24.20	28.20	28.20	28.20	28.20	NM	28.20	28.20	28.20	28.00	28.00	28.20	28.00	28.00	28.00	28.10	28.20	
	MEASURED COLUMN THICKNESS	15.40	15.30	15.70	14.60	13.40	22.00	19.60	18.20	16.90	15.40	13.30	14.20	15.00	15.90	17.20	18.90	NA	18.40	13.30	12.10	19.30	16.70	16.60	16.20	16.00	16.10	16.90	18.20	
LW-4R ⁽³⁾	FLUID LEVEL	73.82	73.77	73.89	73.76	73.88	73.51	73.78	73.83	73.85	74.34	74.18	74.49	75.03	74.70	74.96	74.64	55.13	74.98	66.49	72.55	75.32	47.17	78.55	78.56	78.54	NM	NM	78.54	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	8.18	8.23	8.11	8.24	8.12	8.49	8.22	8.17	8.15	7.66	7.82	7.51	6.97	7.30	7.04	7.36	26.87	7.02	15.51	9.45	6.68	34.83	3.45	3.44	3.46	NM	NA	3.46	
LW-6R	FLUID LEVEL	68.75	68.64	60.32	60.43	56.72	55.41	52.74	51.97	50.94	50.38	71.02	71.33	65.62	70.62	64.59	61.76	69.04	61.85	53.83	56.42	53.30	51.12	63.45	61.89	62.47	61.18	61.91	55.97	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	5.05	5.16	13.48	13.37	17.08	18.39	21.06	21.83	22.86	23.42	2.78	2.47	8.18	3.18	9.21	12.04	4.76	11.95	19.97	17.38	20.50	22.68	10.35	11.91	11.33	12.62	11.89	17.83	
LW-7R	FLUID LEVEL	72.80	83.32	83.68	73.55	69.53	68.94	68.54	83.56	83.60	84.36	84.44	81.98	84.96	NM	82.29	78.80	78.36	84.93	84.86	69.92	67.79	82.63	70.10	82.50	74.75	69.77	68.78	70.53	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	18.20	7.68	7.32	17.45	21.47	22.06	22.46	7.44	7.40	6.64	6.56	9.02	6.04	NA	8.71	12.20	12.64	6.07	6.14	21.08	23.21	8.37	20.90	8.50	16.25	21.23	22.22	20.47	
LW-8R	FLUID LEVEL	74.08	83.32	75.34	42.04	49.47	52.49	44.27	59.62	56.68	62.76	62.59	63.77	63.68	64.44	57.58	61.79	54.56	58.29	54.63	56.10	53.48	58.08	54.12	58.52	58.92	55.38	59.17	55.85	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	11.12	1.88	9.86	43.16	35.73	32.71	40.93	25.58	28.52	22.44	22.61	21.43	21.52	20.76	27.62	23.41	30.64	26.91	30.57	29.10	31.72	27.12	31.08	26.68	26.28	29.82	26.03	29.35	
LW-9R	FLUID LEVEL	40.12	42.39	32.38	31.20	40.36	32.89	31.09	29.54	27.12	26.20	30.84	25.24	23.92	24.49	24.98	23.49	22.81	22.52	22.69	25.84	22.73	24.15	28.06	25.69	25.00	24.49	24.26	26.25	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	12.88	10.61	20.62	21.80	12.64	20.11	21.91	23.46	25.88	26.80	22.16	27.76	29.08	28.51	28.02	29.51	30.19	30.48	30.31	27.16	30.27	28.85	24.94	27.31	28.00	28.51	28.74	26.75	
LW-10	FLUID LEVEL	12.70	10.30	6.50	10.80	13.60	6.60	9.60	9.40	9.70	9.50	9.80	9.50	9.70	9.10	9.40	9.40	NM	9.60	9.60	9.90	9.40	10.50	9.60	9.50	9.40	9.50	8.50	8.50	
	MEASURED PIEZO DEPTH	14.70	14.20	14.70	14.70	14.40	14.70	14.70	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	NM	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	
	MEASURED COLUMN THICKNESS	2.10	4.50	8.30	4.00	1.20	8.20	5.20	5.40	5.10	5.30	5.00	5.30	5.10	5.70	5.40	5.40	NA	5.20	5.20	4.90	5.40	4.30	5.20	5.30	5.40	5.30	6.30	6.30	
LW-11R	FLUID LEVEL	39.40	39.17	38.48	39.24	NM	NM	39.15	35.16	39.04	39.14	38.42	38.69	38.37	38.31	38.36	31.41	31.15	31.02	30.62	30.37	30.24	33.08	39.93	40.07	40.20	40.02	39.93	40.25	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	8.60	8.83	9.52	8.76	NM	NM	8.85	12.84	8.96	8.86	9.58	9.31	9.63	9.69	9.64	16.59	16.85	16.98	17.38	17.63	17.76	14.92	8.07	7.93	7.80	7.98	8.07	7.75	
LW-12R	FLUID LEVEL	Installed May 2019																							72.26	72.27	72.26	NM	72.29	72.28
	MEASURED PIEZO DEPTH																								NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS																								9.74	9.73	9.74	NA	9.71	9.72
LW-13R	FLUID LEVEL	Installed May 2019																							96.95	93.66	96.82	96.83	96.88	96.76
	MEASURED PIEZO DEPTH																								NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS																								14.05	17.34	14.18	14.17	14.12	14.24
LW-14	FLUID LEVEL	55.26	55.22	55.41	55.41	55.50	55.01	55.32	55.36	55.42	55.92	55.63	55.93	55.69	55.67	55.90	55.57	55.76	55.88	17.47	48.30	48.01	50.90	57.48	57.48	57.47	57.44	57.44		
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	5.54	5.58	5.39	5.39	5.30	5.79	5.48	5.44	5.38	4.88	5.17	4.87	5.11	5.13	4.90	5.23	5.04	4.92	43.33	12.50	12.79	9.90	3.32	3.32	3.33	3.34	3.36	3.35	
LW-15	FLUID LEVEL	32.90	33.36	40.88	39.39	38.38	36.69	36.85	36.04	39.05	39.21	39.16	39.09	39.44	30.01	39.84	39.74	38.38	34.55	27.41	25.76	39.23	38.97	38.30	37.47	37.01	36.70	33.78	27.61	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	19.60	19.14	11.62	13.11	14.12	15.81	15.65	16.46	13.45	13.29	13.34	13.41	13.06	22.49	12.66	12.76	14.12	17.95	25.09	26.74	13.27	13.53	14.20	15.03	15.49	15.80	18.72	24.89	
LW-16	FLUID LEVEL	Installed May 2019																							38.11	38.53				
	MEASURED PIEZO DEPTH																								NM	NM				
	MEASURED COLUMN THICKNESS																								6.89	6.47				
LPZ-3 ⁽⁷⁾	FLUID LEVEL	26.90	26.70	27.00	27.00	26.90	27.00	26.90	26.90	27.00	26.90	26.80	26.50	26.80	26.80	26.70	26.70	NM	22.20	26.40	26.50	26.90	25.50	26.60	26.10	26.90	26.30	26.60	24.00	
	MEASURED PIEZO DEPTH	26.90	26.90	27.00	27.00	26.90	27.00	26.90	26.90	27.00	26.90	26.80	26.90	26.90	26.90	26.90	26.90	NM	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.90	26.80	
	MEASURED COLUMN THICKNESS	DRY	0.20	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.10	0.40	0.10	0.20	0.20	NA	4.70	0.50	0.40	DRY	1.40	0.30	0.80	DRY	0.60	0.30	2.90	
LPZ-4 ⁽⁸⁾	FLUID LEVEL	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.50	11.50	11.90	11.90	11.90	NM	11.70	11.40	11.30	11.40	11.00	11.60	11.50	11.30	11.40	10.60	8.00	
	MEASURED PIEZO DEPTH	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	NM	11.90	11.90	11.90	11.80	11.90	11.90	11.80	11.90	11.80	13.60	11.90	
	MEASURED COLUMN THICKNESS	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	0.40	0.40	DRY	DRY	DRY	NA	0.20	0.50	0.60	0.50	0.90	0.30	0.40	0.60	0.50	1.30	3.90	
LPZ-5	FLUID LEVEL	13.70	13.30	13.00	13.70	13.70	13.60	9.60	10.60	13.40	11.20	13.70	11.20	13.70	12.50	4.10	4.00	NM	4.10	10.50	10.20	10.20	9.90	10.80	7.00	9.60	9.30	8.10	5.60	
	MEASURED PIEZO DEPTH	13.70	13.50	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	NM	13.70	13.70	13.70	13.70	13.70	13.70	13.60	13.70	13.60	13.70	13.60	
	MEASURED COLUMN THICKNESS	DRY	0.40	0.70	DRY	DRY	0.10	4.10	3.10	0.30	2.50	DRY	2.50	DRY	1.20	9.60	9.70	NA	9.60	3.20	3.50	3.50	3.80	2.90	6.70	4.10	4.40	5.60	8.10	
LPZ-C1W ⁽⁹⁾	FLUID LEVEL	27.80	27.80	28.00	27.80	27.90	27.80	13.70	27.70	27.90	27.70	27.70	27.60	27.50	26.30	20.50	20.40	NM	20.80	27.10	27.30	26.90	26.70	23.00	24.00	23.70	23.50	23.00		
	MEASURED PIEZO DEPTH	27.90	27.90	28.00	27.90	27.90	27.90	27.90	27.90	27.90	27.90	27.80	27.90	27.90	27.90	27.70	27.90	NM	27.90	27.90	27.90	27.90								

Historical Leachate Column Thicknesses
 2025 Leachate Control System Performance Evaluation Report
 Des Moines County Regional Sanitary Landfill
 Permit No. 29-SDP-01-76P

Leachate Piezometer		Date of Measurement																																
		01/31/20	02/26/20	03/26/20	04/30/20	05/28/20	6/24/20 ⁽⁸⁾	7/31/20 ^(14,30)	08/28/20	9/25/20 ⁽⁵¹⁾	10/30/20	11/23/20	12/21/20	01/25/21	02/18/21	03/29/21	04/30/21	05/28/21	06/30/21	07/25/21	08/25/21	09/24/21	10/27/21	11/23/21	12/14/21	01/26/22	02/14/22	03/02/22	04/25/22	05/24/22	06/20/22	07/13/22	08/24/22	
LW-3	FLUID LEVEL	10.60	11.30	10.70	11.10	10.90	11.00	10.80	10.50	11.30	11.70	11.90	11.10	10.90	10.60	10.20	10.40	11.10	10.90	11.40	11.40	11.70	11.60	11.60	11.60	12.30	11.90	9.90	10.00	10.10	10.30	10.50		
	MEASURED PIEZO DEPTH	28.20	28.20	28.20	28.10	28.10	28.10	28.10	28.10	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	NM	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20		
	MEASURED COLUMN THICKNESS	17.60	16.90	17.50	17.10	17.30	17.20	17.40	17.70	17.70	16.90	16.50	16.30	17.10	17.30	17.60	18.00	17.80	17.10	17.30	17.40	17.00	16.80	16.50	16.60	16.60	15.90	16.30	18.30	18.20	18.10	17.90	17.70	
LW-4R ⁽³⁾	FLUID LEVEL	78.54	NM	NM	NM	78.50	78.47	NM	67.47	68.19	68.30	78.32	79.33	79.26	79.22	76.00	79.32	79.27	56.26	52.07	49.62	47.27	45.74	49.52	69.05	50.94	49.55	79.33	79.25	79.22	79.26	79.30	79.36	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM		
	MEASURED COLUMN THICKNESS	3.46	NA	NA	NA	3.50	3.53	NA	14.53	13.81	13.70	3.68	2.67	2.74	2.78	6.00	2.68	2.73	25.74	29.93	32.38	34.73	36.26	32.48	12.95	31.06	32.45	2.67	2.75	2.78	2.74	2.70	2.64	
LW-6R	FLUID LEVEL	60.86	59.70	53.70	52.21	71.32	66.14	56.46	63.30	61.96	63.30	66.75	62.96	70.82	60.87	70.62	63.17	61.96	57.12	54.00	52.03	51.24	50.96	50.93	51.79	50.15	50.01	49.47	50.27	70.80	70.77	70.90	70.76	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	12.94	14.10	20.10	21.59	2.48	7.66	17.34	10.50	11.84	10.50	7.05	10.84	2.98	12.93	3.18	10.63	11.84	16.68	19.80	21.77	22.56	22.84	22.87	22.01	23.65	23.79	24.33	23.53	3.00	3.03	2.90	3.04	
LW-7R	FLUID LEVEL	68.55	67.98	67.14	66.58	74.68	76.20	67.98	70.89	68.92	75.09	76.22	72.03	76.28	76.85	84.02	76.91	79.28	74.88	72.18	71.25	70.05	69.07	70.17	72.46	69.75	69.14	76.93	81.85	77.35	81.13	84.51	79.79	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	22.45	23.02	23.86	24.44	16.32	14.80	23.02	20.11	22.08	15.91	14.78	18.97	14.72	14.15	6.98	14.09	11.72	16.12	18.82	19.75	20.95	21.93	20.83	18.54	21.25	21.86	14.07	9.15	13.65	9.87	6.49	11.21	
LW-8R	FLUID LEVEL	56.83	53.22	52.80	56.71	74.36	74.38	74.34	74.61	74.43	74.06	71.50	73.92	74.46	71.84	74.48	74.24	72.24	59.88	56.18	53.75	51.94	50.63	58.95	68.44	55.82	54.43	74.46	74.68	74.90	74.46	74.57	74.59	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	28.37	31.98	32.40	28.49	10.84	10.82	10.86	10.59	10.77	11.14	13.70	11.28	10.74	13.36	10.72	10.96	12.96	25.32	29.02	31.45	33.26	34.57	26.25	16.76	29.38	30.77	10.74	10.52	10.30	10.74	10.63	10.61	
LW-9R	FLUID LEVEL	29.28	27.56	31.46	36.77	47.46	47.50	47.47	37.26	40.66	47.15	41.58	40.16	44.77	42.07	46.31	46.22	44.50	31.25	28.67	36.47	25.94	25.53	29.38	37.25	NM	26.08	46.34	41.19	46.62	46.38	46.63	43.91	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	23.72	25.44	21.54	16.23	5.54	5.50	5.53	15.74	12.34	5.85	11.42	12.84	8.23	10.93	6.69	6.78	8.50	21.75	24.33	26.13	27.06	27.47	23.62	15.75	NA	26.92	6.66	11.81	6.38	6.62	6.37	9.09	
LW-10	FLUID LEVEL	9.30	9.50	9.40	9.10	8.90	9.20	9.40	9.20	9.30	9.30	8.50	9.10	9.50	9.60	9.40	9.10	9.30	9.40	9.00	8.80	9.10	9.20	9.30	9.40	9.60	9.60	9.50	9.60	9.40	9.00	9.20	9.20	
	MEASURED PIEZO DEPTH	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	
	MEASURED COLUMN THICKNESS	5.50	5.30	5.40	5.70	5.90	5.60	5.40	5.60	5.50	5.50	6.30	5.70	5.30	5.20	5.40	5.70	5.50	5.40	5.80	6.00	5.70	5.60	5.50	5.40	5.40	5.20	5.30	5.20	5.30	5.40	5.80	5.60	5.60
LW-11R	FLUID LEVEL	33.19	33.06	40.23	40.13	42.00	42.24	42.19	NM	NM	NM	41.97	39.65	42.34	42.00	34.15	40.92	40.46	33.90	33.76	32.22	32.58	32.38	30.56	32.76	35.57	32.06	32.00	39.66	38.23	38.22	40.75	41.26	41.19
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	14.81	14.94	7.77	7.87	6.00	5.76	5.81	NA	NA	6.03	8.35	5.66	6.00	13.85	7.08	7.54	14.10	14.24	15.78	15.42	15.62	17.44	15.24	12.43	15.94	16.00	8.34	9.77	9.18	7.25	6.74	6.81	
LW-12R	FLUID LEVEL	72.26	72.27	72.25	72.24	72.80	72.21	72.18	72.16	72.15	72.20	70.38	72.17	72.21	70.83	72.18	72.16	67.50	59.65	55.00	53.15	51.51	50.64	58.44	67.96	NM	54.62	72.34	72.16	72.16	72.13	72.13		
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	9.74	9.73	9.75	9.76	9.20	9.79	9.82	9.84	9.85	9.80	11.62	9.83	9.79	11.17	9.82	9.84	14.50	22.35	27.00	28.85	30.49	31.36	23.56	14.04	NA	27.38	9.66	9.84	9.84	9.87	9.87		
LW-13R	FLUID LEVEL	96.52	96.75	96.81	96.85	96.86	96.87	96.89	96.85	96.82	96.92	96.89	96.90	96.94	96.59	96.94	96.79	95.73	74.99	63.11	53.15	NM	49.60	70.05	89.63	61.75	57.99	96.51	97.26	97.40	97.48	97.60		
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	14.48	14.25	14.19	14.15	14.14	14.13	14.11	14.15	14.18	14.08	14.11	14.10	14.06	14.41	14.06	14.21	15.27	36.01	47.89	57.85	NA	61.40	40.95	21.37	49.25	53.01	14.49	13.74	13.60	13.52	13.40		
LW-14	FLUID LEVEL	57.45	57.45	57.47	57.49	57.49	57.49	57.49	57.49	57.48	57.47	56.95	57.48	57.44	57.43	57.46	57.47	51.33	50.75	47.06	44.62	43.75	42.76	51.65	56.13	47.03	45.73	57.46	54.10	57.46	57.49	57.50		
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	3.35	3.35	3.33	3.31	3.31	3.31	3.31	3.31	3.31	3.32	3.33	3.85	3.32	3.36	3.37	3.34	3.33	9.47	10.05	13.74	16.18	17.05	18.04	9.15	4.67	13.77	15.07	3.34	6.70	3.34	3.31	3.30	
LW-15	FLUID LEVEL	25.47	26.26	21.51	21.32	44.34	37.92	38.06	37.31	36.32	38.62	38.54	38.54	40.57	47.97	47.97	47.95	47.99	47.97	47.98	47.99	NM	48.01	48.02	48.02	48.03	48.03	48.01	40.51	42.33	45.32	43.06	45.73	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	27.03	26.24	30.99	31.18	8.16	14.58	14.44	15.19	16.18	13.88	12.66	13.96	11.93	4.53	4.53	4.55	4.51	4.52	4.51	NA	4.49	4.48	4.48	4.47	4.47	4.47	11.99	10.17	7.18	9.44	6.77		
LW-16	FLUID LEVEL	38.82	38.55	37.55	36.71	35.98	37.14	39.02	38.92	38.92	38.57	38.95	39.15	38.40	38.86	37.68	38.01	37.06	37.82	37.34	37.81	38.66	NM	40.48	40.49	NM	40.50	40.50	40.31	40.49	40.51	40.47	38.64	
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
	MEASURED COLUMN THICKNESS	6.18	6.45	7.45	8.29	9.02	7.86	5.98	6.08	6.08	6.43	6.05	5.85	6.60	6.14	7.32	6.99	7.94	7.18	7.66	7.19	6.34	NA	4.52	4.51	NA	4.50	4.50	4.69	4.51	4.49	4.53	6.36	
LPZ-3 ⁽⁷⁾	FLUID LEVEL	22.00	26.70	26.50	26.30	26.10	26.00	36.00	35.																									

Historical Leachate Column Thicknesses
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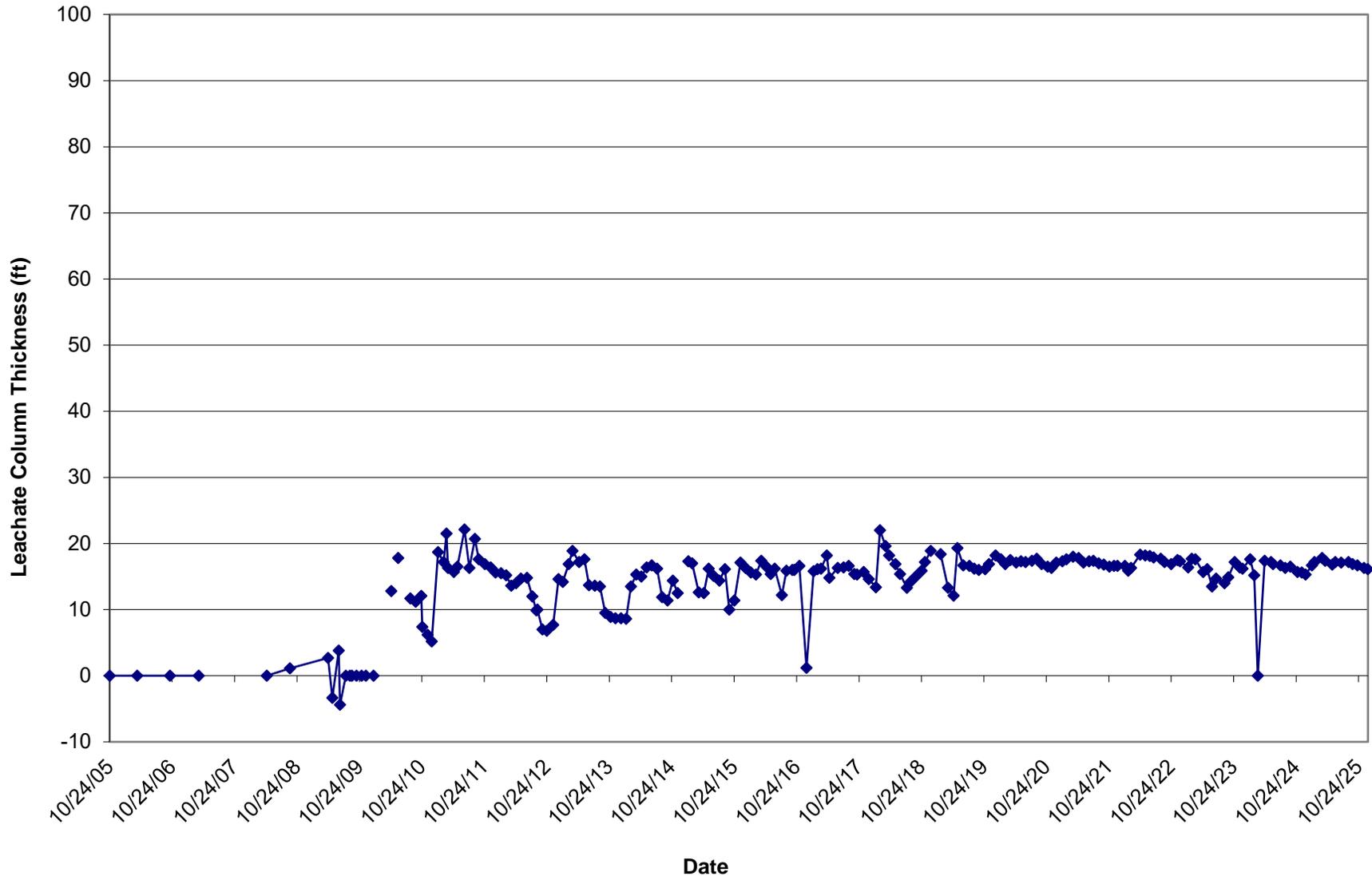
Leachate Piezometer		Date of Measurement											
		01/24/25	02/07/25	03/24/25	04/11/25	05/22/25	06/10/25	07/14/25	08/25/25	09/19/25	10/17/25	11/24/25	12/16/25
LW-3	FLUID LEVEL	11.50	11.00	10.40	10.80	11.40	11.00	11.10	11.00	11.30	11.50	11.90	12.10
	MEASURED PIEZO DEPTH	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20	28.20
	MEASURED COLUMN THICKNESS	16.70	17.20	17.80	17.40	16.80	17.20	17.10	17.20	16.90	16.70	16.30	16.10
LW-4R ⁽³⁾	FLUID LEVEL	59.74	55.83	78.06	78.06	77.87	64.12	53.06	62.77	77.71	77.71	78.02	77.71
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	22.26	26.17	3.94	3.94	4.13	17.88	28.94	19.23	4.29	4.29	3.98	4.29
LW-6R	FLUID LEVEL	62.83	62.04	71.02	70.80	70.95	70.95	70.96	70.89	70.99	70.96	71.05	70.99
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	10.97	11.76	2.78	3.00	2.85	2.85	2.84	2.91	2.81	2.84	2.75	2.81
LW-7R	FLUID LEVEL	84.97	84.06	80.93	80.27	84.06	83.18	83.28	80.17	83.84	84.40	76.01	84.58
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	6.03	6.94	10.07	10.73	6.94	7.82	7.72	10.83	7.16	6.60	14.99	6.42
LW-8R	FLUID LEVEL	65.97	62.11	75.56	75.35	75.31	75.49	74.82	74.90	74.04	72.81	75.08	64.33
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	19.23	23.09	9.64	9.85	9.89	9.71	10.38	10.30	11.16	12.39	10.12	20.87
LW-9R	FLUID LEVEL	41.96	47.77	47.91	47.92	47.89	47.89	47.87	47.76	47.02	47.78	47.69	47.83
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	11.04	5.23	5.09	5.08	5.11	5.11	5.13	5.24	5.98	5.22	5.31	5.17
LW-10	FLUID LEVEL	9.00	9.10	9.30	9.20	9.00	9.10	9.30	8.80	8.40	8.70	8.60	8.90
	MEASURED PIEZO DEPTH	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80
	MEASURED COLUMN THICKNESS	5.8	5.7	5.5	5.6	5.8	5.7	5.5	6	6.4	6.1	6.2	5.9
LW-11R	FLUID LEVEL	38.54	37.98	41.56	41.82	41.37	41.53	41.54	41.37	41.49	41.80	41.74	41.83
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	9.46	10.02	6.44	6.18	6.63	6.47	6.46	6.63	6.51	6.20	6.26	6.17
LW-12R	FLUID LEVEL	71.96	65.69	71.98	71.99	72.09	71.92	72.17	71.98	71.96	72.15	72.05	72.11
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	10.04	16.31	10.02	10.01	9.91	10.08	9.83	10.02	10.04	9.85	9.95	9.89
LW-13R	FLUID LEVEL	97.29	89.07	97.67	96.82	96.81	96.82	96.82	96.82	96.85	96.79	96.85	96.70
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	13.71	21.93	13.33	14.18	14.19	14.18	14.18	14.18	14.15	14.21	14.15	14.30
LW-14	FLUID LEVEL	54.00	52.87	56.95	56.97	56.96	56.92	56.85	56.97	56.85	56.92	57.00	56.99
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	6.80	7.93	3.85	3.83	3.84	3.88	3.95	3.83	3.95	3.88	3.80	3.81
LW-15	FLUID LEVEL	41.32	41.39	47.94	41.57	41.58	41.45	41.52	42.34	48.11	41.61	48.37	43.84
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	11.18	11.11	4.56	10.93	10.92	11.05	10.98	10.16	4.39	10.89	4.13	8.66
LW-16	FLUID LEVEL	NM	38.86	39.05	38.86	38.70	38.77	38.77	38.97	38.83	38.90	39.01	39.05
	MEASURED PIEZO DEPTH	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	MEASURED COLUMN THICKNESS	NM	6.14	5.95	6.14	6.30	6.23	6.23	6.03	6.17	6.10	5.99	5.95
LPZ-3 ⁽⁷⁾	FLUID LEVEL	38.40	38.40	38.30	38.40	38.40	38.40	38.40	38.40	38.30	38.40	38.40	38.30
	MEASURED PIEZO DEPTH	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40	38.40
	MEASURED COLUMN THICKNESS	DRY	DRY	0.10	DRY	DRY	DRY	DRY	DRY	0.10	DRY	DRY	0.10
LPZ-4 ⁽⁸⁾	FLUID LEVEL	11.90	11.90	11.80	11.90	11.90	11.80	11.90	11.90	11.80	11.90	11.90	11.80
	MEASURED PIEZO DEPTH	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
	MEASURED COLUMN THICKNESS	DRY	DRY	0.10	DRY	DRY	0.10	DRY	DRY	0.10	DRY	DRY	0.10
LPZ-5	FLUID LEVEL	13.70	13.70	13.60	13.70	13.50	13.60	13.70	13.70	13.50	13.60	13.50	13.60
	MEASURED PIEZO DEPTH	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70	13.70
	MEASURED COLUMN THICKNESS	DRY	DRY	0.10	DRY	0.20	0.10	DRY	DRY	0.20	0.10	0.20	0.10
LPZ-C1W ⁽⁹⁾	FLUID LEVEL	27.8	27.7	27.9	27.7	27.701	27.8	27.9	27.9	27.9	27.8	27.8	27.9
	MEASURED PIEZO DEPTH	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9	27.9
	MEASURED COLUMN THICKNESS	0.10	0.20	DRY	0.20	0.20	0.10	DRY	DRY	DRY	0.10	0.10	DRY
		01/24/25	02/07/25	03/24/25	04/11/25	05/22/25	06/10/25	07/14/25	08/25/25	09/19/25	10/17/25	11/24/25	12/16/25
LM-1	Cell 1	9.01	9.00	8.99	8.99	8.99	9.00	NM	8.99	8.98	8.98	8.99	8.99
LM-2	Cell 2	12.63	12.63	12.63	12.63	12.63	12.63	12.63	12.63	NM	12.63	12.63	12.63
LPZ-6	Cell 5 Sump	3.30	3.41	3.29	3.28	3.35	3.3	3.21	3.09	3.27	3.24	3.29	3.27
LPZ-7	Cell 5	11.59	11.59	NM	NM	NM	11.59	11.59	3.37	2.19	2.02	0.97	0.9

Notes: Measured Column Thickness is based on average total depths in 2009 (excluding anomalies) or as-built information when available.
 NM = Not measured, NV = Not valid data, NA=Not available, NI=Not Installed

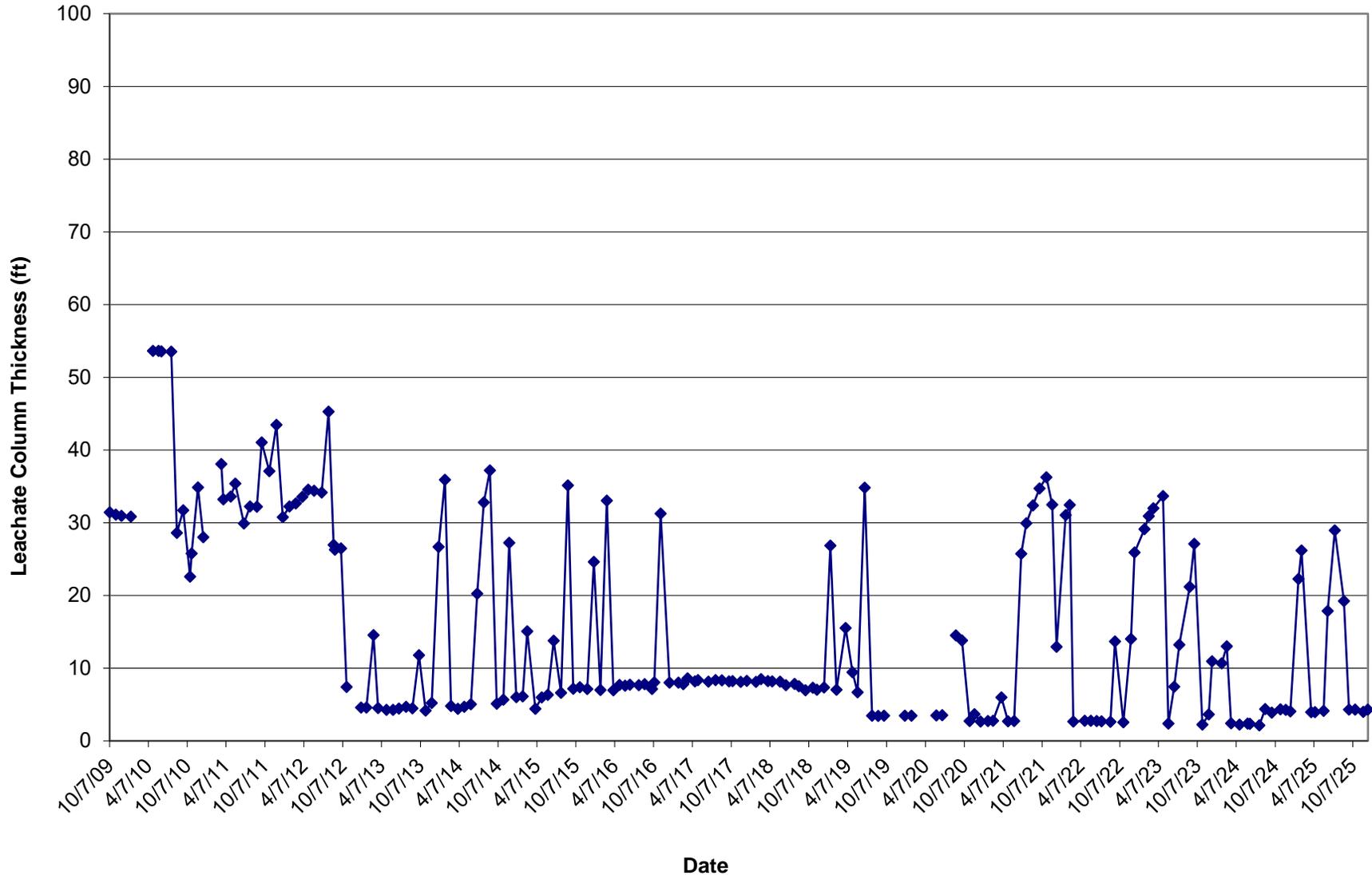
Attachment C

Historical Leachate Column Thickness Graphs

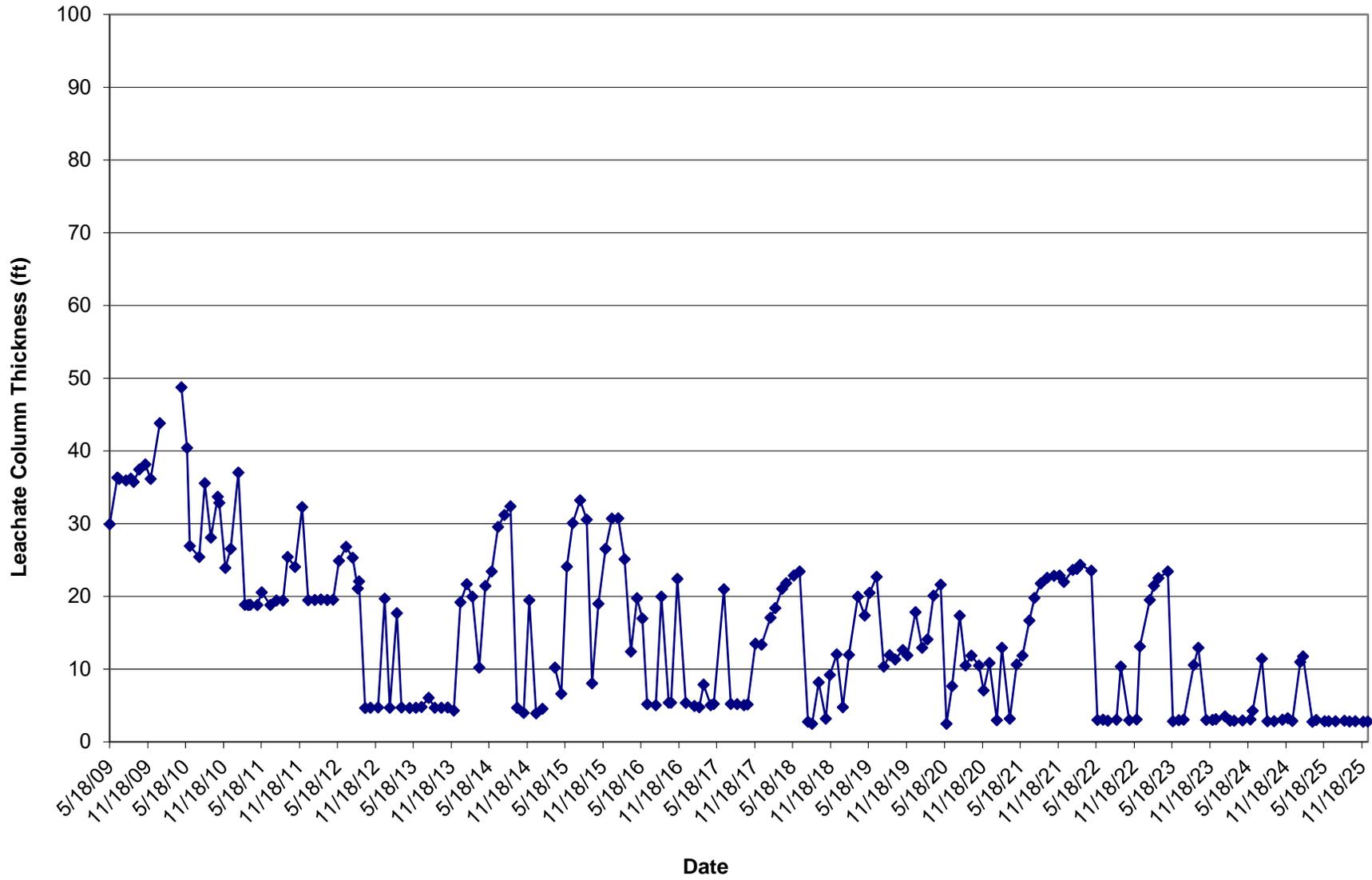
LW-3



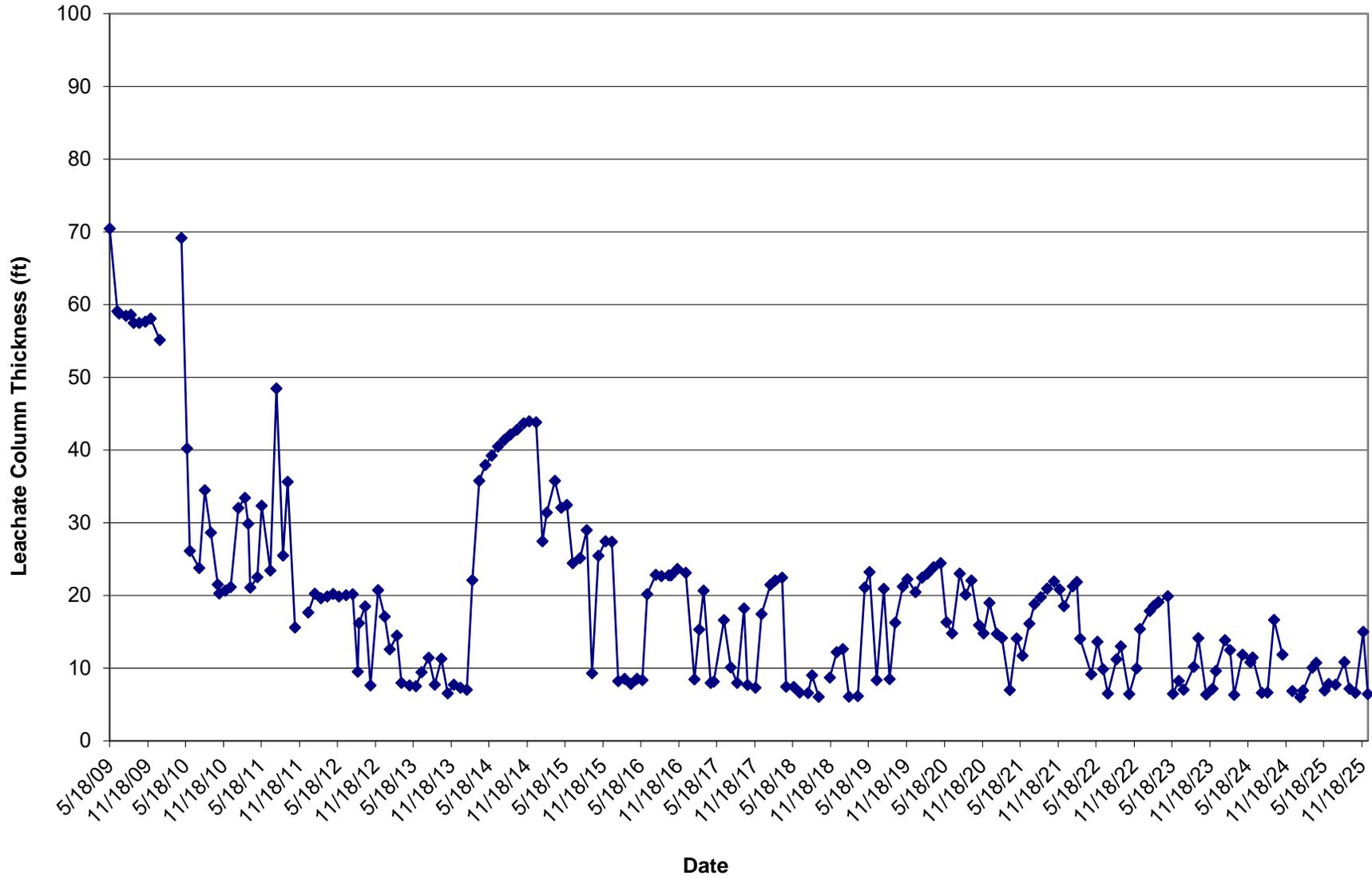
LW-4R



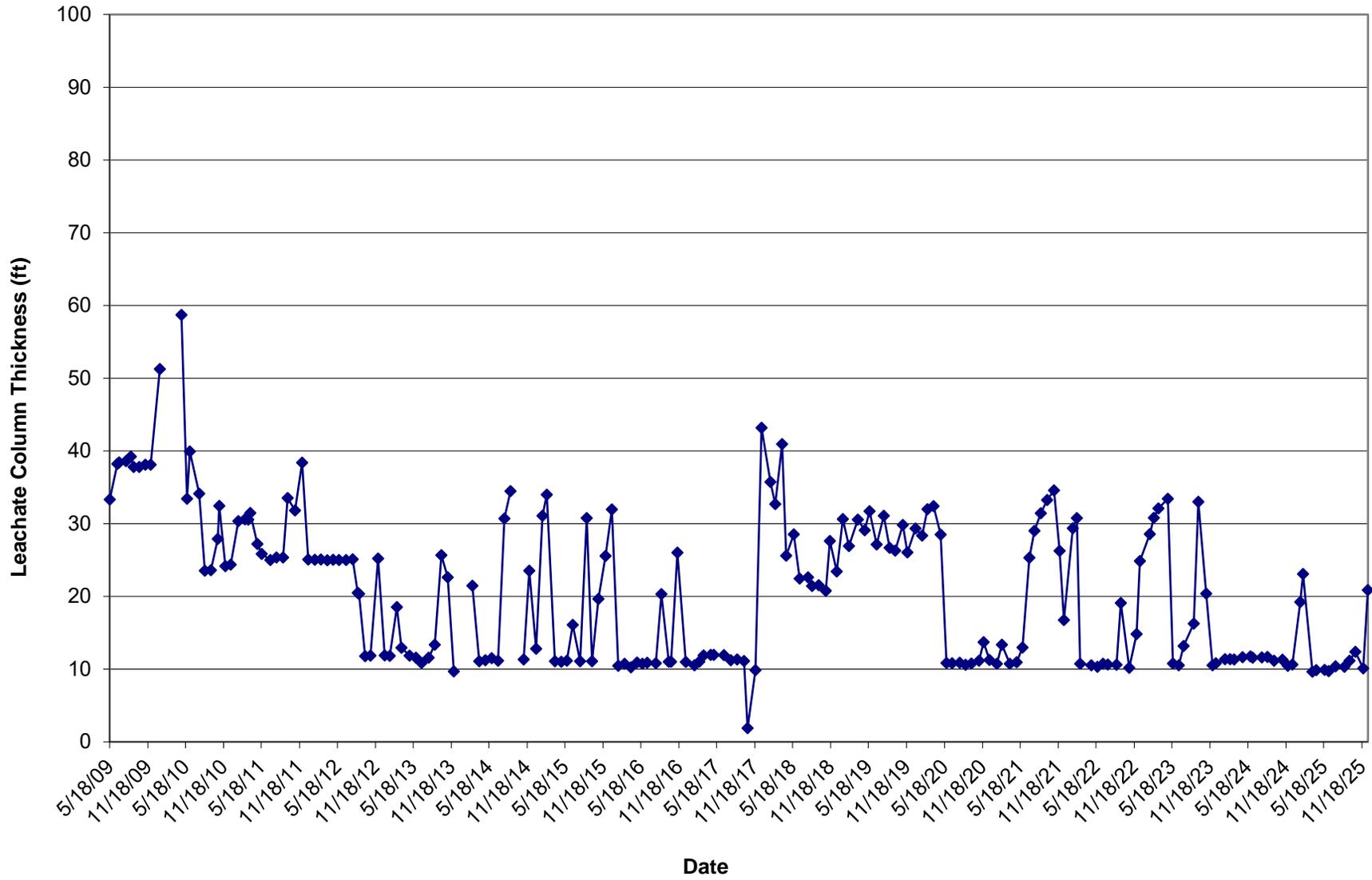
LW-6R



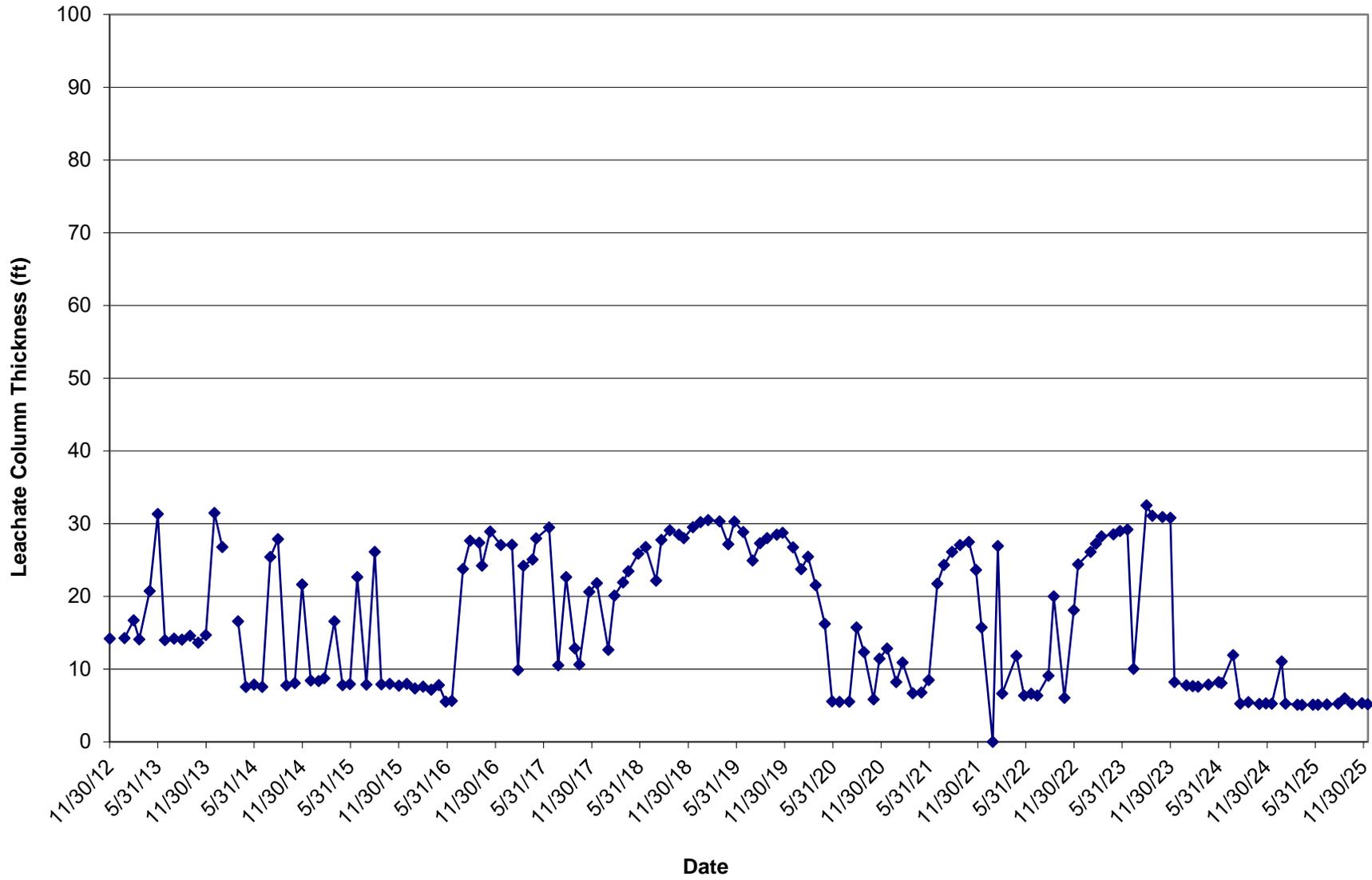
LW-7R



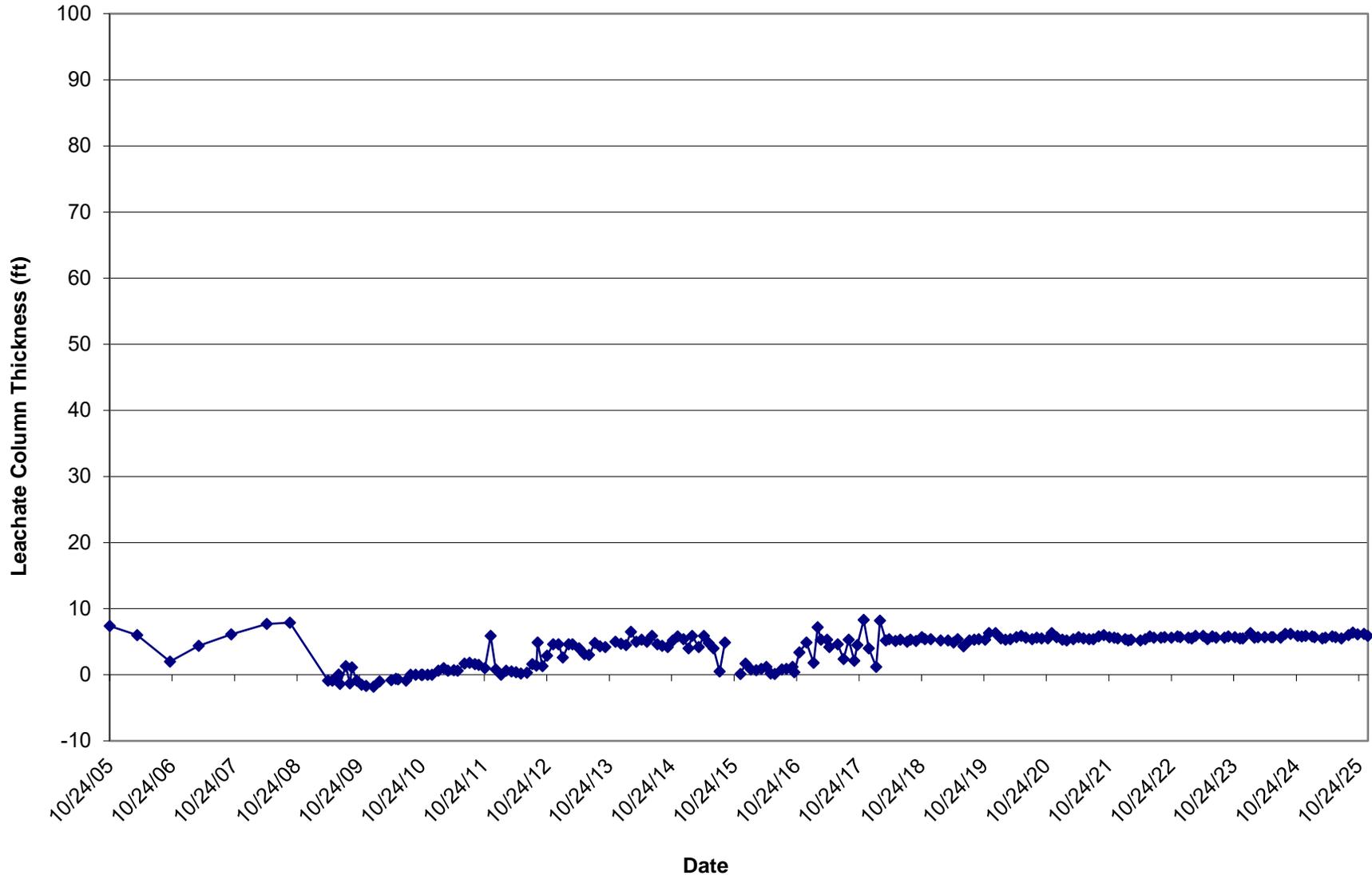
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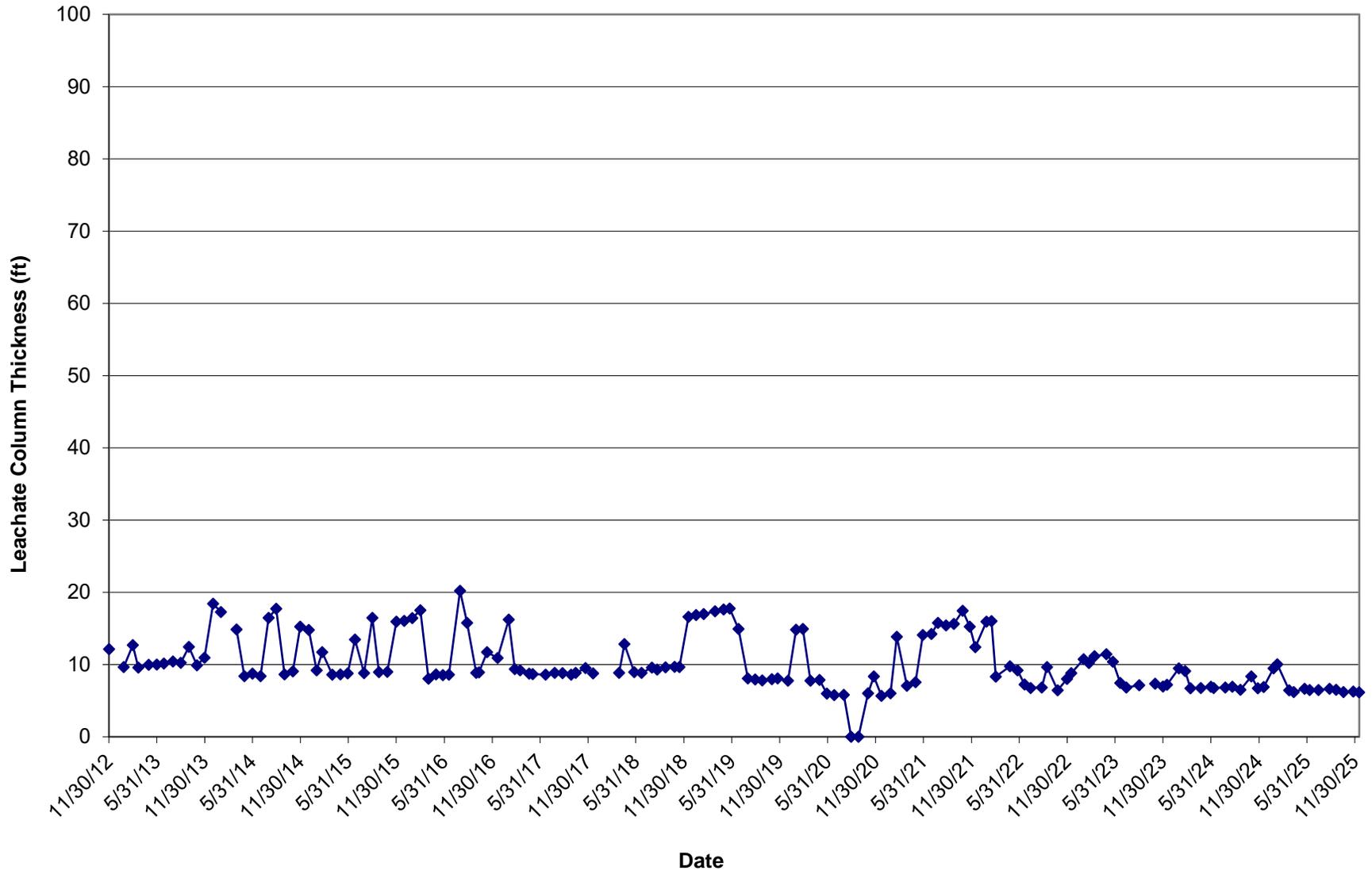
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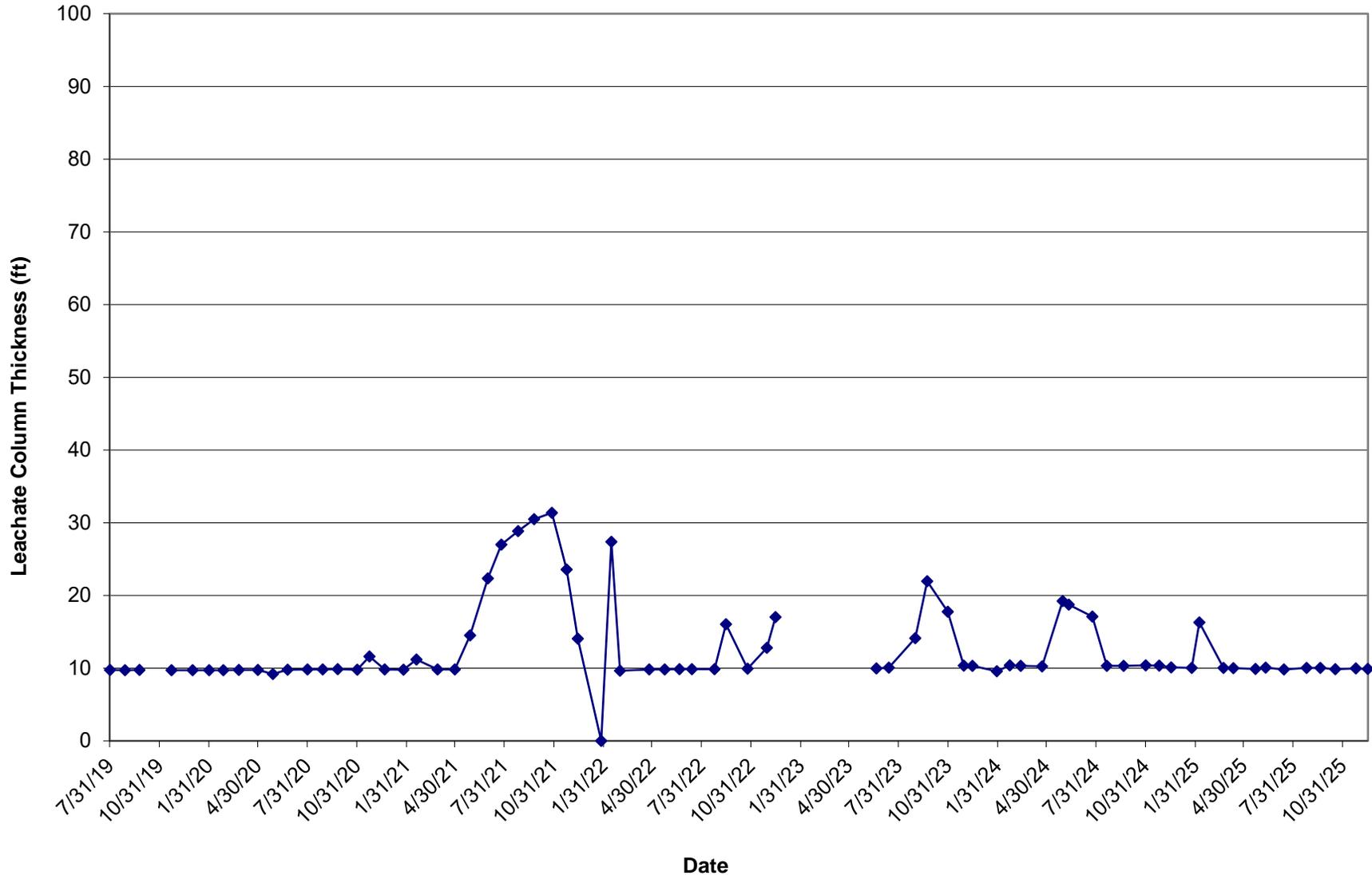
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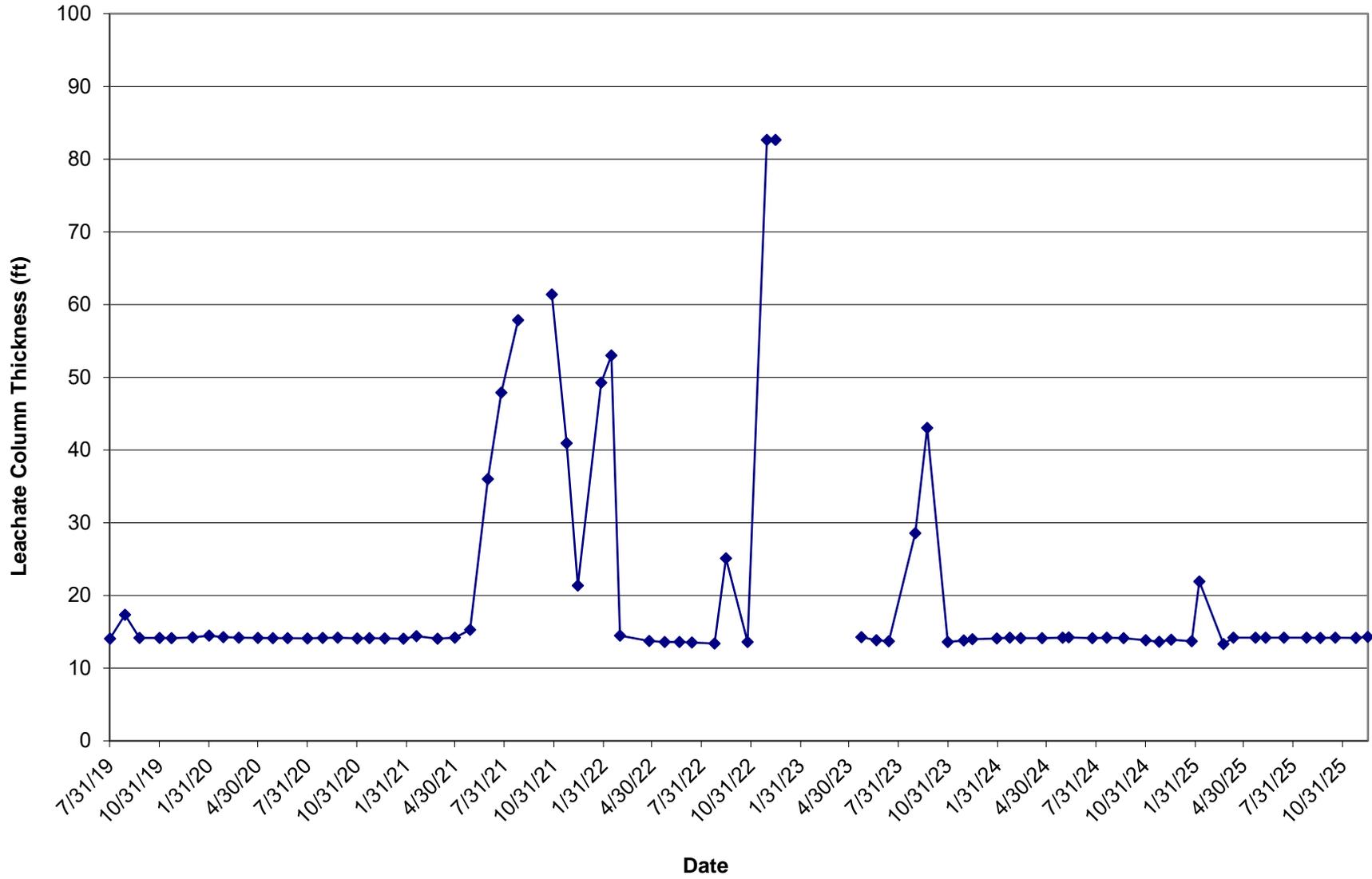
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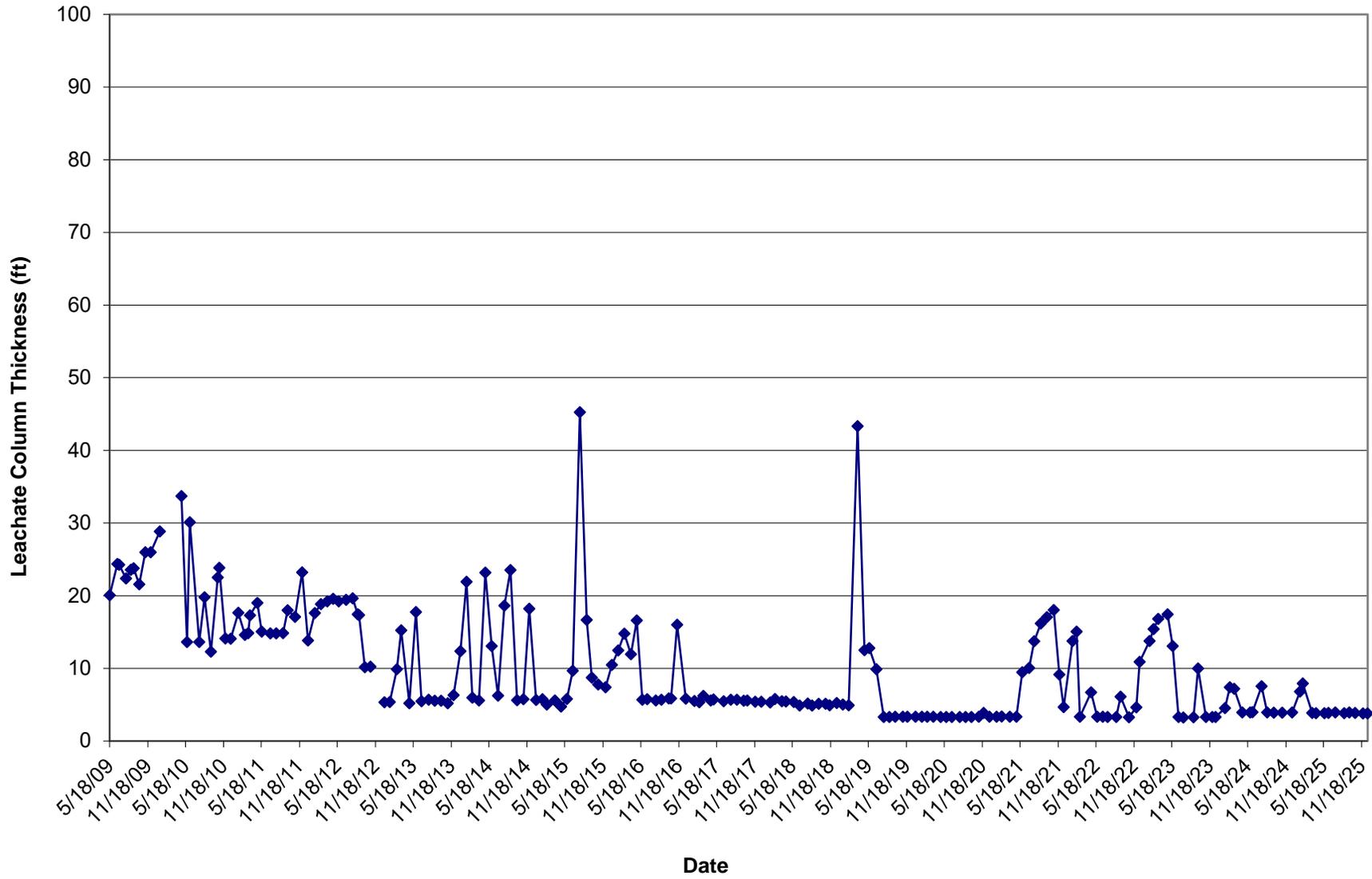
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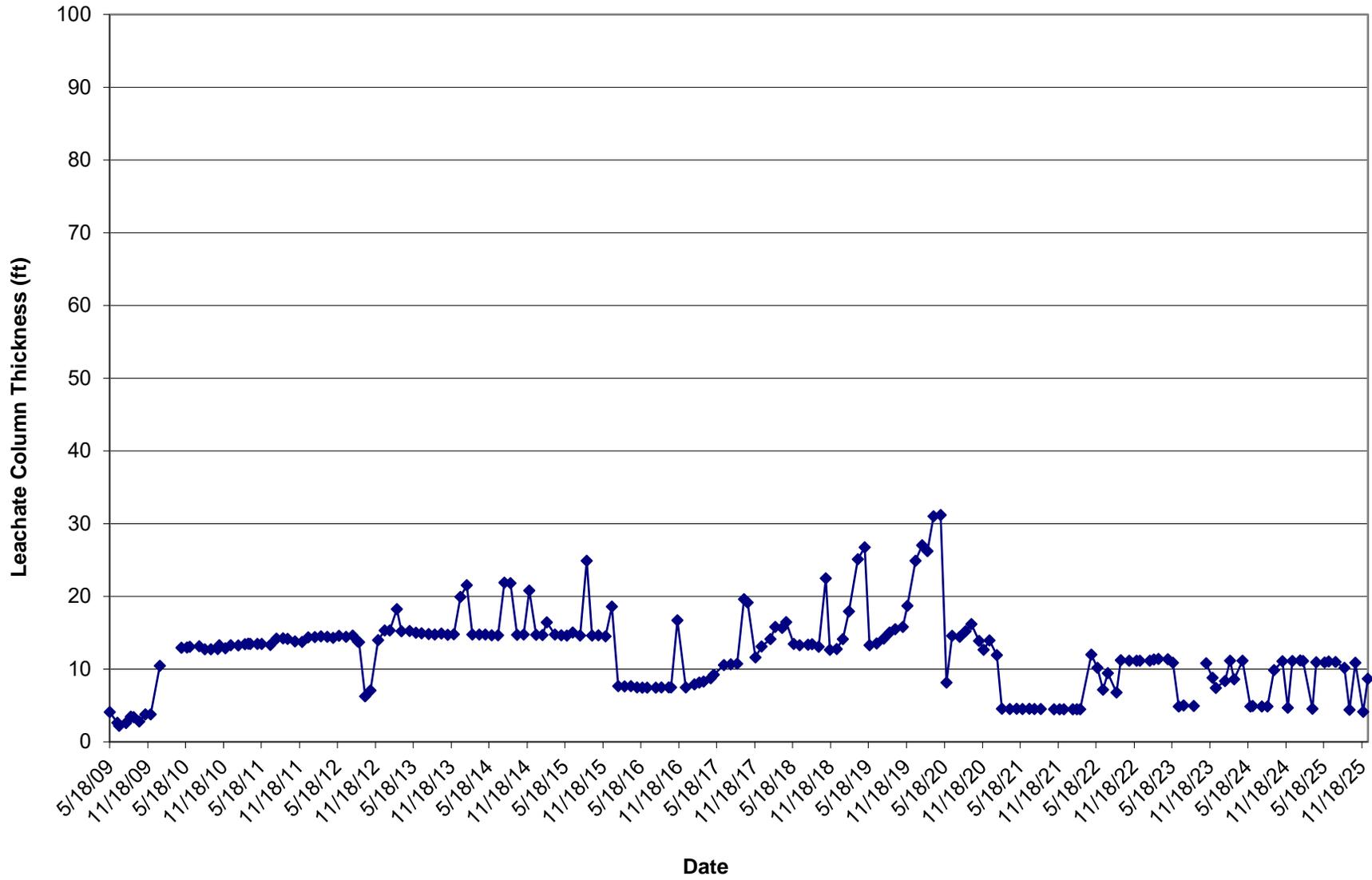
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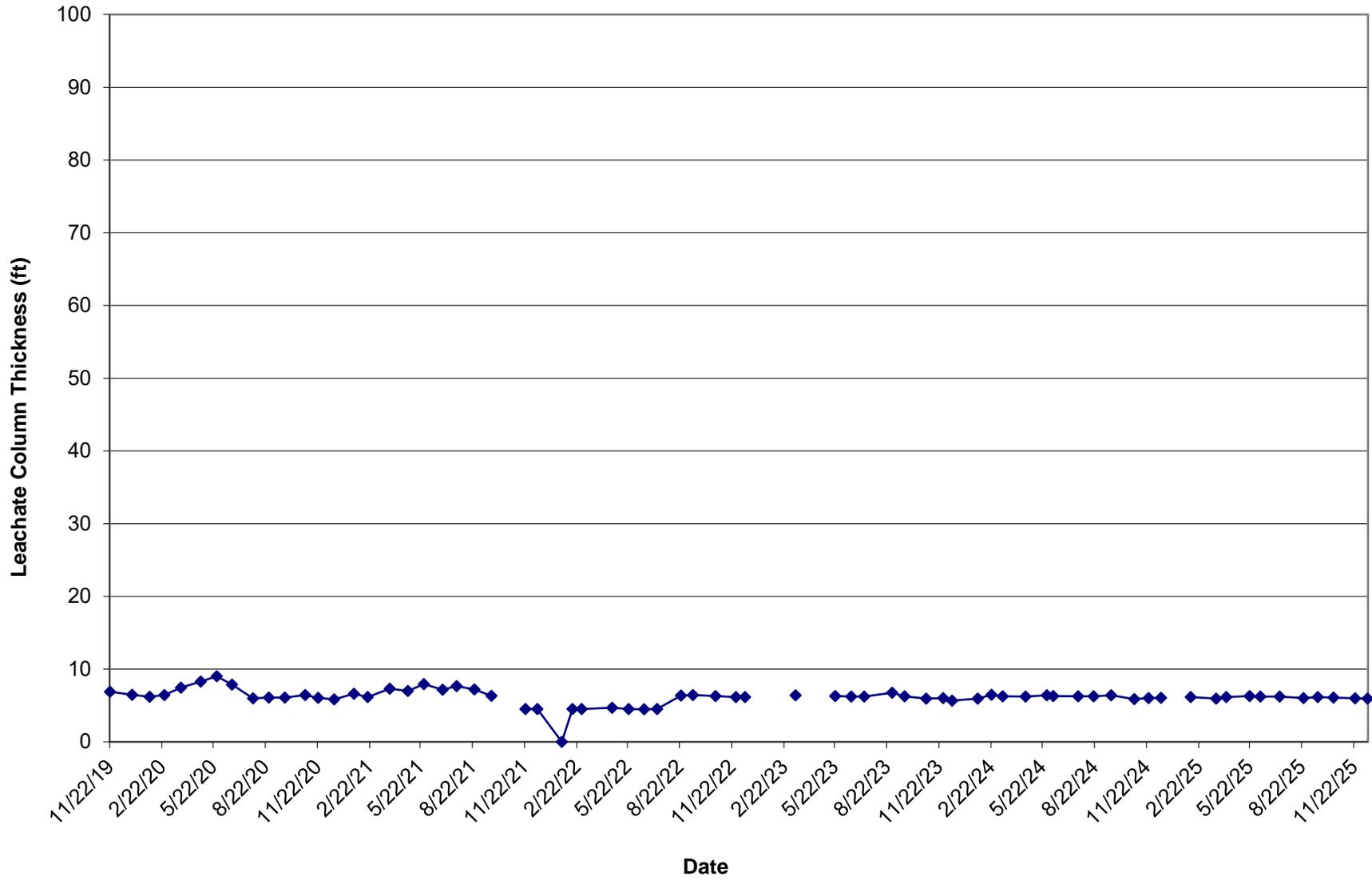
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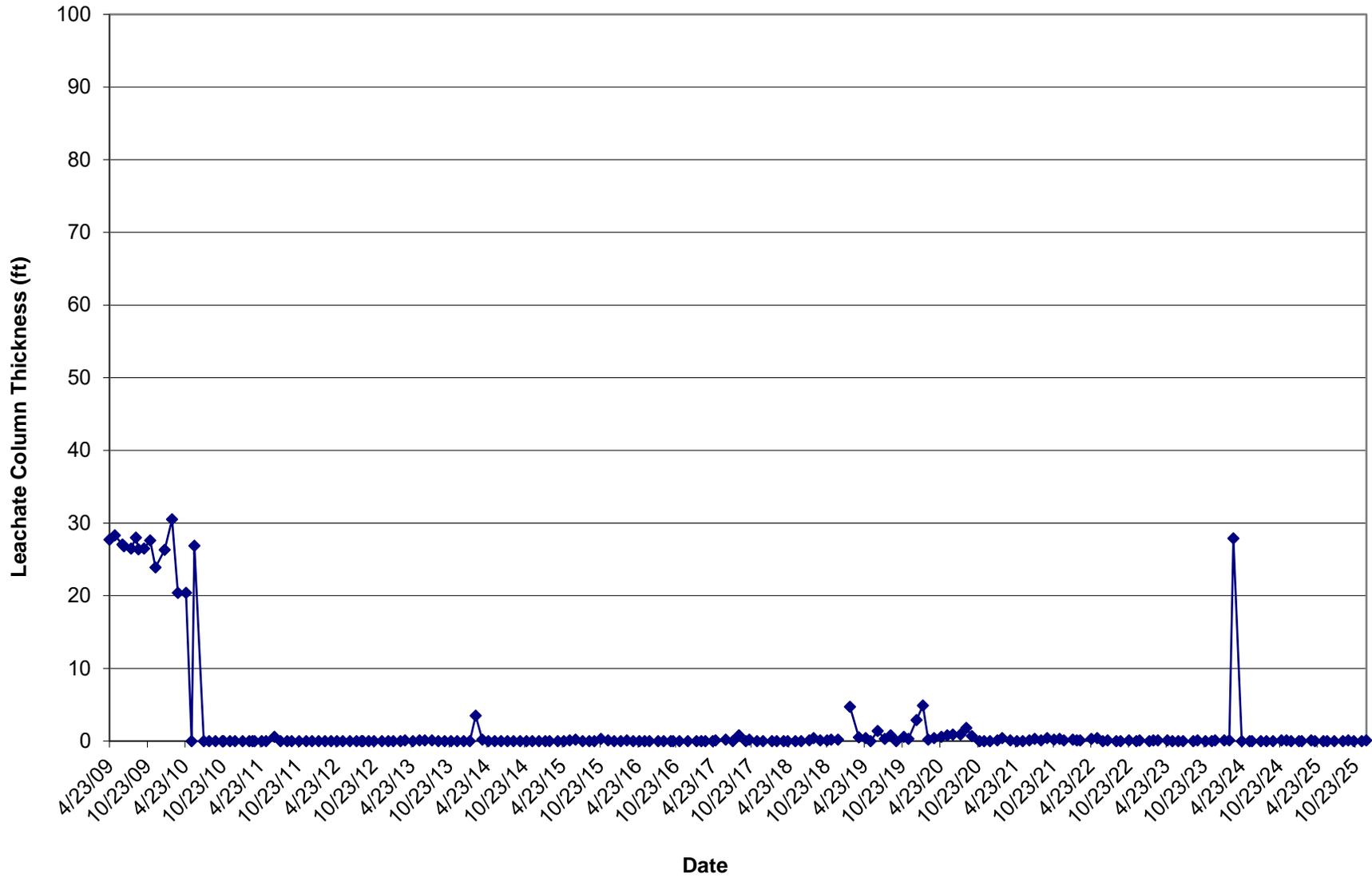
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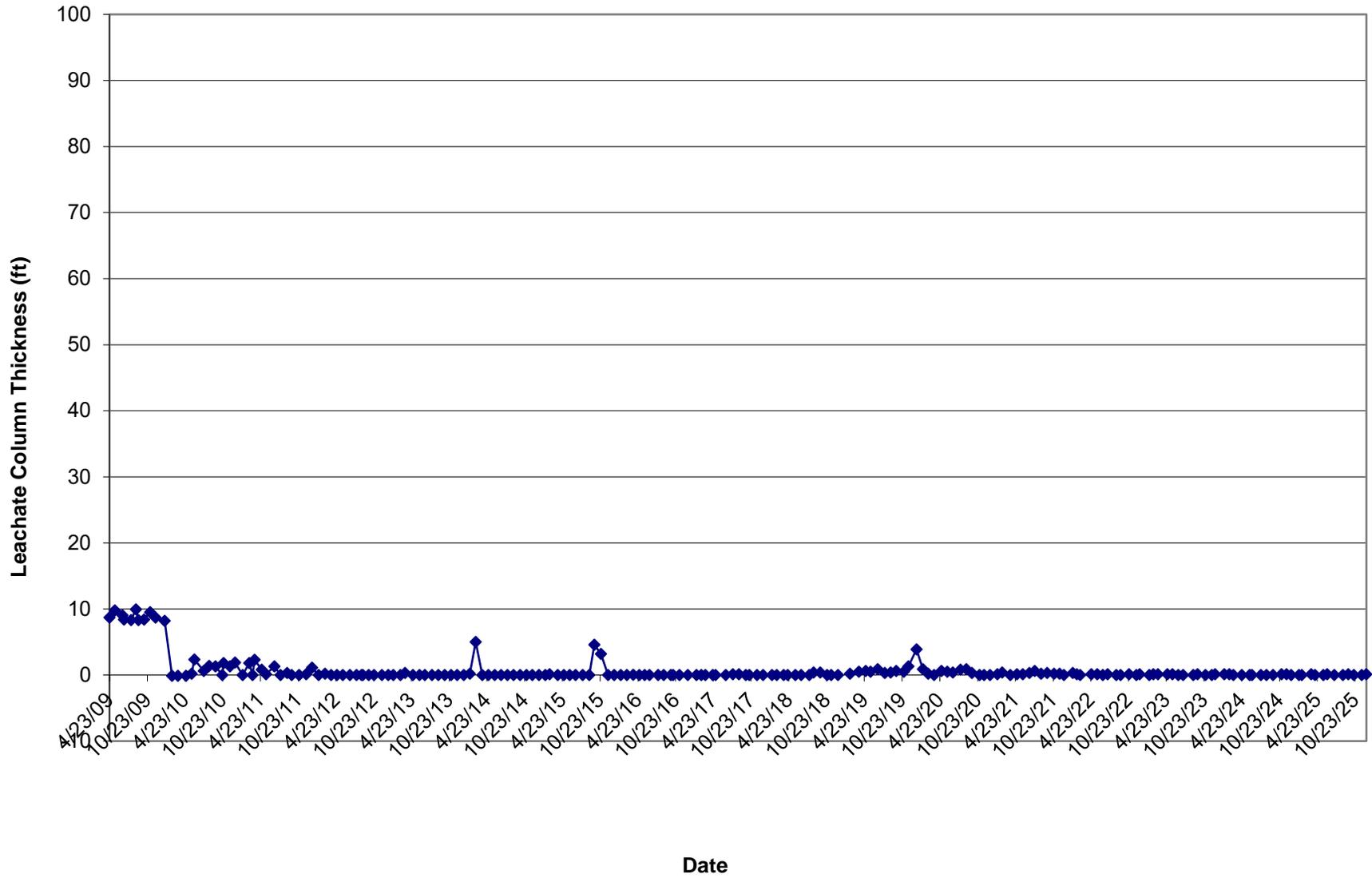
LW-16



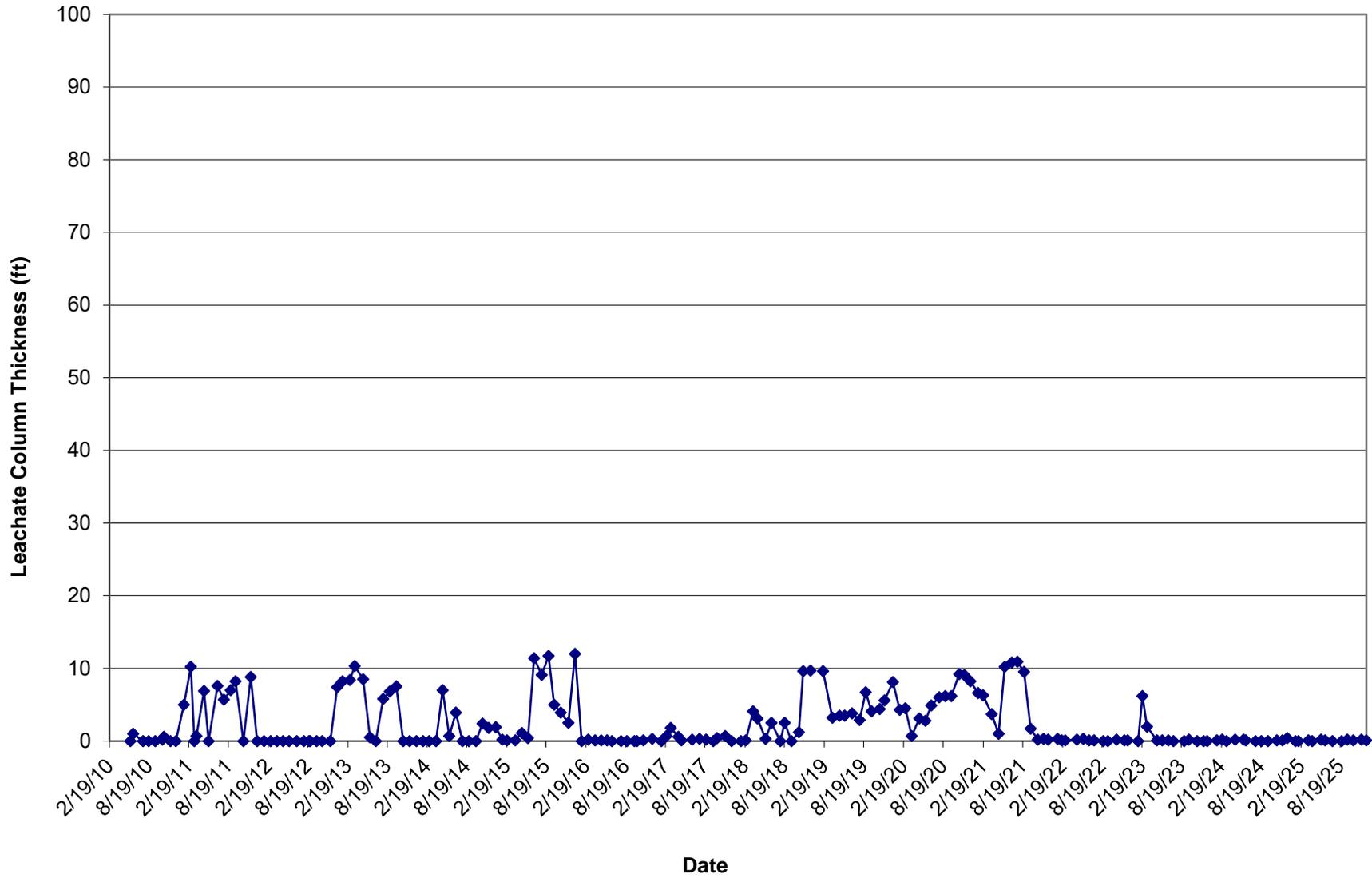
LPZ-3



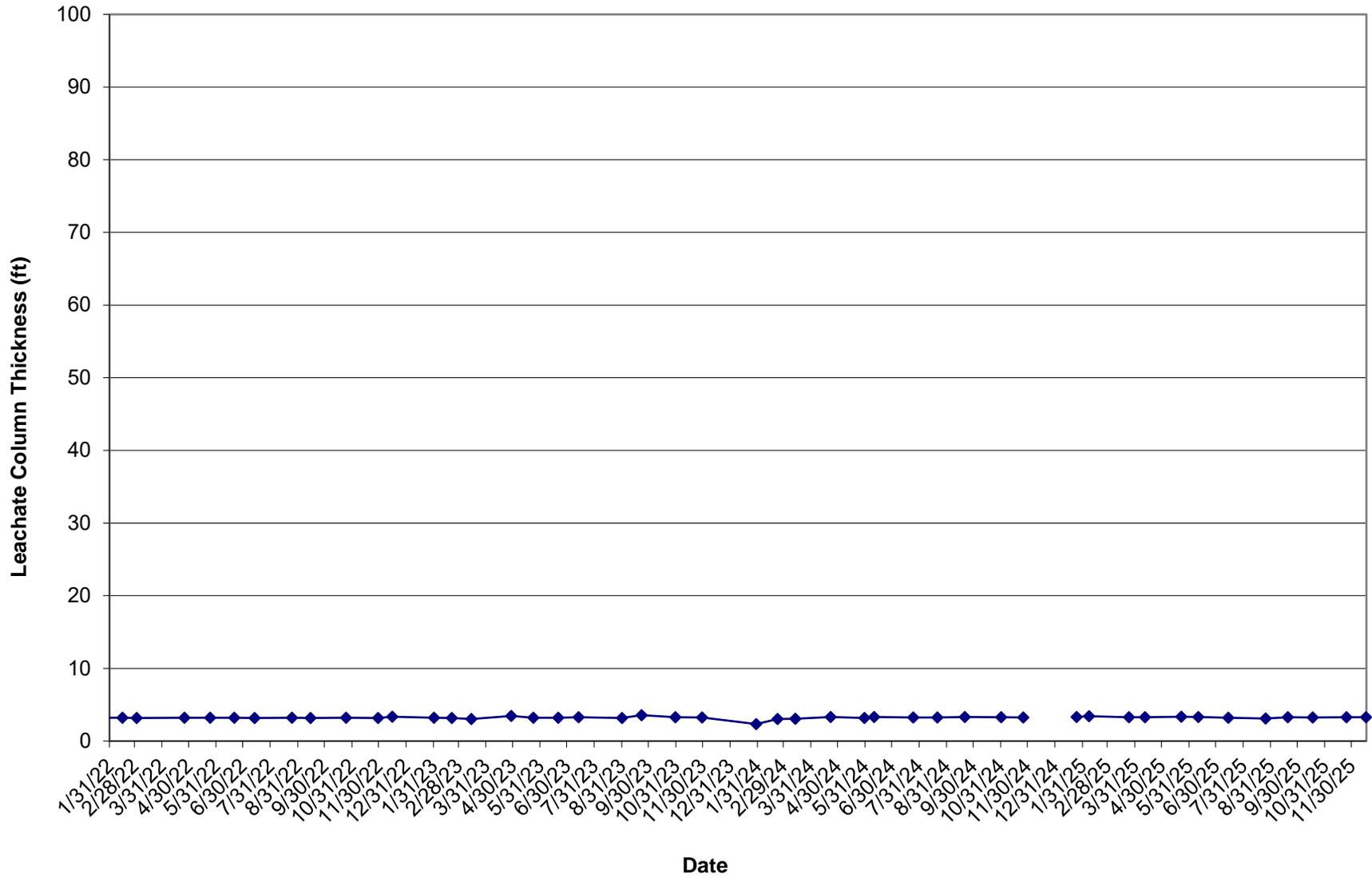
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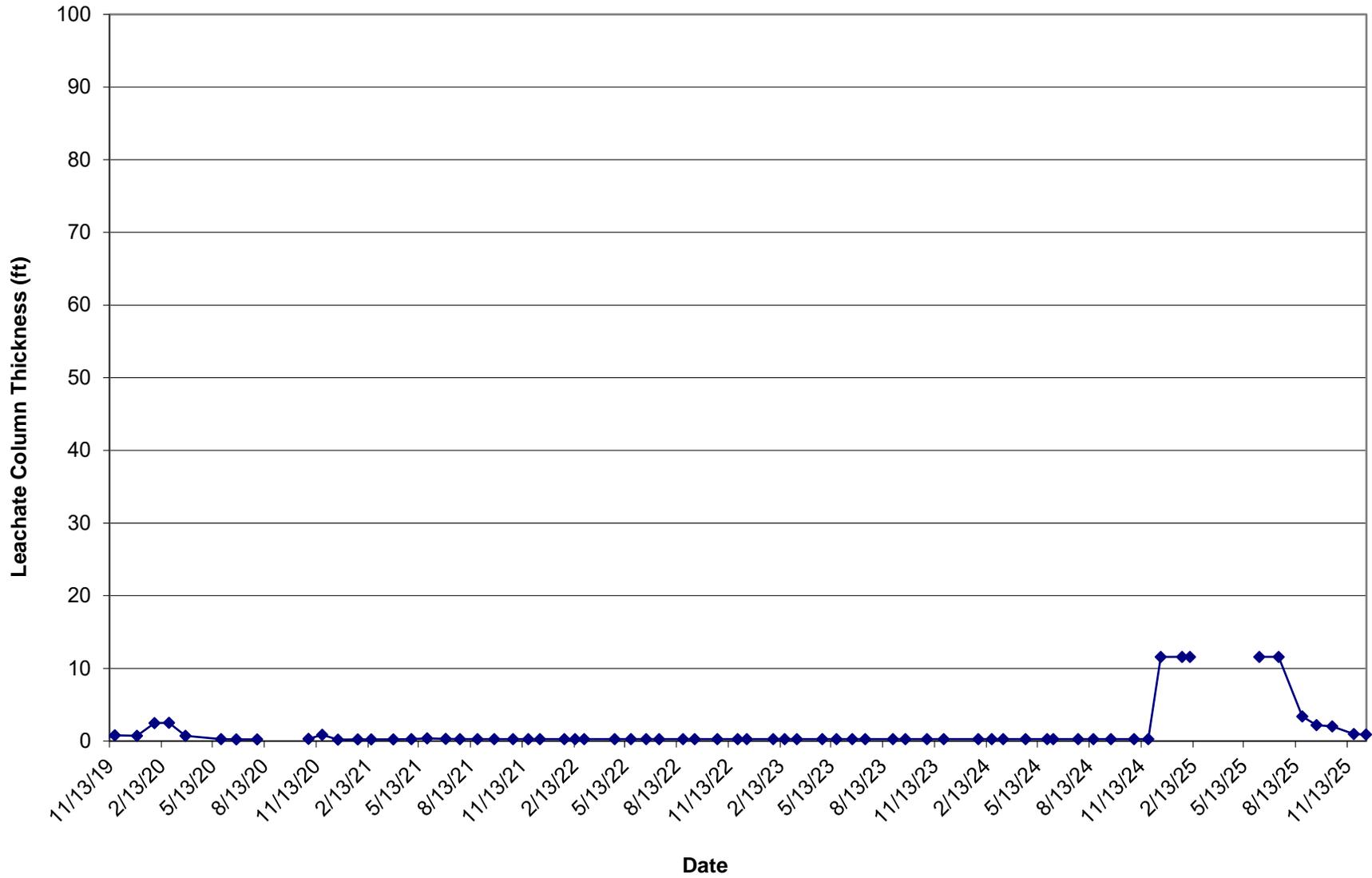
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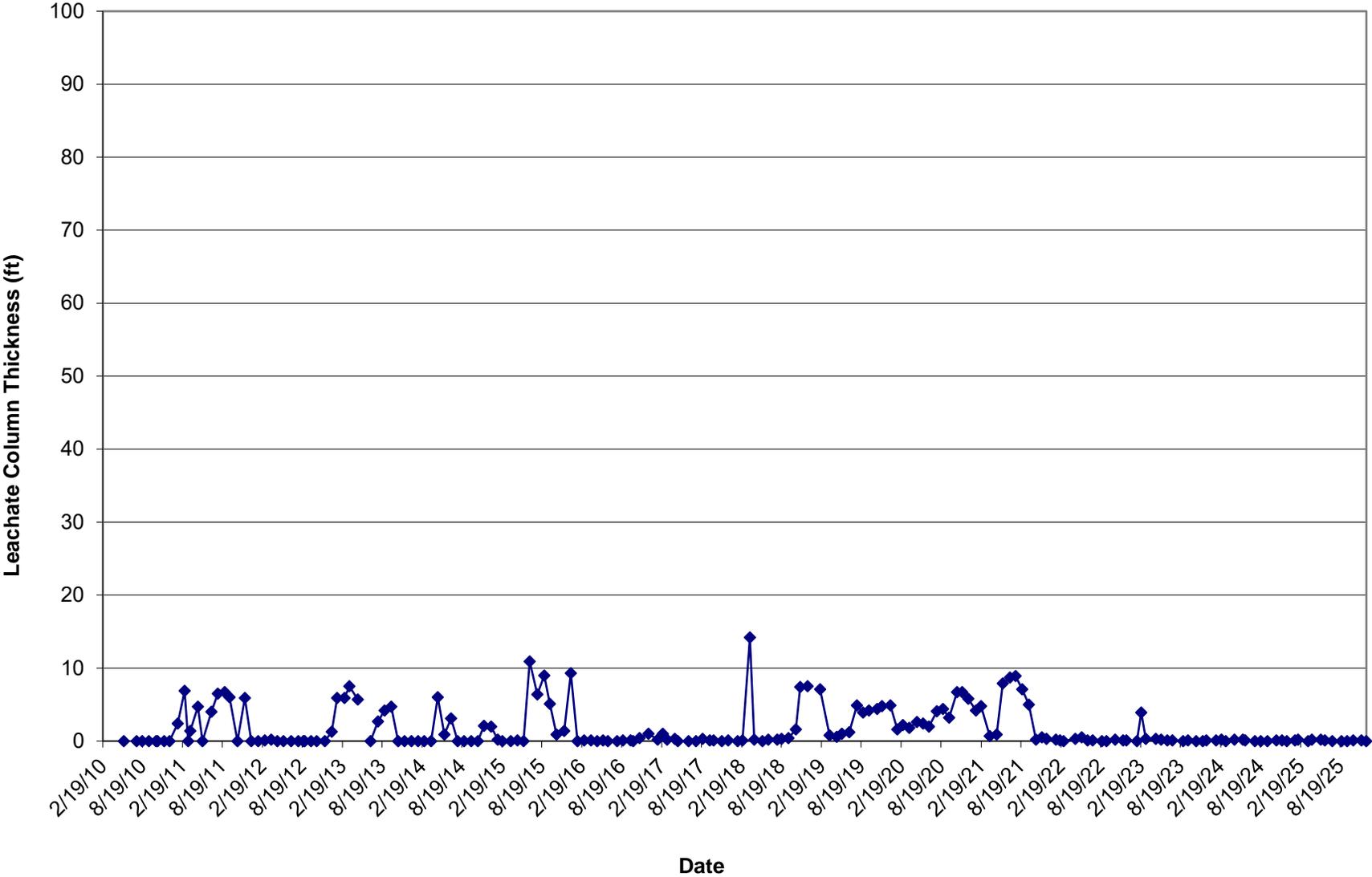
LPZ-6



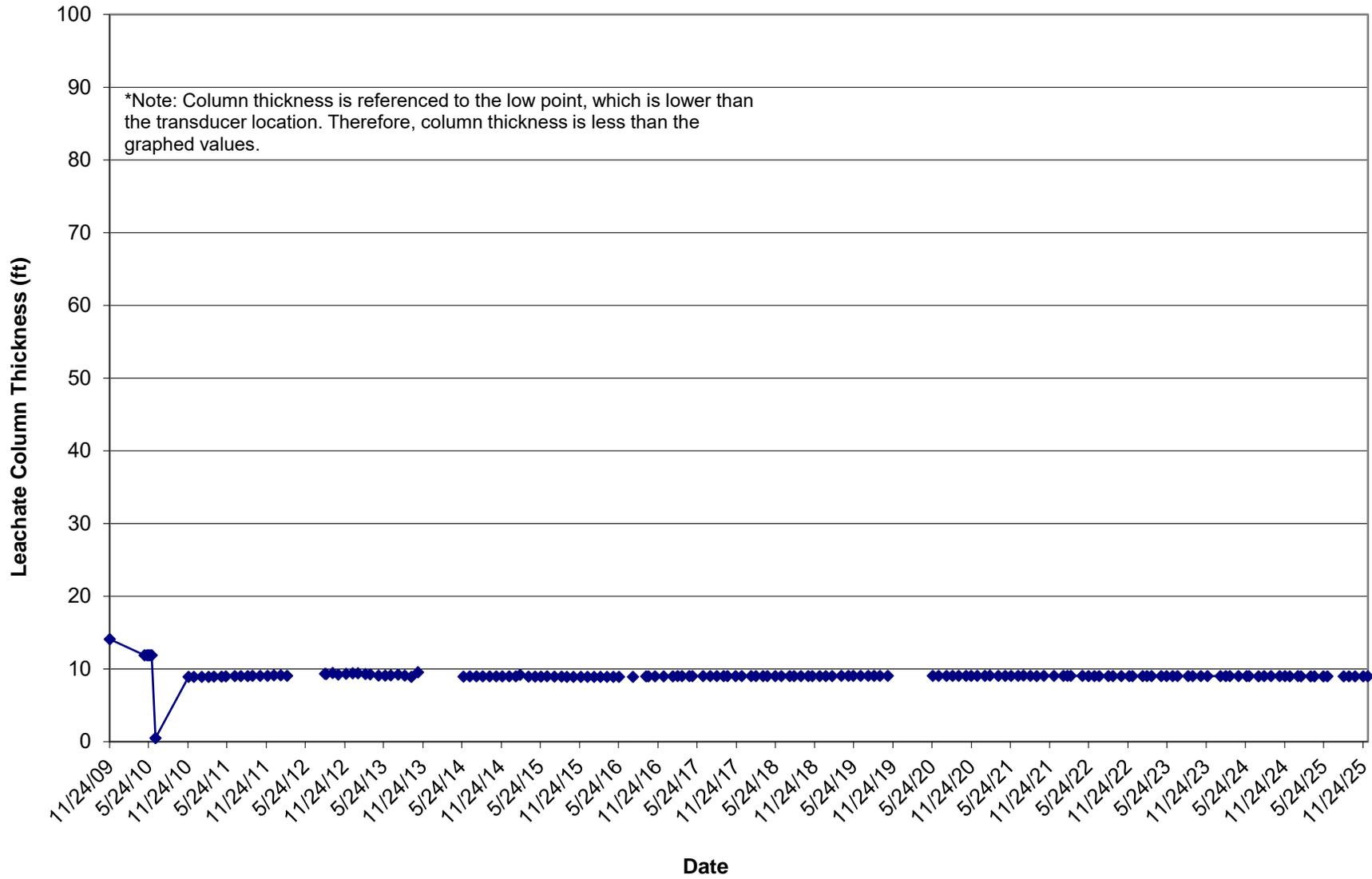
LPZ-7



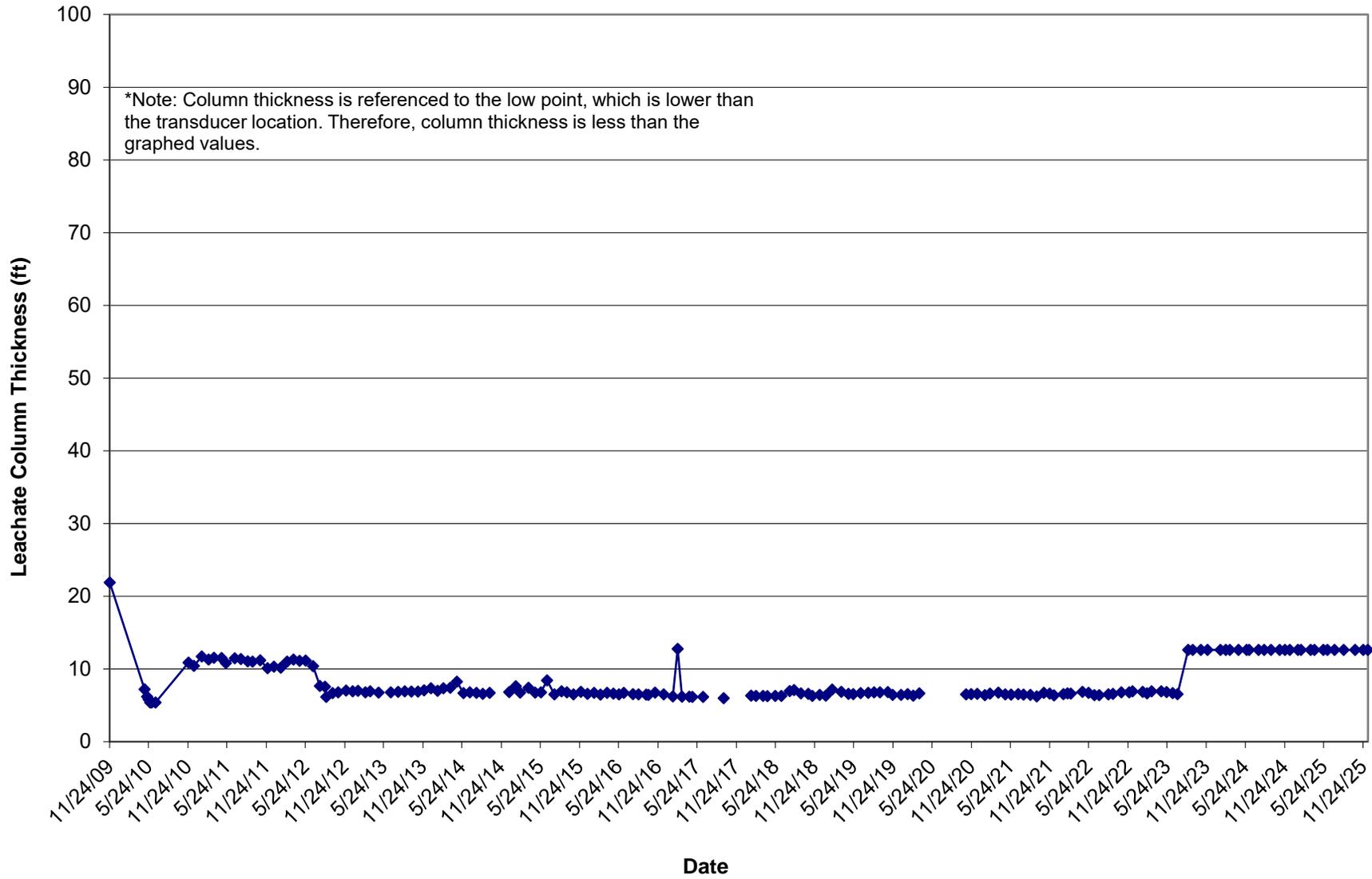
LPZ-C1W



LM-1



LM-2



Attachment D

Leachate Analytical Data Sheets

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 02/07/25 11:57
Date Reported: 02/14/25 15:18
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 02/05/25 7:30	Date Received: 02/07/25 11:57		
Lab No.: 25B0713-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	02/10/25 15:11	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	02/10/25 15:11	kc	EPA 200.7	
Copper	0.00431	mg/L	02/10/25 15:11	kc	EPA 200.7	
Nickel	0.0458	mg/L	02/10/25 15:11	kc	EPA 200.7	
Lead	<0.00200	mg/L	02/10/25 15:11	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composit			Date Sampled: 02/06/25 8:00	Date Received: 02/07/25 11:57		
Lab No.: 25B0713-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	113	mg/L	02/13/25 14:22	jc	Timberline	
Biochemical Oxygen Demand	28	mg/L	02/07/25 12:59	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	02/10/25 15:15	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	02/10/25 15:15	kc	EPA 200.7	
Copper	0.0141	mg/L	02/10/25 15:15	kc	EPA 200.7	
Nickel	0.0461	mg/L	02/10/25 15:15	kc	EPA 200.7	
Lead	<0.00200	mg/L	02/10/25 15:15	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 02/06/25 8:00	Date Received: 02/07/25 11:57		
Lab No.: 25B0713-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	8.0	pH Units	02/06/25 8:00	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 02/07/25 12:04
Date Reported: 02/24/25 14:27
Project: Wastewater - Yearly - Leachate
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW - Yearly - Leachate Composite			Date Sampled: 02/06/25 8:00		Date Received: 02/07/25 12:04	
Lab No.: 25B0717-01			Sampled by: JW			
Classical Chemistry Parameters						
Chloride	429	mg/L	02/07/25 16:42	EV	EPA 300.0	
Sulfate as SO4	442	mg/L	02/07/25 16:42	EV	EPA 300.0	
Phenolics	0.031	mg/L	02/13/25 14:00	kc	EPA 420.1 rev1978	
Metals by EPA 200 Series Methods						
Arsenic	<0.0100	mg/L	02/10/25 15:25	kc	EPA 200.7	
Chromium	0.0127	mg/L	02/10/25 15:25	kc	EPA 200.7	
Iron	4.14	mg/L	02/10/25 15:25	kc	EPA 200.7	
Selenium	<0.00500	mg/L	02/10/25 15:25	kc	EPA 200.7	
Zinc	0.00889	mg/L	02/10/25 15:25	kc	EPA 200.7	
Volatile Organic Compounds						
Benzene	<0.00200	mg/L	02/12/25 14:46	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	02/12/25 14:46	kc	EPA 624.1	
Toluene	<0.00200	mg/L	02/12/25 14:46	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	02/12/25 14:46	kc	EPA 624.1	
Chlorobenzene	0.000674	mg/L	02/13/25 13:08	kc	EPA 624.1	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW - Yearly - Leachate Composite			Date Sampled: 02/06/25 8:00		Date Received: 02/07/25 12:04	
Lab No.: 25B0717-01			Sampled by: JW			
Semivolatile Organic Compounds (GC/MS)						
Surrogate: 2,4,6-Tribromophenol (Surr)	27-136	105 %	02/14/25 10:13	V7YZ	625.1	
Surrogate: 2-Fluorophenol (Surr)	25-110	67 %	02/14/25 10:13	V7YZ	625.1	
Benzoic acid	<0.100	mg/L	02/14/25 10:13	V7YZ	625.1	
p-Cresol	<0.0100	mg/L	02/14/25 10:13	V7YZ	625.1	
Phenol	<0.0100	mg/L	02/14/25 10:13	V7YZ	625.1	

Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill 13758 Washinton Rd West Burlington IA, 52655	Project: Wastewater - Yearly - Leachate Send COC with Report Client Contact: Eric Houtz	Reported: 02/24/25 14:27
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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW - Yearly - Leachate Composite			Date Sampled: 02/06/25 8:00	Date Received: 02/07/25 12:04		
Lab No.: 25B0717-01			Sampled by: JW			
Surrogate: Phenol-d5 (Surr)	21-110	56 %	02/14/25 10:13	V7YZ	625.1	

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 02/07/25 12:01
Date Reported: 02/14/25 16:42
Project: Wastewater - 1st Week of Jan, April, July
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 1st samp of wk Compos			Date Sampled: 02/05/25 7:30	Date Received: 02/07/25 12:01		
Lab No.: 25B0716-01			Sampled by:			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	02/10/25 15:18	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	02/10/25 15:18	kc	EPA 200.7	
Copper	0.00451	mg/L	02/10/25 15:18	kc	EPA 200.7	
Nickel	0.0455	mg/L	02/10/25 15:18	kc	EPA 200.7	
Lead	<0.00200	mg/L	02/10/25 15:18	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk Compo			Date Sampled: 02/06/25 8:00	Date Received: 02/07/25 12:01		
Lab No.: 25B0716-02			Sampled by:			

Classical Chemistry Parameters

Ammonia as N	112	mg/L	02/13/25 14:30	jc	Timberline	
Biochemical Oxygen Demand	30	mg/L	02/07/25 12:59	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	132	mg/L	02/14/25 15:34	jc	Hach 10242	
Total Suspended Solids	27	mg/L	02/12/25 13:13	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	02/10/25 15:21	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	02/10/25 15:21	kc	EPA 200.7	
Copper	0.00331	mg/L	02/10/25 15:21	kc	EPA 200.7	
Nickel	0.0452	mg/L	02/10/25 15:21	kc	EPA 200.7	
Lead	<0.00200	mg/L	02/10/25 15:21	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 02/06/25 8:00	Date Received: 02/07/25 12:01		
Lab No.: 25B0716-03			Sampled by:			

Classical Chemistry Parameters

Fats, Oil & Grease (total)	8.0	mg/L	02/14/25 11:08	kt	EPA 1664 A	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
 13758 Washinton Rd
 West Burlington IA, 52655

Project: Wastewater - 1st Week of Jan, April, July, Oct

Send COC with Report

Client Contact: Eric Houtz

Reported:
 02/14/25 16:42

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 02/06/25 8:00	Date Received: 02/07/25 12:01		
Lab No.: 25B0716-03			Sampled by:			
<i>Volatile Organic Compounds</i>						
Benzene	<0.00200	mg/L	02/12/25 14:46	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	02/12/25 14:46	kc	EPA 624.1	
Toluene	<0.00200	mg/L	02/12/25 14:46	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	02/12/25 14:46	kc	EPA 624.1	
Field pH	8.0	pH Units	02/06/25 8:00		SM 4500 H + B	

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 02/14/25 11:00
Date Reported: 02/24/25 14:30
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 02/12/25 7:30	Date Received: 02/14/25 11:00		
Lab No.: 25B1406-01			Sampled by: BP			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	02/17/25 15:01	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	02/17/25 15:01	kc	EPA 200.7	
Copper	<0.00300	mg/L	02/17/25 15:01	kc	EPA 200.7	
Nickel	0.0608	mg/L	02/17/25 15:01	kc	EPA 200.7	
Lead	<0.00200	mg/L	02/17/25 15:01	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composi			Date Sampled: 02/13/25 8:30	Date Received: 02/14/25 11:00		
Lab No.: 25B1406-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	223	mg/L	02/21/25 11:45	jc	Timberline	
Biochemical Oxygen Demand	29	mg/L	02/14/25 13:09	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	02/17/25 15:04	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	02/17/25 15:04	kc	EPA 200.7	
Copper	<0.00300	mg/L	02/17/25 15:04	kc	EPA 200.7	
Nickel	0.0618	mg/L	02/17/25 15:04	kc	EPA 200.7	
Lead	<0.00200	mg/L	02/17/25 15:04	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 02/13/25 8:30	Date Received: 02/14/25 11:00		
Lab No.: 25B1406-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	8.0	pH Units	02/13/25 8:30	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 04/04/25 11:21
Date Reported: 04/21/25 10:33
Project: Wastewater - 3rd, 5th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 1st samp of wk Composite			Date Sampled: 04/02/25 7:00	Date Received: 04/04/25 11:21		
Lab No.: 25D0410-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	04/07/25 15:13	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	04/07/25 15:13	kc	EPA 200.7	
Copper	<0.00300	mg/L	04/07/25 15:13	kc	EPA 200.7	
Nickel	0.0330	mg/L	04/07/25 15:13	kc	EPA 200.7	
Lead	<0.00200	mg/L	04/07/25 15:13	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk Composi			Date Sampled: 04/03/25 7:00	Date Received: 04/04/25 11:21		
Lab No.: 25D0410-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	97.3	mg/L	04/08/25 14:14	jc	Timberline	
Biochemical Oxygen Demand	22	mg/L	04/04/25 13:06	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	102	mg/L	04/11/25 11:36	jc	Hach 10242	
Total Suspended Solids	40	mg/L	04/08/25 15:22	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	04/07/25 15:17	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	04/07/25 15:17	kc	EPA 200.7	
Copper	<0.00300	mg/L	04/07/25 15:17	kc	EPA 200.7	
Nickel	0.0329	mg/L	04/07/25 15:17	kc	EPA 200.7	
Lead	<0.00200	mg/L	04/07/25 15:17	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 04/03/25 7:30	Date Received: 04/04/25 11:21		
Lab No.: 25D0410-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	8	pH Units	04/03/25 7:30	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
13758 Washinton Rd
West Burlington IA, 52655

Project: Wastewater - 3rd, 5th Week of Month
Send COC with Report
Client Contact: Eric Houtz

Reported:
04/21/25 10:33

1500710

CHAIN OF CUSTODY RECORD

Wastewater - 3rd, 5th Week of Month

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des Moines County Landfill

Accounts Payable - DMC

13

West Des Moines, IA 50265

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 3,5 wk - 1st samp of wk	4-2-25 7:00 am	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver, ICP (WW) Cd - Cadmium, ICP (WW) Cu - Copper, ICP (WW) Ni - Nickel, ICP (WW) Pb - Lead, ICP metals prep	JW
WW wkly 3,5 wk - 2nd samp of wk	4-3-25		Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline, sTKN	JW
WW wkly 3,5 wk - 2nd samp of wk	4-3-25		Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD, TSS	JW
WW wkly 3,5 wk - 2nd samp of wk	4-3-25		Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver, ICP (WW) Cd - Cadmium, ICP (WW) Cu - Copper, ICP (WW) Ni - Nickel, ICP (WW) Pb - Lead, ICP metals prep	JW
WW wkly 3,5 wk - 2nd samp of wk grab	4-3-25	Grab	Water	1 35 - Add Field Data to COC	field data, field data (1)	JW
29						
Relinquished By	Eric Houtz	Date/Time	4-3-25	Received By	Date/Time	
Relinquished By		Date/Time	4-4-11:22	Received By	Date/Time	Comments
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 04/04/25 11:26
Date Reported: 04/21/25 10:36
Project: Wastewater - 1st Week of Jan, April, July
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 1st samp of wk Compos			Date Sampled: 04/02/25 7:00	Date Received: 04/04/25 11:26		
Lab No.: 25D0411-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	04/07/25 15:20	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	04/07/25 15:20	kc	EPA 200.7	
Copper	<0.00300	mg/L	04/07/25 15:20	kc	EPA 200.7	
Nickel	0.0336	mg/L	04/07/25 15:20	kc	EPA 200.7	
Lead	<0.00200	mg/L	04/07/25 15:20	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk Compo			Date Sampled: 04/03/25 7:00	Date Received: 04/04/25 11:26		
Lab No.: 25D0411-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	97.0	mg/L	04/08/25 14:17	jc	Timberline	
Biochemical Oxygen Demand	22	mg/L	04/04/25 13:06	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	117	mg/L	04/11/25 11:36	jc	Hach 10242	
Total Suspended Solids	44	mg/L	04/08/25 15:22	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	04/07/25 15:23	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	04/07/25 15:23	kc	EPA 200.7	
Copper	<0.00300	mg/L	04/07/25 15:23	kc	EPA 200.7	
Nickel	0.0344	mg/L	04/07/25 15:23	kc	EPA 200.7	
Lead	<0.00200	mg/L	04/07/25 15:23	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 04/03/25 7:30	Date Received: 04/04/25 11:26		
Lab No.: 25D0411-03			Sampled by: JW			

Classical Chemistry Parameters

Fats, Oil & Grease (total)	6.1	mg/L	04/10/25 15:17	kt	EPA 1664 A	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
 13758 Washinton Rd
 West Burlington IA, 52655

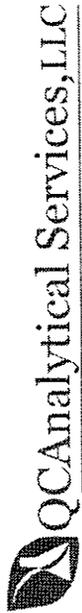
Project: Wastewater - 1st Week of Jan, April, July, Oct

Send COC with Report

Client Contact: Eric Houtz

Reported:
 04/21/25 10:36

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 04/03/25 7:30		Date Received: 04/04/25 11:26	
Lab No.: 25D0411-03			Sampled by: JW			
<i>Volatile Organic Compounds</i>						
Benzene	<0.00200	mg/L	04/07/25 13:16	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	04/07/25 13:16	kc	EPA 624.1	
Toluene	<0.00200	mg/L	04/07/25 13:16	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	04/07/25 13:16	kc	EPA 624.1	
Field pH	8	pH Units	04/03/25 7:30	JW	SM 4500 H + B	



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des moines County Landfill
 Accounts Payable - DMC

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West Des Moines, IA 50265

CHAIN OF CUSTODY RECORD

Wastewater - 1st Week of Jan, April, July, Oct

25D0411

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW (Ja, Ap, Ju, Oc) 1st samp of wk	4-2-25 7:00 AM	comp	Water	1 18 - 250mL WM Plastic w/HNO3 pH <2	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	4-3-25		Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia- Timberline-QCAS, sTKN-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	4-3-25		Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	4-3-25		Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	4-3-25		Water	1 01 - 40mL Clear Vial w/ HCl; 2 per set	EPA 624 - WW BTEX-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	4-3-25		Water	1 10 - 500mL Clear Glass pH<2w/ HCl	FOG-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	4-3-25	g-r-b	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS	JW
Relinquished By	Eric Heutz	Date/Time	4-3-25 3:45	Received By	Date/Time	
Relinquished By		Date/Time		Received By	Date/Time	Comments
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 04/11/25 11:17
Date Reported: 04/18/25 15:29
Project: Wastewater - 1st Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-1st samp of wk Composite			Date Sampled: 04/09/25 7:00	Date Received: 04/11/25 11:17		
Lab No.: 25D1106-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	04/14/25 15:19	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	04/14/25 15:19	kc	EPA 200.7	
Copper	<0.00300	mg/L	04/14/25 15:19	kc	EPA 200.7	
Nickel	0.0342	mg/L	04/14/25 15:19	kc	EPA 200.7	
Lead	<0.00200	mg/L	04/14/25 15:19	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk Composite			Date Sampled: 04/10/25 10:10	Date Received: 04/11/25 11:17		
Lab No.: 25D1106-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	146	mg/L	04/16/25 14:25	jc	Timberline	
Biochemical Oxygen Demand	20	mg/L	04/11/25 13:04	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	150	mg/L	04/15/25 14:07	jc	Hach 10242	
Total Suspended Solids	32	mg/L	04/14/25 14:50	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	04/14/25 15:22	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	04/14/25 15:22	kc	EPA 200.7	
Copper	<0.00300	mg/L	04/14/25 15:22	kc	EPA 200.7	
Nickel	0.0405	mg/L	04/14/25 15:22	kc	EPA 200.7	
Lead	<0.00200	mg/L	04/14/25 15:22	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab Grab			Date Sampled: 04/10/25 10:15	Date Received: 04/11/25 11:17		
Lab No.: 25D1106-03			Sampled by: BP			

Classical Chemistry Parameters

Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
 13758 Washinton Rd
 West Burlington IA, 52655

Project: Wastewater - 1st Week of Month

Send COC with Report

Client Contact: Eric Houtz

Reported:
 04/18/25 15:29

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab Grab			Date Sampled: 04/10/25 10:15		Date Received: 04/11/25 11:17	
Lab No.: 25D1106-03			Sampled by: BP			
Volatile Organic Compounds						
Benzene	<0.00200	mg/L	04/17/25 16:28	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	04/17/25 16:28	kc	EPA 624.1	
Toluene	<0.00200	mg/L	04/17/25 16:28	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	04/17/25 16:28	kc	EPA 624.1	
Field pH	8.0	pH Units	04/10/25 10:15	BP	SM 4500 H + B	

CHAIN OF CUSTODY RECORD

2501106

des Moines County Landfill
 Accounts Payable - DMC
 13

West Des Moines, IA 50265

Wastewater - 1st Week of Month

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 1st wk-1st samp of wk	4-9-25 7:00 am	Comp	Water	1 18 - 250mL WM Plastic PH <2 w/HNO3	ICP (WW) Ag - Silver, ICP (WW) Cd - Cadmium, ICP (WW) Cu - Copper, ICP (WW) Ni - Nickel, ICP (WW) Pb - Lead, ICP metals prep	JW
WW wkly 1st wk-2nd samp of wk	4-10-25 10:10	Comp	Water	1 05 - 500mL Plastic PH <2 w/ H2SO4	Ammonia-Timberline, sTKN	B.P.
WW wkly 1st wk-2nd samp of wk	4-10-25 10:10	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD, TSS	B.P.
WW wkly 1st wk-2nd samp of wk	4-10-25 10:10	Comp	Water	1 18 - 250mL WM Plastic PH <2 w/HNO3	ICP (WW) Ag - Silver, ICP (WW) Cd - Cadmium, ICP (WW) Cu - Copper, ICP (WW) Ni - Nickel, ICP (WW) Pb - Lead, ICP metals prep	B.P.
WW wkly 1st wk-2nd samp of wk grab	4-10-25 10:15	Grab	Water	1 01 - 40mL Clear Vial w/ HCl; 2 per set	EPA 624 - WW BTEX	B.P.
WW wkly 1st wk-2nd samp of wk grab	4-10-25 10:15	Grab	Water	1 35 - Add Field Data to COC	field data, field data (1) PH 8.0	B.P.
Relinquished By <i>Sarah Healy</i>	Date/Time 4/10/25 3:55 PM	Received By <i>[Signature]</i>	Date/Time 4-11-25 11:18	Comments		
Relinquished By <i>[Signature]</i>	Date/Time	Received By <i>[Signature]</i>	Date/Time	Comments		
Relinquished By <i>[Signature]</i>	Date/Time	Received By <i>[Signature]</i>	Date/Time	Comments		

Cooler Numbers and Temperatures

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 06/06/25 13:06
Date Reported: 06/19/25 14:19
Project: Wastewater - 1st Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-1st samp of wk Composite			Date Sampled: 06/04/25 7:00	Date Received: 06/06/25 13:06		
Lab No.: 25F0613-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/09/25 15:28	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/09/25 15:28	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/09/25 15:28	kc	EPA 200.7	
Nickel	0.0356	mg/L	06/09/25 15:28	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/09/25 15:28	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk Composite			Date Sampled: 06/05/25 7:00	Date Received: 06/06/25 13:06		
Lab No.: 25F0613-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	101	mg/L	06/09/25 14:43	jc	Timberline	
Biochemical Oxygen Demand	42	mg/L	06/06/25 14:04	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	102	mg/L	06/11/25 16:18	kt	Hach 10242	
Total Suspended Solids	28	mg/L	06/10/25 13:50	kt	USGS I-3765-85	

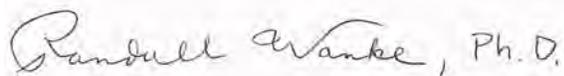
Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/09/25 15:31	kc	EPA 200.7	
Cadmium	0.00101	mg/L	06/09/25 15:31	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/09/25 15:31	kc	EPA 200.7	
Nickel	0.0357	mg/L	06/09/25 15:31	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/09/25 15:31	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab			Date Sampled: 06/05/25 7:00	Date Received: 06/06/25 13:06		
Lab No.: 25F0613-03			Sampled by: JW			

Classical Chemistry Parameters

Analysis Certified by:



Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill 13758 Washinton Rd West Burlington IA, 52655	Project: Wastewater - 1st Week of Month Send COC with Report Client Contact: Eric Houtz	Reported: 06/19/25 14:19
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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab			Date Sampled: 06/05/25 7:00		Date Received: 06/06/25 13:06	
Lab No.: 25F0613-03			Sampled by: JW			
<i>Volatile Organic Compounds</i>						
Benzene	<0.00200	mg/L	06/09/25 15:45	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	06/09/25 15:45	kc	EPA 624.1	
Toluene	<0.00200	mg/L	06/09/25 15:45	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	06/09/25 15:45	kc	EPA 624.1	
Field pH	8	pH Units	06/05/25 7:00	JW	SM 4500 H + B	



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CHAIN OF CUSTODY RECORD

25FDB13

des Moines County Landfill
 Accounts Payable - DMC

13
 West Des Moines, IA 50265

Wastewater - 1st Week of Month

11/8

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 1st wk-1st samp of wk	6-4-25 7:00	Comp	Water	1 18 - 250mL W/M Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wkly 1st wk-2nd samp of wk	6-5-25 7:00	Comp	Water	1 05 - 500mL Plastic pH <2 w/H2SO4	Ammonia-Timberline-QCAS, sTKN-QCAS	JW
WW wkly 1st wk-2nd samp of wk	6-5-25 7:00	Comp	Water	1 12 - 500mL W/M Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW wkly 1st wk-2nd samp of wk	6-5-25 7:00	Comp	Water	1 18 - 250mL W/M Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wkly 1st wk-2nd samp of wk grab	6-5-25 7:00	Comp	Water	1 01 - 40mL Clear Vial w/ HCl; 2 per set	EPA 624 - WW BTEX-QCAS	JW
WW wkly 1st wk-2nd samp of wk grab	6-5-25 7:00	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS PHS	JW
Relinquished By <i>Pat Woodhouse</i>	Date/Time 6-5-25 3:45	Received By <i>[Signature]</i>	Date/Time 6-6-25 12:50	Comments		
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 06/13/25 13:18
Date Reported: 07/07/25 09:12
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 06/11/25 7:00	Date Received: 06/13/25 13:18		
Lab No.: 25F1314-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/16/25 15:30	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/16/25 15:30	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/16/25 15:30	kc	EPA 200.7	
Nickel	0.0342	mg/L	06/16/25 15:30	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/16/25 15:30	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composit			Date Sampled: 06/12/25 8:00	Date Received: 06/13/25 13:18		
Lab No.: 25F1314-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	100	mg/L	06/16/25 14:39	jc	Timberline	
Biochemical Oxygen Demand	24	mg/L	06/13/25 14:13	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/16/25 15:33	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/16/25 15:33	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/16/25 15:33	kc	EPA 200.7	
Nickel	0.0351	mg/L	06/16/25 15:33	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/16/25 15:33	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 06/12/25 8:10	Date Received: 06/13/25 13:18		
Lab No.: 25F1314-03			Sampled by: BP			

Classical Chemistry Parameters

Field pH	8.0	pH Units	06/12/25 8:10	BP	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director



QCA Analytical Services, LLC

1796 Iowa Drive, LaCaire, IA 52753 • qcanalytical.net
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CHAIN OF CUSTODY RECORD

11.7 255 1314

des Moines County Landfill

Accounts Payable - DMC

13

West Des Moines, IA 50265

Wastewater - 2nd, 4th Week of Month

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 2,4 wk - 1st samp of wk	6-11-25 7:00 AM	Comp	Water	1 18 - 250mL W/M Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JL
WW wkly 2,4 wk - 2nd samp of wk	6-12-25 8:00 AM	Comp	Water	1 05 - 500mL Plastic pH <2 w/H2SO4	Ammonia - Timberline-QCAS	BP
WW wkly 2,4 wk - 2nd samp of wk	6-12-25 8:00 AM	Comp	Water	1 12 - 500mL W/M Plastic Cool to 4° C	BOD-QCAS	BP
WW wkly 2,4 wk - 2nd samp of wk	6-12-25 8:00 AM	Comp	Water	1 18 - 250mL W/M Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	BP
WW wkly 2,4 wk - 2nd samp of wk grab	6-12-25 8:16 AM	Grab	Water	1 35 - Add Field Data to COC	Field Data (1) - QCAS, Field Data-QCAS PH 8.0	BP
Relinquished By <i>Eric Heck</i>	Date/Time 6/12/25	Date/Time 3:30	Received By <i>[Signature]</i>	Date/Time 6-25-25	Date/Time 12:56	Comments
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 06/20/25 12:06
Date Reported: 07/07/25 10:19
Project: Wastewater - 3rd, 5th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 1st samp of wk Composite			Date Sampled: 06/18/25 8:36	Date Received: 06/20/25 12:06		
Lab No.: 25F2020-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/23/25 14:02	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/23/25 14:02	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/23/25 14:02	kc	EPA 200.7	
Nickel	0.0432	mg/L	06/23/25 14:02	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/23/25 14:02	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk Composi			Date Sampled: 06/19/25 7:15	Date Received: 06/20/25 12:06		
Lab No.: 25F2020-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	175	mg/L	06/25/25 12:15	jc	Timberline	
Biochemical Oxygen Demand	44	mg/L	06/20/25 13:24	kt	SM 5210 B-2001	
Total Kjeldahl Nitrogen	181	mg/L	06/25/25 16:33	kt	Hach 10242	
Total Suspended Solids	38	mg/L	06/25/25 16:48	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/23/25 14:06	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/23/25 14:06	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/23/25 14:06	kc	EPA 200.7	
Nickel	0.0429	mg/L	06/23/25 14:06	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/23/25 14:06	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 06/19/25 7:25	Date Received: 06/20/25 12:06		
Lab No.: 25F2020-03			Sampled by: BP			

Classical Chemistry Parameters

Field pH	8.0	pH Units	06/19/25 7:25	BP	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbelare For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
13758 Washinton Rd
West Burlington IA, 52655

Project: Wastewater - 3rd, 5th Week of Month
Send COC with Report
Client Contact: Eric Houtz

Reported:
07/07/25 10:19



QCA Analytical Services, LLC

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CHAIN OF CUSTODY RECORD

Wastewater - 3rd, 5th Week of Month

25F2020

des moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

6.3

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 3,5 wk - 1st samp of wk	6/18/25	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver, ICP (WW) Cd - Cadmium, ICP (WW) Cu - Copper, ICP (WW) Ni - Nickel, ICP (WW) Pb - Lead, ICP metals prep	JL
WW wkly 3,5 wk - 2nd samp of wk	6/19/25 8:30 A.M.	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline, sTKN	B.P.
WW wkly 3,5 wk - 2nd samp of wk	6/19/25 7:15 AM	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD, TSS	B.P.
WW wkly 3,5 wk - 2nd samp of wk	6/19/25 7:15 AM	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver, ICP (WW) Cd - Cadmium, ICP (WW) Cu - Copper, ICP (WW) Ni - Nickel, ICP (WW) Pb - Lead, ICP metals prep	B.P.
WW wkly 3,5 wk - 2nd samp of wk grab	6/19/25 7:25 AM	Grab	Water	1 35 - Add Field Data to COC	field data, field data (1)	B.P.
Relinquished By <i>phsawolke</i>	Date/Time 6-19-25	3:45	Received By <i>[Signature]</i>	Date/Time 6-20-25	12:05	Comments
Relinquished By <i>[Signature]</i>	Date/Time 6-20-25	6:20/1310	Received By <i>[Signature]</i>	Date/Time 6-20-25	12:05	Comments
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 06/27/25 12:49
Date Reported: 07/07/25 10:58
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 06/25/25 8:00	Date Received: 06/27/25 12:49		
Lab No.: 25F2716-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/30/25 15:03	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/30/25 15:03	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/30/25 15:03	kc	EPA 200.7	
Nickel	0.0407	mg/L	06/30/25 15:03	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/30/25 15:03	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composi			Date Sampled: 06/26/25 8:15	Date Received: 06/27/25 12:49		
Lab No.: 25F2716-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	119	mg/L	07/01/25 11:00	jc	Timberline	
Biochemical Oxygen Demand	<24	mg/L	06/27/25 13:51	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	06/30/25 15:07	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	06/30/25 15:07	kc	EPA 200.7	
Copper	<0.00300	mg/L	06/30/25 15:07	kc	EPA 200.7	
Nickel	0.0384	mg/L	06/30/25 15:07	kc	EPA 200.7	
Lead	<0.00200	mg/L	06/30/25 15:07	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 06/26/25 8:15	Date Received: 06/27/25 12:49		
Lab No.: 25F2716-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	8.0	pH Units	06/26/25 8:15	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

CHAIN OF CUSTODY RECORD

Wastewater - 2nd, 4th Week of Month

25F2716

des moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW/ wklly 2,4 wk - 1st samp of wk	6/25/25 8:00a	Comp	Water	1 18 - 250mL W/M Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW/ wklly 2,4 wk - 2nd samp of wk	6/26-25 8:15	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS	JW
WW/ wklly 2,4 wk - 2nd samp of wk	6/26/25 8:15	Comp	Water	1 12 - 500mL W/M Plastic Cool to 4° C	BOD-QCAS	JW
WW/ wklly 2,4 wk - 2nd samp of wk	6/26/25 8:15	Comp	Water	1 18 - 250mL W/M Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW/ wklly 2,4 wk - 2nd samp of wk grab	6/26/25 8:15	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS PH 8.0	JW
Relinquished By <i>Eric Houtz</i>	Date/Time 6-26-25 3:45	Received By <i>[Signature]</i>	Date/Time 6-27/12:50	Comments		
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 08/08/25 12:48
Date Reported: 08/18/25 12:21
Project: Wastewater - 1st Week of Jan, April, July
 Send COC with Report

Case Narrative

Chlorobenzene analyzed by method EPA 624.1. BTEX method utilized for corresponding analytes. - KC

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 1st samp of wk Compos			Date Sampled: 08/06/25 7:15	Date Received: 08/08/25 12:48		
Lab No.: 25H0812-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	08/11/25 15:06	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	08/11/25 15:06	kc	EPA 200.7	
Copper	<0.00300	mg/L	08/11/25 15:06	kc	EPA 200.7	
Nickel	0.0354	mg/L	08/11/25 15:06	kc	EPA 200.7	
Lead	0.00221	mg/L	08/11/25 15:06	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk Compo			Date Sampled: 08/07/25 13:30	Date Received: 08/08/25 12:48		
Lab No.: 25H0812-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	83.1	mg/L	08/11/25 11:28	kt	Timberline	
Biochemical Oxygen Demand	27	mg/L	08/08/25 10:57	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	125	mg/L	08/13/25 16:24	jc	Hach 10242	
Total Suspended Solids	40	mg/L	08/11/25 15:53	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	08/11/25 15:09	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	08/11/25 15:09	kc	EPA 200.7	
Copper	<0.00300	mg/L	08/11/25 15:09	kc	EPA 200.7	
Nickel	0.0328	mg/L	08/11/25 15:09	kc	EPA 200.7	
Lead	<0.00200	mg/L	08/11/25 15:09	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 08/07/25 13:30	Date Received: 08/08/25 12:48		
Lab No.: 25H0812-03			Sampled by: JW			

Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
 13758 Washinton Rd
 West Burlington IA, 52655

Project: Wastewater - 1st Week of Jan, April, July, Oct

Send COC with Report

Client Contact: Eric Houtz

Reported:
 08/18/25 12:21

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 08/07/25 13:30	Date Received: 08/08/25 12:48		
Lab No.: 25H0812-03			Sampled by: JW			
Classical Chemistry Parameters						
Fats, Oil & Grease (total)	10.7	mg/L	08/15/25 13:09	kt	EPA 1664 A	
Volatile Organic Compounds						
Benzene	<0.00200	mg/L	08/11/25 13:32	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	08/11/25 13:32	kc	EPA 624.1	
Toluene	<0.00200	mg/L	08/11/25 13:32	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	08/11/25 13:32	kc	EPA 624.1	
Field pH	8.0	pH Units	08/07/25 13:30	JW	SM 4500 H + B	



OCC Analytical Services, LLC
 1200 Grand Drive, Lincoln, IA 52243 • (715) 251-1111
 Fax: (715) 251-1171 • Fax: (888) 251-2211

CHAIN OF CUSTODY RECORD

Wastewater - 1st Week of Jan, April, July, Oct

2540912

des Moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW (Ja, Ap, Ju, Oc) 1st samp of wk	8-6-25 7:15	comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	8-7-25 1:30	comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, STKN-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	8-7-25 1:30	comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	8-7-25 1:30	comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	8-7-25 1:30	comp	Water	1 01 - 40mL Clear Vial w/ HCl; 2 per set	EPA 624 - WW BTEX-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	8-7-25 1:30	comp	Water	1 10 - 500mL Clear Glass pH-2w/ HCl	FOG-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	8-7-25 1:30	Grab	Water	1 35 - Add Field Data to COC 8.0	Field Data (1)-QCAS, Field Data-QCAS	JW
Relinquished By <i>D. DeWolfe</i>	Date/Time 8-7-25 3:45	Received By <i>[Signature]</i>	Date/Time 8-8-12-51	Comments		
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 08/15/25 13:04
Date Reported: 08/21/25 16:30
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 08/13/25 8:05	Date Received: 08/15/25 13:04		
Lab No.: 25H1512-01			Sampled by: BP			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	08/18/25 14:24	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	08/18/25 14:24	kc	EPA 200.7	
Copper	<0.00300	mg/L	08/18/25 14:24	kc	EPA 200.7	
Nickel	0.0307	mg/L	08/18/25 14:24	kc	EPA 200.7	
Lead	<0.00200	mg/L	08/18/25 14:24	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composit			Date Sampled: 08/14/25 6:30	Date Received: 08/15/25 13:04		
Lab No.: 25H1512-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	84.6	mg/L	08/19/25 12:42	kt	Timberline	
Biochemical Oxygen Demand	20	mg/L	08/15/25 14:14	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	08/18/25 14:28	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	08/18/25 14:28	kc	EPA 200.7	
Copper	<0.00300	mg/L	08/18/25 14:28	kc	EPA 200.7	
Nickel	0.0310	mg/L	08/18/25 14:28	kc	EPA 200.7	
Lead	<0.00200	mg/L	08/18/25 14:28	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 08/14/25 6:35	Date Received: 08/15/25 13:04		
Lab No.: 25H1512-03			Sampled by: BP			

Classical Chemistry Parameters

Field pH	8.0	pH Units	08/14/25 6:35	BP	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

CHAIN OF CUSTODY RECORD

Wastewater - 2nd, 4th Week of Month

des Moines County Landfill
Accounts Payable - DMC

13

West Des Moines, IA 50265

OCA analytical Services LLC

179P ova Dr
O: 515-285-3
2753 • t@analytical.net
9-5526

5.6

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials	
WW wkly 2,4 wk - 1st samp of wk	8/13/05	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Ni - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lea ICP Metals Prep-QCAS	B. Pate	
WW wkly 2,4 wk - 2nd samp of wk	8/11 10 AM	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS	B. Pate	
WW wkly 2,4 wk - 2nd samp of wk	8/11 11 AM	Comp	Water	1 12 - 500mL WM Plastic Cool to 4 C	BOD-QCAS	Pate	
WW wkly 2,4 wk - 2nd samp of wk	8/11 1 PM	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP () Cd - Cadmium-QCAS, ICP (WW) Copper-QCAS, ICP (WW) N Nickel-QCAS, ICP (WW) Pb - Lea ICP Metals Prep-QCAS	B. Pate	
WW wkly 2,4 wk - 2nd samp of wk grab	8/14 6:53 AM	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS i Data- PH 8.0	B.P	
Relinquished By	B. Pate	Date/Time	8/15/05 3:45 PM	Received By		Date/Time	
Relinquished By		Date/Time		Received E		Date/Time	8-15-05 12:53
Cooler Numbers and Temperatures							

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 08/22/25 13:19
Date Reported: 08/29/25 16:44
Project: Wastewater - 3rd, 5th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 1st samp of wk Composite			Date Sampled: 08/20/25 10:09	Date Received: 08/22/25 13:19		
Lab No.: 25H2216-01			Sampled by: BP			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	08/25/25 16:24	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	08/25/25 16:24	kc	EPA 200.7	
Copper	<0.00300	mg/L	08/25/25 16:24	kc	EPA 200.7	
Nickel	0.0183	mg/L	08/25/25 16:24	kc	EPA 200.7	
Lead	<0.00200	mg/L	08/25/25 16:24	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk Composi			Date Sampled: 08/21/25 8:30	Date Received: 08/22/25 13:19		
Lab No.: 25H2216-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	38.4	mg/L	08/25/25 12:36	jc	Timberline	
Biochemical Oxygen Demand	<24	mg/L	08/22/25 13:36	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	37.1	mg/L	08/27/25 14:51	jc	Hach 10242	
Total Suspended Solids	14	mg/L	08/25/25 14:33	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	08/25/25 16:27	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	08/25/25 16:27	kc	EPA 200.7	
Copper	<0.00300	mg/L	08/25/25 16:27	kc	EPA 200.7	
Nickel	0.0174	mg/L	08/25/25 16:27	kc	EPA 200.7	
Lead	<0.00200	mg/L	08/25/25 16:27	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 08/21/25 8:45	Date Received: 08/22/25 13:19		
Lab No.: 25H2216-03			Sampled by: BP			

Classical Chemistry Parameters

Field pH	8.0	pH Units	08/21/25 8:45	BP	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
13758 Washinton Rd
West Burlington IA, 52655

Project: Wastewater - 3rd, 5th Week of Month
Send COC with Report
Client Contact: Eric Houtz

Reported:
08/29/25 16:44



QCA Analytical Services, LLC

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 Ct. 563-289-3273 • Fax: 563-289-5526

CHAIN OF CUSTODY RECORD

2542216
 Wastewater - 3rd, 5th Week of Month

des Moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

25

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW w/klly 3,5 wk - 1st samp of wk	8/20/25	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	B. Post
WW w/klly 3,5 wk - 2nd samp of wk	10:09 AM	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, STKN-QCAS	B. Post
WW w/klly 3,5 wk - 2nd samp of wk	8/21/25 8:30 AM	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	B. Post
WW w/klly 3,5 wk - 2nd samp of wk	8/21/25 8:30 AM	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	B. Post
WW w/klly 3,5 wk - 2nd samp of wk grab	8/21/25 8:45 AM	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS PH 8.0	B. Post
Relinquished By	B. Post	Date/Time	8/21/25 3:45 PM	Received By	Date/Time	Comments
Relinquished By		Date/Time		Received By	Date/Time	
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 09/05/25 13:39
Date Reported: 09/17/25 15:07
Project: Wastewater - 3rd, 5th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 1st samp of wk Composite			Date Sampled: 09/03/25 8:30	Date Received: 09/05/25 13:39		
Lab No.: 25I0526-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/08/25 15:07	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/08/25 15:07	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/08/25 15:07	kc	EPA 200.7	
Nickel	0.0191	mg/L	09/08/25 15:07	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/08/25 15:07	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk Composit			Date Sampled: 09/04/25 13:30	Date Received: 09/05/25 13:39		
Lab No.: 25I0526-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	34.2	mg/L	09/09/25 14:42	jc	Timberline	
Biochemical Oxygen Demand	14	mg/L	09/05/25 13:12	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	43.3	mg/L	09/11/25 11:57	jc	Hach 10242	
Total Suspended Solids	8	mg/L	09/09/25 13:03	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/08/25 15:11	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/08/25 15:11	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/08/25 15:11	kc	EPA 200.7	
Nickel	0.0187	mg/L	09/08/25 15:11	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/08/25 15:11	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 09/04/25 13:30	Date Received: 09/05/25 13:39		
Lab No.: 25I0526-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	7.0	pH Units	09/04/25 13:30	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
13758 Washinton Rd
West Burlington IA, 52655

Project: Wastewater - 3rd, 5th Week of Month
Send COC with Report
Client Contact: Eric Houtz

Reported:
09/17/25 15:07



QCA Analytical Services, LLC

1316 Iowa Drive, Lincoln, IA 50022 • (515) 281-1111
565-289-3177 • Fax: 565-281-1111

CHAIN OF CUSTODY RECORD

Wastewater - 3rd, 5th Week of Month

1510516

des Moines County Landfill
Accounts Payable - DMC

13

West Des Moines, IA 50265

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW w/ly 3.5 wk - 1st samp of wk	9-3-25 8:30	Com	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW w/ly 3.5 wk - 2nd samp of wk	9-4-25 1:30	Com	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, sTKN-QCAS	JW
WW w/ly 3.5 wk - 2nd samp of wk	9-4-25 1:30	Com	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW w/ly 3.5 wk - 2nd samp of wk	9-4-25 1:30	Com	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW w/ly 3.5 wk - 2nd samp of wk	9-4-25 1:30	Com	Water	1 35 - Add Field Data to COC PH 7.0	Field Data (1)-QCAS, Field Data-QCAS	JW
Relinquished By <i>[Signature]</i>	Date/Time 9-4-25 3:45	Received By <i>[Signature]</i>	Date/Time 9-4-25 13:41	Comments		
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 09/12/25 13:00
Date Reported: 09/19/25 16:12
Project: Wastewater - 1st Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-1st samp of wk Composite			Date Sampled: 09/10/25 8:00	Date Received: 09/12/25 13:00		
Lab No.: 25I1212-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/15/25 17:01	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/15/25 17:01	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/15/25 17:01	kc	EPA 200.7	
Nickel	0.0478	mg/L	09/15/25 17:01	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/15/25 17:01	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk Composite			Date Sampled: 09/11/25 7:10	Date Received: 09/12/25 13:00		
Lab No.: 25I1212-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	217	mg/L	09/15/25 15:02	jc	Timberline	
Biochemical Oxygen Demand	41	mg/L	09/12/25 13:32	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	206	mg/L	09/19/25 14:00	jc	Hach 10242	
Total Suspended Solids	52	mg/L	09/17/25 14:10	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/15/25 17:05	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/15/25 17:05	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/15/25 17:05	kc	EPA 200.7	
Nickel	0.0487	mg/L	09/15/25 17:05	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/15/25 17:05	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab Grab			Date Sampled: 09/11/25 7:30	Date Received: 09/12/25 13:00		
Lab No.: 25I1212-03			Sampled by: BP			

Classical Chemistry Parameters

Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill 13758 Washinton Rd West Burlington IA, 52655	Project: Wastewater - 1st Week of Month Send COC with Report Client Contact: Eric Houtz	Reported: 09/19/25 16:12
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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab Grab			Date Sampled: 09/11/25 7:30		Date Received: 09/12/25 13:00	
Lab No.: 25I1212-03			Sampled by: BP			
<i>Volatile Organic Compounds</i>						
Benzene	0.00433	mg/L	09/17/25 15:18	kc	EPA 624.1	
Ethylbenzene	0.00213	mg/L	09/17/25 15:18	kc	EPA 624.1	
Toluene	<0.00200	mg/L	09/17/25 15:18	kc	EPA 624.1	
Xylenes (total)	0.00899	mg/L	09/17/25 15:18	kc	EPA 624.1	
Field pH	8.0	pH Units	09/11/25 7:30	BP	SM 4500 H + B	

CHAIN OF CUSTODY RECORD

des Moines County Landfill
 Accounts Payable - DMC
 13

25T1212

West Des Moines, IA 50265

Wastewater - 1st Week of Month

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 1st wk-1st samp of wk	9-10-25 8:00	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	sw
WW wkly 1st wk-2nd samp of wk	9/11/25 7:10 AM	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, STKN-QCAS	B. Pate
WW wkly 1st wk-2nd samp of wk	9/11/25 7:10 AM	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	B. Pate
WW wkly 1st wk-2nd samp of wk	9/11/25 7:10 AM	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	B. Pate
WW wkly 1st wk-2nd samp of wk grab	9/11/25 7:30 AM	Grab	Water	1 01 - 40mL Clear Vial w/ HCl; 2 per set	EPA 624 - WW BTEX-QCAS	B. Pate
WW wkly 1st wk-2nd samp of wk grab	9/11/25 7:20 AM	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS	B. Pate
Relinquished By	Bob Pate	Date/Time	9/11/25 3:45 PM	Received By	Date/Time	
Relinquished By		Date/Time		Received By	Date/Time	
Cooler Numbers and Temperatures						

pH 8.0

[Handwritten signature]

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 09/19/25 12:53
Date Reported: 09/30/25 13:45
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 09/17/25 7:30	Date Received: 09/19/25 12:53		
Lab No.: 25I1913-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/22/25 14:44	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/22/25 14:44	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/22/25 14:44	kc	EPA 200.7	
Nickel	0.0476	mg/L	09/22/25 14:44	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/22/25 14:44	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composit			Date Sampled: 09/18/25 7:45	Date Received: 09/19/25 12:53		
Lab No.: 25I1913-02			Sampled by: BP			

Classical Chemistry Parameters

Ammonia as N	188	mg/L	09/26/25 10:36	jc	Timberline	
Biochemical Oxygen Demand	36	mg/L	09/19/25 13:15	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/22/25 14:48	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/22/25 14:48	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/22/25 14:48	kc	EPA 200.7	
Nickel	0.0466	mg/L	09/22/25 14:48	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/22/25 14:48	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 09/19/25 8:00	Date Received: 09/19/25 12:53		
Lab No.: 25I1913-03			Sampled by: BP			

Classical Chemistry Parameters

Field pH	8.0	pH Units	09/19/25 8:00	BP	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director



OCC Analytical Services, LLC

1798 Iowa Drive, LeClaire, IA 52553 • geoanalytical.net
 O: 563-239-3373 • Fax: 563-289-5626

CHAIN OF CUSTODY RECORD

2571913

Wastewater - 2nd, 4th Week of Month

des Moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

7.3

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wklly 2,4 wk - 1st samp of wkl	9-17-25 7:30 am	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	DS
WW wklly 2,4 wk - 2nd samp of wkl	9-18-25 7:45 AM	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS	B.Pst
WW wklly 2,4 wk - 2nd samp of wkl	9-18-25 7:45 AM	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS	B.Pst
WW wklly 2,4 wk - 2nd samp of wkl	9-18-25 7:45 AM	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Ni - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	B.Pst
WW wklly 2,4 wk - 2nd samp of wkl grab	9-18-25 8:00 AM	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS	B.Pst
Relinquished By Eric Huff		Date/Time 9-18-25 3:45	Received By 	Date/Time 9-18-25 1243	Comments	
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 09/26/25 12:04
Date Reported: 10/07/25 14:16
Project: Wastewater - 3rd, 5th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 1st samp of wk Composite			Date Sampled: 09/24/25 8:00	Date Received: 09/26/25 12:04		
Lab No.: 25I2617-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/29/25 14:53	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/29/25 14:53	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/29/25 14:53	kc	EPA 200.7	
Nickel	0.0342	mg/L	09/29/25 14:53	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/29/25 14:53	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk Composite			Date Sampled: 09/25/25 9:30	Date Received: 09/26/25 12:04		
Lab No.: 25I2617-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	71.6	mg/L	10/06/25 12:34	jc	Timberline	
Biochemical Oxygen Demand	24	mg/L	09/26/25 13:33	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	83.2	mg/L	10/06/25 15:55	jc	Hach 10242	
Total Suspended Solids	38	mg/L	09/30/25 13:39	DY	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	09/29/25 14:57	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	09/29/25 14:57	kc	EPA 200.7	
Copper	<0.00300	mg/L	09/29/25 14:57	kc	EPA 200.7	
Nickel	0.0336	mg/L	09/29/25 14:57	kc	EPA 200.7	
Lead	<0.00200	mg/L	09/29/25 14:57	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 09/25/25 9:30	Date Received: 09/26/25 12:04		
Lab No.: 25I2617-03			Sampled by: JW			

Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill 13758 Washinton Rd West Burlington IA, 52655	Project: Wastewater - 3rd, 5th Week of Month Send COC with Report Client Contact: Eric Houtz	Reported: 10/07/25 14:16
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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 09/25/25 9:30		Date Received: 09/26/25 12:04	
Lab No.: 25I2617-03			Sampled by: JW			
Classical Chemistry Parameters						
Field pH	8.0	pH Units	09/25/25 9:30	JW	SM 4500 H + B	



OCC Analytical Services, LLC

1798 Iowa Drive, LeClaire, IA 52753 • occanalytical.net
 O: 563-289-3373 • Fx: 563-289 5296

CHAIN OF CUSTODY RECORD

Wastewater - 3rd, 5th Week of Month

25/26/17

des Moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

(Handwritten signature/initials)

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW w/ky 3,5 wk - 1st samp of wk	9-24-25 8:00 am	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW w/ky 3,5 wk - 2nd samp of wk	9-25-25 9:30	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, STKN-QCAS	JW
WW w/ky 3,5 wk - 2nd samp of wk	9-25-25 9:30	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW w/ky 3,5 wk - 2nd samp of wk	9-25-25 9:30	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW w/ky 3,5 wk - 2nd samp of wk grab	9-25-25 9:30	Grab	Water	1 35 - Add Field Data to COC PH 8	Field Data (1)-QCAS, Field Data-QCAS PH 8	JW
Relinquished By <i>(Signature)</i>	Date/Time 9/25/25	Received By <i>(Signature)</i>	Date/Time 3:45	Date/Time 9/25/25	Date/Time 11:58	Comments
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 12/05/25 11:39
Date Reported: 12/19/25 13:28
Project: Wastewater - 3rd, 5th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 1st samp of wk Composite			Date Sampled: 12/03/25 10:00	Date Received: 12/05/25 11:39		
Lab No.: 25L0526-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	12/08/25 15:14	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/08/25 15:14	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/08/25 15:14	kc	EPA 200.7	
Nickel	0.0448	mg/L	12/08/25 15:14	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/08/25 15:14	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk Composi			Date Sampled: 12/04/25 8:30	Date Received: 12/05/25 11:39		
Lab No.: 25L0526-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	157	mg/L	12/08/25 15:32	jc	Timberline	
Biochemical Oxygen Demand	28	mg/L	12/05/25 13:23	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	172	mg/L	12/12/25 17:36	jc	Hach 10242	
Total Suspended Solids	60	mg/L	12/09/25 13:42	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	12/08/25 15:17	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/08/25 15:17	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/08/25 15:17	kc	EPA 200.7	
Nickel	0.0468	mg/L	12/08/25 15:17	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/08/25 15:17	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 3,5 wk - 2nd samp of wk grab Grab			Date Sampled: 12/04/25 8:30	Date Received: 12/05/25 11:39		
Lab No.: 25L0526-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	7.83	pH Units	12/04/25 8:30	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
13758 Washinton Rd
West Burlington IA, 52655

Project: Wastewater - 3rd, 5th Week of Month
Send COC with Report
Client Contact: Eric Houtz

Reported:
12/19/25 13:28

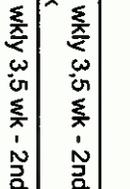
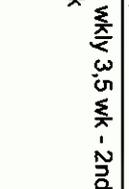
CHAIN OF CUSTODY RECORD

Wastewater - 3rd, 5th Week of Month

2549526

3.6

des Moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wklly 3,5 wk - 1st samp of wk	12-3-25 10:00 AM	comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNOC3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wklly 3,5 wk - 2nd samp of wk	12-4-25 8:30	comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, sTKN-QCAS	JW
WW wklly 3,5 wk - 2nd samp of wk	12-4-25	comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW wklly 3,5 wk - 2nd samp of wk	12-4-25	comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNOC3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wklly 3,5 wk - 2nd samp of wk grab	12-4-25	Grab	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS	JW
Relinquished By Eric Houtz	Date/Time 12-4-25 3:45	Received By 	Date/Time 12-4-25 3:45	Received By 	Date/Time 10-5-25 11:17	Comments
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 12/05/25 11:44
Date Reported: 12/19/25 13:32
Project: Wastewater - 1st Week of Jan, April, July
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 1st samp of wk Compos			Date Sampled: 12/03/25 10:00	Date Received: 12/05/25 11:44		
Lab No.: 25L0529-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Silver	<0.00100	mg/L	12/08/25 15:21	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/08/25 15:21	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/08/25 15:21	kc	EPA 200.7	
Nickel	0.0448	mg/L	12/08/25 15:21	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/08/25 15:21	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk Compo			Date Sampled: 12/04/25 8:30	Date Received: 12/05/25 11:44		
Lab No.: 25L0529-02			Sampled by: JW			

Classical Chemistry Parameters

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Ammonia as N	159	mg/L	12/08/25 15:35	jc	Timberline	
Biochemical Oxygen Demand	27	mg/L	12/05/25 13:23	JB	SM 5210 B-2001	
Fats, Oil & Grease (total)	8.0	mg/L	12/15/25 14:00	kt	EPA 1664 A	
Total Kjeldahl Nitrogen	142	mg/L	12/12/25 17:36	jc	Hach 10242	
Total Suspended Solids	57	mg/L	12/09/25 13:42	kt	USGS I-3765-85	

Metals by EPA 200 Series Methods

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Silver	<0.00100	mg/L	12/08/25 15:24	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/08/25 15:24	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/08/25 15:24	kc	EPA 200.7	
Nickel	0.0450	mg/L	12/08/25 15:24	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/08/25 15:24	kc	EPA 200.7	

Volatile Organic Compounds

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Benzene	<0.00200	mg/L	12/10/25 14:08	kc	EPA 624.1	
Ethylbenzene	<0.00200	mg/L	12/10/25 14:08	kc	EPA 624.1	
Toluene	<0.00200	mg/L	12/10/25 14:08	kc	EPA 624.1	
Xylenes (total)	<0.00600	mg/L	12/10/25 14:08	kc	EPA 624.1	

Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill 13758 Washinton Rd West Burlington IA, 52655	Project: Wastewater - 1st Week of Jan, April, July, Oct Send COC with Report Client Contact: Eric Houtz	Reported: 12/19/25 13:32
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Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab G			Date Sampled: 12/04/25 8:30	Date Received: 12/05/25 11:44		
Lab No.: 25L0529-03			Sampled by: JW			
Classical Chemistry Parameters						
Field pH	7.83	pH Units	12/04/25 8:30	JW	SM 4500 H + B	



OCC Analytical Services, LLC

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O: 563-289-3373 • F: 563-289-5525

CHAIN OF CUSTODY RECORD

Wastewater - 1st Week of Jan, April, July, Oct

des Moines County Landfill
Accounts Payable - DMC

13
West Des Moines, IA 50265

25.05.19

3.8

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW (Ja, Ap, Ju, Oc) 1st samp of wk	12-3-25 10:00 AM	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	12-4-25 8:30	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS, STKN-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	12-4-25	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk	12-4-25	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	12-4-25	Comp	Water	1 01 - 40mL Clear Vial w/ HCl; 2 per set	EPA 624 - WW BTEX-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	12-4-25	Comp	Water	1 10 - 500mL Clear Glass pH<2w/ HCl	FOG-QCAS	JW
WW (Ja, Ap, Ju, Oc) 2nd samp of wk grab	12-4-25	Comp	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS 7.93	JW
Relinquished By Eric Hautz	Date/Time 12-4-25 3:45	Received By	Date/Time 12-5-25 18:17	Comments		
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 12/12/25 10:16
Date Reported: 12/22/25 17:05
Project: Wastewater - 1st Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-1st samp of wk Composite			Date Sampled: 12/10/25 8:00	Date Received: 12/12/25 10:16		
Lab No.: 25L1208-01			Sampled by: JW			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	12/16/25 15:00	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/16/25 15:00	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/16/25 15:00	kc	EPA 200.7	
Nickel	0.0519	mg/L	12/16/25 15:00	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/16/25 15:00	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk Composite			Date Sampled: 12/11/25 8:00	Date Received: 12/12/25 10:16		
Lab No.: 25L1208-02			Sampled by: JW			

Classical Chemistry Parameters

Ammonia as N	150	mg/L	12/16/25 13:21	jc	Timberline	
Biochemical Oxygen Demand	21	mg/L	12/12/25 12:52	JB	SM 5210 B-2001	
Total Kjeldahl Nitrogen	166	mg/L	12/22/25 11:48	jc	Hach 10242	
Total Suspended Solids	46	mg/L	12/19/25 11:03	JB	USGS I-3765-85	

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	12/16/25 15:03	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/16/25 15:03	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/16/25 15:03	kc	EPA 200.7	
Nickel	0.0542	mg/L	12/16/25 15:03	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/16/25 15:03	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 1st wk-2nd samp of wk grab Grab			Date Sampled: 12/11/25 8:00	Date Received: 12/12/25 10:16		
Lab No.: 25L1208-03			Sampled by: JW			

Classical Chemistry Parameters

Field pH	7.94	pH Units	12/11/25 8:00	JW	SM 4500 H + B	
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Analysis Certified by:

Randall Wanke, Ph.D.

Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director

Des Moines County Landfill
13758 Washinton Rd
West Burlington IA, 52655

Project: Wastewater - 1st Week of Month
Send COC with Report
Client Contact: Eric Houtz

Reported:
12/22/25 17:05



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CHAIN OF CUSTODY RECORD

des Moines County Landfill

Accounts Payable - DMC

13

West Des Moines, IA 50265

Wastewater - 1st Week of Month

7561208

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wkly 1st wk-1st samp of wk	12-10-25 8:00am	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wkly 1st wk-2nd samp of wk	12-11-25 8:00	Comp	Water	1 05 - 500mL Plastic pH <2 w/ H2SO4	Ammonia - Timberline-QCAS, sTKN-QCAS	JW
WW wkly 1st wk-2nd samp of wk	12-11-25 8:00	Comp	Water	1 12 - 500mL WM Plastic Cool to 4° C	BOD-QCAS, TSS-QCAS	JW
WW wkly 1st wk-2nd samp of wk	12-11-25 8:00am	Comp	Water	1 18 - 250mL WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wkly 1st wk-2nd samp of wk grab	12-11-25 8:00	Comp	Water	1 01 - 40mL Clear Vial w/ HCl: 2 per set	EPA 624 - WW BTEX-QCAS	JW
WW wkly 1st wk-2nd samp of wk grab	12-11-25 8:00	Comp	Water	1 35 - Add Field Data to COC	Field Data (1)-QCAS, Field Data-QCAS pH 7.94	JW
Relinquished By Eric Houtz	Date/Time 12-11-25 3:45	Received By <i>[Signature]</i>	Date/Time 12/12/25 10:00	Comments		
Relinquished By	Date/Time	Received By	Date/Time	Comments		
Cooler Numbers and Temperatures						

Laboratory Report

Des Moines County Landfill
 Eric Houtz
 13758 Washinton Rd
 West Burlington, IA 52655

Date Received: 12/19/25 13:16
Date Reported: 12/26/25 17:19
Project: Wastewater - 2nd, 4th Week of Month
 Send COC with Report

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 1st samp of wk Composite			Date Sampled: 12/17/25 7:30	Date Received: 12/19/25 13:16		
Lab No.: 25L1919-01			Sampled by: Eric Houtz			

Metals by EPA 200 Series Methods

Silver	<0.00100	mg/L	12/23/25 13:19	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/23/25 13:19	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/23/25 13:19	kc	EPA 200.7	
Nickel	0.0319	mg/L	12/23/25 13:19	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/23/25 13:19	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk Composi			Date Sampled: 12/18/25 8:00	Date Received: 12/19/25 13:16		
Lab No.: 25L1919-02			Sampled by: Eric Houtz			

Classical Chemistry Parameters

Ammonia as N	24.2	mg/L	12/23/25 13:03	jc	Timberline	
Biochemical Oxygen Demand	14	mg/L	12/19/25 13:56	JB	SM 5210 B-2001	

Metals by EPA 200 Series Methods

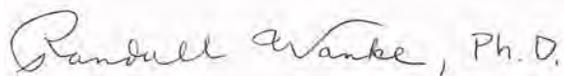
Silver	<0.00100	mg/L	12/23/25 13:23	kc	EPA 200.7	
Cadmium	<0.000400	mg/L	12/23/25 13:23	kc	EPA 200.7	
Copper	<0.00300	mg/L	12/23/25 13:23	kc	EPA 200.7	
Nickel	0.0313	mg/L	12/23/25 13:23	kc	EPA 200.7	
Lead	<0.00200	mg/L	12/23/25 13:23	kc	EPA 200.7	

Analyte	Result	Units	Analyzed	Analyst	Method	Notes
Sample ID: WW wkly 2,4 wk - 2nd samp of wk grab Grab			Date Sampled: 12/18/25 8:00	Date Received: 12/19/25 13:16		
Lab No.: 25L1919-03			Sampled by: Eric Houtz			

Classical Chemistry Parameters

Field pH	7.73	pH Units	12/18/25 8:00	Eric Hout	SM 4500 H + B	
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Analysis Certified by:



Amy Dobbela For Randall Wanke, Laboratory Director

Randal Wanke, Laboratory Director



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CHAIN OF CUSTODY RECORD

Wastewater - 2nd, 4th Week of Month

des moines County Landfill
 Accounts Payable - DMC
 13
 West Des Moines, IA 50265

2561919

Collection Point	Date/Time	Sample Type Comp or Grab	Contents	Qty Container	Analysis	Sampler Initials
WW wklly 2,4 wk - 1st samp of wk	12-17-25 7:30 AM	Comp	Water	1 18 - 250ml WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wklly 2,4 wk - 2nd samp of wk	12-18-25 8:00	Comp	Water	1 05 - 500ml Plastic pH <2 w/ H2SO4	Ammonia-Timberline-QCAS	JW
WW wklly 2,4 wk - 2nd samp of wk	12-18-25 8:00	Comp	Water	1 12 - 500ml WM Plastic Cool to 4° C	BOD ⁵ QCAS	JW
WW wklly 2,4 wk - 2nd samp of wk	12-18-25 8:00	Comp	Water	1 18 - 250ml WM Plastic pH <2 w/HNO3	ICP (WW) Ag - Silver-QCAS, ICP (WW) Cd - Cadmium-QCAS, ICP (WW) Cu - Copper-QCAS, ICP (WW) Ni - Nickel-QCAS, ICP (WW) Pb - Lead-QCAS, ICP Metals Prep-QCAS	JW
WW wklly 2,4 wk - 2nd samp of wk grab	12-18-25 9:00	Grab	Water	1 35 - Add Field Data to QCAS 9.73 PH	Field Data (1)-QCAS, Field Data-QCAS	JW
Relinquished By Eric Houtz	Date/Time 12-18-25	Received By <i>[Signature]</i>	Date/Time 12-18-25	Received By <i>[Signature]</i>	Date/Time 12-19-25	Comments
Cooler Numbers and Temperatures						

02
02
03



Appendix F
Landfill Gas Annual Report

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of Facility: Des Moines County Sanitary Landfill

Monitoring Equipment Used: GEM 5000

Date of Measurement: 3/24/2025

Equipment Calibration Date: 4/15/2024

Equipment Calibration Time: _____

Weather Conditions:

Temperature: 48°F

Name of Sampler: J. Wooldridge
B. Porter

Barometric Pressure: 29.34

Other: Partly Cloudy

Sample Point	Type	Methane Concentration (% LEL)	Comments
#1 Household Hazardous Waste Building	Indoor	0	
#2 Public Drop-off Area	Outdoor	0	
#3 New maintenance building	Indoor	0	
#4 East Lagoon	Outdoor	0	
#5 East Aeration Basin	Outdoor	0	
#6 West Lagoon	Outdoor	0	
#7 NW Comer-MW1-97	Outdoor	0	
#9 MW1-93	Outdoor	0	
#10 MW6-93	Outdoor	0	
#11 MW3-98	Outdoor	0	
#12 New scale	Outdoor	0	
#13 New office/HIM	Indoor	0	
#14 LFGW-W1	Subsurface	0	
#15 LFGW-W2	Subsurface	0	
#16 GW-Lagoon-00	Subsurface	0	
#17 GW-SUMP	Subsurface	0	
#18 GUCO-1	Subsurface	0	
#19 GUCO-2	Subsurface	25.3	
#32 GUCO-15	Subsurface	0	No Notification Required
#33 GUCO-16	Subsurface	65.0	No Notification Required
#34 MW6-90	Outdoor	0	
#35 Compressor Shed	Indoor	0	
#36 GUCO-17	Subsurface	0	
# 37 GUCO-18	Subsurface	48.3	No Notification Required

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of Facility: Des Moines County Sanitary Landfill
 Date of Measurement: 8/27/2025

Monitoring Equipment Used: GEM 5000
 Equipment Calibration Date: 6/11/25
 Equipment Calibration Time: _____

Weather Conditions:
 Temperature: 73°F
 Barometric Pressure: 29.61
 Other: partly cloudy

Name of Sampler: J. Wooldridge
B. Porter

Sample Point	Type	Methane Concentration (% LEL)	Comments
#1 Household Hazardous Waste Building	Indoor	Ø	
#2 Public Drop-off Area	Outdoor	Ø	
#3 New maintenance building	Indoor	Ø	
#4 East Lagoon	Outdoor	Ø	
#5 East Aeration Basin	Outdoor	Ø	
#6 West Lagoon	Outdoor	Ø	
#7 NW Corner-MW1-97	Outdoor	Ø	
#9 MW1-93	Outdoor	Ø	
#10 MW6-93	Outdoor	Ø	
#11 MW3-98	Outdoor	Ø	
#12 New scale	Outdoor	Ø	
#13 New office/HHM	Indoor	Ø	
#14 LFGW-W1	Subsurface	Ø	
#15 LFGW-W2	Subsurface	Ø	
#16 GW-Lagoon-00	Subsurface	Ø	
#17 GW-SUMP	Subsurface	Ø	
#18 GUCO-1	Subsurface	Ø	
#19 GUCO-2	Subsurface	47.8	
#32 GUCO-15	Subsurface	12.5	No Notification Required
#33 GUCO-16	Subsurface	64.2	No Notification Required
#34 MW6-90	Outdoor	Ø	
#35 Compressor Shed	Indoor	Ø	
#36 GUCO-17	Subsurface	Ø	
#37 GUCO-18	Subsurface	Ø	No Notification Required Recent Construction changed location

Landfill Gas Monitoring - Field Measurement Recording Sheet

Name of Facility: Des Moines County Sanitary Landfill
 Date of Measurement: June 10th 25
 Weather Conditions: 75 partly sunny
 Temperature: 75
 Barometric Pressure: 29.34
 Other: _____

Monitoring Equipment Used: Gen 5000
 Equipment Calibration Date: _____
 Equipment Calibration Time: _____
 Name of Sampler: J Wooldridge

Sample Point	Type	Methane Concentration (% LEL)	Comments
#1 Household Hazardous Waste Building	Indoor	Ø	
#2 Public Drop-off Area	Outdoor	Ø	
#3 New maintenance building	Indoor	Ø	
#4 East Lagoon	Outdoor	Ø	
#5 East Aeration Basin	Outdoor	Ø	
#6 West Lagoon	Outdoor	Ø	
#7 NW Corner-MW1-97	Outdoor	Ø	
#9 MW1-93	Outdoor	Ø	
#10 MW6-93	Outdoor	Ø	
#11 MW3-98	Outdoor	Ø	
#12 New scale	Outdoor	Ø	
#13 New office/HHM	Indoor	Ø	
#14 LFGW-W1	Subsurface	Ø	
#15 LFGW-W2	Subsurface	Ø	
#16 GW-Lagoon-00	Subsurface	Ø	
#17 GW-SUMP	Subsurface	Ø	
#18 GUCO-1	Subsurface	Ø	
#19 GUCO-2	Subsurface	58.8	
#32 GUCO-15	Subsurface	Ø	No Notification Required
#33 GUCO-16	Subsurface	62.1	No Notification Required
#34 MW6-90	Outdoor	Ø	
#35 Compressor Shed	Indoor	Ø	
#36 GUCO-17	Subsurface	Ø	
#37 GUCO-18	Subsurface	56.5	No Notification Required

Landfill Gas Monitoring - Field Measurement Recording Sheet

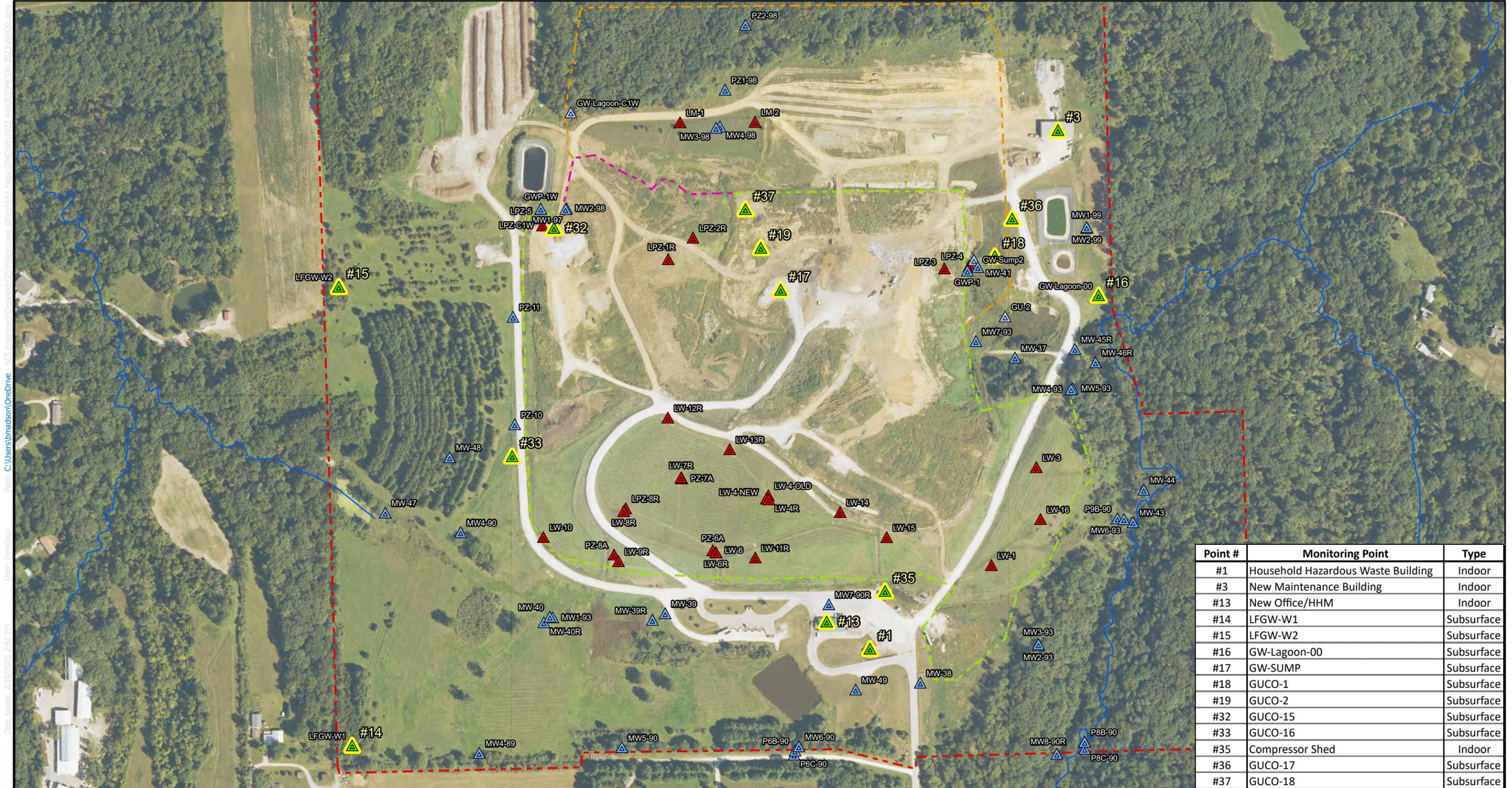
Name of Facility: Des Moines County Sanitary Landfill
 Date of Measurement: October 17, 2025

Monitoring Equipment Used: GEM 5000
 Equipment Calibration Date: 6/11/25
 Equipment Calibration Time: _____

Weather Conditions:
 Temperature: 69°F
 Barometric Pressure: 29.19
 Other: _____

Name of Sampler: J. Woolridge

Sample Point	Type	Methane Concentration (% LEL)	Comments
#1 Household Hazardous Waste Building	Indoor	0	
#2 Public Drop-off Area	Outdoor	0	
#3 New maintenance building	Indoor	0	
#4 East Lagoon	Outdoor	0	
#5 East Aeration Basin	Outdoor	0	
#6 West Lagoon	Outdoor	0	
#7 NW Corner-MW1-97	Outdoor	0	
#9 MW1-93	Outdoor	0	
#10 MW6-93	Outdoor	0	
#11 MW3-98	Outdoor	0	
#12 New scale	Outdoor	0	
#13 New office/HHM	Indoor	0	
#14 LFGW-W1	Subsurface	0	
#15 LFGW-W2	Subsurface	0	
#16 GW-Lagoon-00	Subsurface	0	
#17 GW-SUMP	Subsurface	0	
#18 GUCO-1	Subsurface	0	
#19 GUCO-2	Subsurface	41.7	
#32 GUCO-15	Subsurface	0	No Notification Required
#33 GUCO-16	Subsurface	63.2	No Notification Required
#34 MW6-90	Outdoor	0	
#35 Compressor Shed	Indoor	0	
#36 GUCO-17	Subsurface	0	
# 37 GUCO-18	Subsurface	10.3	No Notification Required



Methane Monitoring Network

Legend

- ▲ Methane Monitoring Point
- ▲ Leachate Monitoring Point
- ▲ Landfill Gas Well
- ▲ Monitoring Well
- ▲ Groundwater Underdrain
- Located Waste Boundary
- Approximate Property Boundary
- Future Waste Boundary
- Stream
- Approximate Waste Boundary

Des Moines County Regional
Sanitary Landfill
West Burlington, Iowa
Project No: 27224414.26
Drawing Date: January 2026

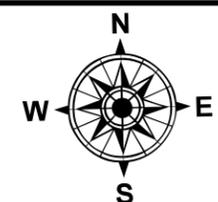


Figure 1

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Appendix G
Standards History Graphs

